## GOLLEGE CATALOG ${ }_{22: 23}$

## Academic Policies

- Academic Fresh Start
- Academic Integrity
- Academic Probation
- Attendance
- Life/Work Experience Credit
- Dean's List
- Grading
- Grade Appeal


## Academic Fresh Start

The Academic Fresh Start program is designed for students who attended SCCC, compiled an unsuccessful academic record, and subsequently left the College for an extended period of time. As a result of their work experience, maturity, or new interests, these student may now wish to return to college to pursue a program of student towards a degree.

Academic Fresh Start allows students tor restore their academic standing at Sussex by eliminating the previous academic credit from their Cumulative Grade Point Average (CGPA). Contact the Registrar's Office for additional information and the forms necessary to apply for the Academic Fresh Start program.

## Academic Integrity

Students are required to perform all of the work specified by faculty and are responsible for the content and integrity of all academic work submitted, including term papers, reports and examinations. A student will be guilty of violating the Rule of Academic Integrity if he or she knowingly represents the work of others as his or her own, or if he or she uses or obtains unauthorized assistance in any academic work.

Cheating on examinations, through use of unauthorized aids or inappropriate resources, is forbidden. In addition, plagiarism or the unattributed use of another's words or ideas, through either direct appropriation or paraphrase, is a serious breach of academic standards. Students have an obligation to exhibit honesty in carrying out their academic assignments. They may be penalized by the following: written warnings and/or assignment of an " F " grade for the assignment/test or for the course. If the student is found guilty in more than one case, he or she may be dismissed from the College.

## Academic Probation

Students who after 6 credits have a grade point average (GPA) that falls below 2.0 are placed on academic probation and are informed in writing of their probation status. Students pre-registered for a succeeding semester, will be notified to make an appointment with a Counselor in the Advising and Counseling Center. Failure to comply may result in cancellation of a student's existing course registration(s). Students may be required to take a reduced course load based on their level of probation.

It is the prerogative of the Academic Probation Committee to place special requirements and restrictions on the student in the succeeding semester. Such conditions may include, but are not limited to, not holding office in a student organization or participating in intercollegiate athletic functions. Students will be monitored and offered guidance and support in making satisfactory academic progress. The student has the right to appeal the decision of the Academic Probation committee.

## Attendance

At Sussex, class attendance and academic achievement are recognized as being interrelated. Attendance in class is not used solely as a basis for grade determination; however, lectures, assignments, tests and class participation missed or inadequately made up as a result of class absences will jeopardize a student's grade.

- Students are expected to attend all classes and to adhere to the written requirements and consequences of nonattendance outlined in the syllabi of each instructor. Faculty are required to keep attendance records.
- Faculty are required to state their attendance requirements on their course outlines.
- While it is the responsibility of the student to notify the instructor after the student's first absence, the instructor may personally contact the student to discuss the effect of the absence and possible subsequent absences, on the successful completion of the course.
- If subsequent absences do occur, it is the student's responsibility to contact the instructor for guidance in completing missed work.
- The instructor determines if an absence is valid and if a student may complete missed assignments. If the absence is not valid or if work is made up without prior discussion with the instructor, said work may not be accepted.


## Life/Work Experience Credit

Students who wish to receive college credit for life/work experience have the option of completing an official Application for Life/Work Experience Credit. The student must then meet with a Division Dean to receive approval to prepare a portfolio for evaluation. The portfolio will be evaluated by either the Division Dean, or their designee; with final approval for credit from the Senior Vice President of Academic \& Student Affairs.

The student will be responsible to pay half the tuition for the course credits when they submit their portfolio. The initial application is found in the Student Advising and Counseling Center. Following the transfer credit policy, a student may only earn a maximum of half the credits towards a degree or certificate though life/work experience. The student is also responsible for recording fees.

## Dean's List

Sussex County Community College acknowledges outstanding academic achievement of full-time students on a semester basis and the cumulative achievement of part-time students through the Dean's List designation (fall and spring semesters only).

## Eligibility

1. Full-time students earning 12 or more college credits during the fall or spring semesters.
2. Part-time students having cumulatively earned 12 or more college credits in a fall or spring semester and thereafter upon completion of each additional cluster of 12 or more credits.

## Academic Requirements

1. A semester grade point average of 3.5 for full-time students (based upon earned credit hours).
2. A cumulative grade point average of 3.5 for part-time students (based upon earned clusters of 12 or more credits)

## Grading

Letter grades are given to students and posted to each student's transcript at the end of each semester. A grade represents an instructor's evaluation of a student's academic performance in a course and is determined by examinations and other criteria established by the College and the individual instructor. All grades are recorded on the individual transcript and remain as such unless revised and/or removed by action following from the College's Student Appeal of Grades Policy. (See Appeal of Grades.)

Grades are posted on the my.sussex.edu portal at the completion of each semester.
Grades Counted in the Grade Point Average (GPA)

| Grade | Interpretation | Points |
| :--- | :--- | :--- |
| A | Excellent | 4.0 |
| B+ | Very Good | 3.5 |
| B | Good | 3.0 |
| C+ | Above Average | 2.5 |
| C | Average | 2.0 |
| D | Poor | 1.0 |
| F | Fail | 0.0 |
| FN | Fail no-show | 0.0 |


|  | Grades not counted in the GPA |  |
| :--- | :--- | :--- |
| Grade | Interpretation | Points |
| AI | Excellent | 0 |
| BI + | Very Good | 0 |
| BI | Good | 0 |
| CI + | Above Average | 0 |
| CI | Average | 0 |


| RI | Repeat | 0 |
| :--- | :--- | :--- |
| FI | Insufficient | 0 |
| FNI | Fail no-show | 0 |
| II | Incomplete | 0 |
| AU | Audit | 0 |
| I | Incomplete | 0 |
| IP | In Progress | 0 |
| W | Approved Withdrawal | 0 |

Letter grades AI through FI represent institutional credit. Institutional credits do not count in the grade point average, nor do they fulfill graduation requirements. Students who earn a grade of AI-CI in developmental courses are eligible to move to the next course in the sequence or to the next level.

## How to Calculate a Grade Point Average

The calculation of a grade point average is a simple mathematical process. Quality points earned, QP, also known as "grade points," are divided by the student's quality credits attempted.

## Quality Points

Quality points (QP) earned are determined by multiplying the quality credits attempted of a course by the numerical value of the grade. For example, a "B" received in a three-credit course would yield nine quality points ( $3 \times 3=9$ ). When calculating quality points earned, some courses are excluded from the process. Transfer credits and grades received for exams (CLEP, AP, etc.) as well as grades for "IC" (institutional credit) courses are not counted.

| Course | Credits Attempted | Quality Credits <br> Attempted | Grade | Value of Points | QP Earned | GPA |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Math | 3 | 3 | B | 3 | 9 |  |
| Literature | 3 | 3 | $\mathrm{~F}^{*}$ | 0 | 0 |  |
| Chemistry | 4 | 4 | A | 4 | 16 |  |
| History | 3 | 3 | B | 3 | 9 |  |
| Basic Algebra | $0\left(3\right.$ IC $^{* *} 0$ | 0 | BI | 0 | 0 |  |
| Total | 13 | 13 |  |  | 34 | 2.62 |

Grade Point Average $=$ Quality Points Earned (34) divided by Quality Credits Attempted (13) $=2.62$

* "F" points are counted as credits attempted but produce "0" quality points
** "IC" courses (Institutional Credits) are counted neither in quality credits attempted nor as quality points.


## Quality Credits Attempted

Quality Credits Attempted (Q Cr. Attempted) consists of all the college credits attempted by a student (including those failed, but not the exclusions above).

Example: (GPA = QP Earned/Q Credits Attempted); Grade Point Average = Quality Points Earned (34) divided by Quality Credits Attempted (13) $=2.62$

## Grade Appeal

Educational institutions have the responsibility for evaluating students by standards and a grading system which is publicized and known to instructors and students. The responsibility for determining the final grade of each student rests with the faculty member who has responsibility for teaching the course in which the student is responsible for demonstrating the learning which results in a final grade. A student who feels that the final grade he/she received in the class is unfair is entitled to an appeal.

Any student pursuing a grade appeal must follow the procedure outlined below. Students are responsible for taking action within the procedural time line. Faculty secretaries are available to address student questions regarding the procedure. Grade appeals not following this procedure are not eligible for review.

Step One: The student must understand the policy and complete the appropriate form stating the exact nature of the appeal within two weeks from the end of the semester.

Step Two: The instructor must read the appeal, meet with the student and grant or deny the student's request.
Step Three: (a) If the professor is an adjunct or part-time instructor, the appropriate Program Coordinator or Department Chair must hear the appeal and attempt to resolve the problem. If no solution is reached, the appeal may be forwarded to the appropriate Division Dean whose decision is final.

Step Three: (b) If the professor is a full-time instructor, the Division Dean must hear the appeal and attempt to resolve the problem within five days of the start of the next semester. The decision of the Division Dean is considered final.

## Auditing

Students may choose to enroll in a course on an audit basis with the understanding that neither a grade nor credits can be assigned to the course(s) selected for audit. Audit status must be declared in the Registrar's Office by the tenth day of the semester. Students attempting to audit a course shall have satisfied all prerequisite requirements for that course on a credit basis unless they obtain a prerequisite waiver from the appropriate division dean or department chair. In those cases where no prerequisite is required, student requesting to audit a course must have obtained a satisfactory score on the appropriate placement test or present a one-course waiver from the Advising and Counseling Center exempting them from the placement test for the course selected for audit.

All standard tuition and fees are charged for courses audited. Senior citizens registering for credit courses on an audit basis will be charged tuition according to New Jersey statutory law. Students may not change from credit to audit status or from audit to credit status after the tenth day of the semester.

Audited courses appear on the student's transcript with a grade of "AU" and do not satisfy prerequisite requirements or indicate mastery of the subject material. Additionally, courses taken on an audit basis are not approved for veterans training, for financial aid or tuition waivers (with the exception of Sussex employees electing to audit a class as part of the standard tuition waiver benefit). Forms requesting a change from credit to audit and vice versa are available in the Registrar's Office.

Faculty members who are in charge of the course being audited shall be responsible for determining the extent to which auditing students participate in class assignments and other activities.

## Incomplete Grades

An incomplete grade "I," may be given at the initiation of a student and at the discretion of the faculty, only to students who have completed at least $80 \%$ of the required coursework with a grade of "C" or better. No "I" grade may be given without the submission of the signed form.

The completion date is determined by the instructor, but in no case may the date exceed February 15 th for grades issued in fall and Winter semesters or terms and September 30th for grades issued in spring and summer semester or terms. After the deadline, if the "I" has not been changed by the instructor, the original "I" will be recorded as an "F."

## Repeat Courses

Students may repeat courses in order to improve grade point averages. In a repeated course, the highest grade is calculated in the grade point average and appears on the transcript as "repeated course." All instances of repeated courses and grades remain on the transcript, however, credit will be awarded only once.

A course may be repeated twice, i.e., an initial registration plus two repeats for a total of three. Should a student attempt to repeat a course a third time (4th registration), he or she will be barred from registration except as noted: Special Topics, Chorus and English for Speakers of Other Languages. In the event a course is retired and a replacement course designated, the repeat logic will apply to the designated replacement course.

In the event a course is retired and a replacement course not designated, the student will lose the repeat option. Students may appeal this policy in writing to the Interim Assistant Vice President of Academic Affairs.

## Satisfactory Academic Standing

To be classified as a student in satisfactory academic standing, any student, whether full-time or part-time, matriculated or non-matriculated, must maintain a grade point average of 2.0 or above.

## Academic Requirements

- Developmental Studies
- General Education Requirements
- Liberal Arts Electives


# Academics Support Services 

- Academic Advisement
- Clearing Corporation Business Learning Center
- Computer Labs
- Distance Learning
- Library
- Earn College Credits in High School
- Service Learning
- Transfer Articulation Agreements
- Writing Center


## Academic Advisement

An important part of each student's academic career is meeting with an academic advisor to plan a program of study. Continuing students are strongly encouraged to meet with an advisor prior to registration in order to ensure sufficient progress toward a degree or certificate.

## Clearing Corporation Business Learning Center

Located in the east wing of the Academics \& Athletics Building, the Clearing Corporation Business Learning Center provides students of business administration with a contemporary, business-like environment in which they can learn, study, discuss ideas, keep abreast of the latest business news and interact informally with business faculty. The Center contains a classroom that is fully equipped with computers and modern instructional technology. It also includes a large conference room that is designed to emulate the professional environment that students will encounter during the course of their business careers.

A professional lounge area provides students with a comfortable place to read and study. The television monitors in the Center provide continuous access to news provided throughout the day by the Bloomberg Business Channel. The Clearing Corporation Business Learning Center has become a popular place for informal discussions among students and faculty, as well as presentations by guest speakers, regular Business Club meetings, business book discussions, and other events of interest to students interested in business, accounting, economics, marketing, and finance.

## Computer Labs

College computers are available in the Library, Advising and Counseling Center, Computer Classrooms, and Graphics Lab. In addition, printing is available in the Library. Students are required to pay for printing.

## Distance Learning

## Online and Hybrid Courses

Sussex offers online and hybrid courses each semester. Online courses offer all instruction and traditional course interactions in an online environment. Online courses are not for every student. It is essential to have the self-discipline required for independent learning. Access to a computer is required for online courses.

Hybrid courses are a combination of online and in-class instruction. Typically hybrid classes are held on-campus in a classroom for $50 \%$ of the course, while the other half is conducted online. Hybrid courses are designed to give the benefits of traditional face-to-face learning and the independence of online learning. Access to a computer is required.

## Sussex offers the following course delivery methods:

- In-person Courses: Taught with an instructor and students in a classroom setting at a specified campus location.
- Hybrid Course: A course with both in-person instruction AND online instruction (students must log in to CANVAS on a computer for part of the course).
- Online Courses: Provides students with maximum flexibility with their weekly schedule. Proctored exams may be required, either inperson or remotely on camera using Honor Lock services. (Asynchronous).
- Remote Delivery Courses: A course offered at a specific day and time using technology and live instruction via CANVAS LMS using a computer. May require exams proctored on camera through Honor Lock services. Similar feel to an in-person class experience than online courses. (Synchronous).
- Remote Hybrid Courses: A course with live instruction (students must log in to CANVAS on a computer for part of the course, and then EITHER an entirely online instruction OR in-person instruction at a specified campus location.


## Library

## Library \& Science (L) Building • 973.300.2162

As the research center of the College, the Library is the major resource for its educational programs. To support the College curriculum, the Library acquires, organizes, and maintains a variety of print and non-print material for individual and classroom use. Librarians are available to assist students in learning to locate, evaluate and understand information through individual reference assistance and library
instruction/information literacy classes. The Library's collection includes books, magazines, professional journals, and various non-print media. Numerous online research databases, as well as the online catalog, are available for student use both in the Library and through remote Internet access. Traditional library services such as inter-library loans and academic reserves are also available to all students, faculty, and staff.

A Student ID Card is necessary to access Library databases, borrow materials, or print. There is a nominal fee to print.

## Earn College Credits in High School

Students can get a jump on their college education by earning college credits while still in high school. Sussex offers programs that can assist in helping students graduate college early plus save substantially on the cost of tuition.

Students who earn college credits can begin preparing for their college education or career, increase their education options, enhance their opportunities for challenging and beneficial work, and see tuition savings.

Successfully completed coursework will be documented on a Sussex transcript. These credits can be applied to a Sussex degree or transferred to other colleges/universities.

Students should review the course content with admissions/ transfer counselors at the college of their choice. Many factors affect the decision to accept transfer credits, including the grade the student earned in the course

## Sussex offers options for students currently in high school

Sussex provides qualifying high school and/or homeschooled students, the opportunity to earn college credits. Sussex offers different types of programs under the Early College Advantage Program.

Qualifying high school and homeschooled students have the opportunity to take in-person and/or online courses. Students participating in these programs must adhere to all policies, rules, and regulations governing their peers, non-ECAP participants, established by the college or mandated by the state, local, and federal guidelines.

## Concurrent Enrollment Program (CEP)

The Concurrent Enrollment program allows eligible high school students the ability to participate in College courses that are integrated into their regular high school curriculum. A high school instructor who meets the credentialing eligibility criteria established by Sussex teaches concurrent courses.

## Jump Start Program

The Jump Start program allows qualified high school and homeschooled students the ability to participate in Sussex courses, taught by Sussex faculty members, either on-campus or online. Students participating in the Jump Start program are limited to two courses per semester, not to exceed 8 credits per semester.

* Home-schooled students between the ages of 16-18 may also be eligible.


## Service Learning

Service Learning is a teaching and learning strategy that integrates classroom learning with service to the community. Service Learning is an opportunity for students to get engaged with the community, meet the needs of community constituents and apply what is learned in the classroom to real-life situations.

Students who have participated in Service Learning activities report a higher level of interest in their coursework, better retention of the information they are learning - and rewarding service experiences. The skills and experience gained also look great on a resume and application for transfer to a four-year college or university.

## Transfer Articulation Agreements

Sussex has established transfer articulation agreements for specific majors with Berkeley College, Centenary College, East Stroudsburg University, Fairleigh Dickinson University, Felician University, Marywood University, Montclair State University, New Jersey Institute of Technology, Ramapo College, Rutgers University-Newark, and William Paterson University.

Most agreements guarantee students who have completed an A.A. degree or an A.S. degree, full junior-year status in various majors if they transfer to these institutions. Students should consult with the Advising and Counseling Center for additional information. Writing Center.

| 4-Year Colleges | Programs |
| :---: | :---: |
| Berkeley College Woodland Park, NJ New York, NY | - Accounting <br> - Business Administration <br> - Fashion Marketing \& Management <br> - Financial Services <br> - Health Services Management <br> - International Business <br> - Justice Studies <br> - Legal Studies <br> - Management <br> - Marketing Communications |
| Centenary College Hackettstown, NJ | Human Services |
| Fairleigh Dickinson <br> University - Madison, NJ | - Graphic Design <br> - Film and Animation |
| East Stroudsburg University East Stroudsburg, PA | - Business Management <br> - History <br> - Human Services <br> - Psychology <br> - Political Science <br> - Social Work |
| Felician University Lodi, NJ | - Business Administration <br> - Education |
| John J College of Criminal Justice Manhattan NY | - Criminal Justice |
| Marywood University Scranton, PA | Graphic Design |
| Montclair State University Montclair, NJ | - Biochemistry <br> - Biology <br> - Chemistry <br> - Environmental Science <br> - Marine Biology \& Coastal Science |


|  | - Molecular Biology |
| :---: | :---: |
| New Jersey Institute of Technology Newark, NJ | - Business Administration <br> - Computer Science <br> - Information Systems |
| Ramapo College <br> Mahwah, NJ | - Chemistry <br> - Human Services <br> - Mathematics |
| Rutgers University-Newark <br> Newark, NJ | Human Services |
| Suny Cobleskill | - Agricultural Business Management <br> - Plant Science |
| $\begin{aligned} & \text { William Paterson University } \\ & \text { Wayne, NJ } \end{aligned}$ | - Accounting <br> - Biology-General <br> - Biology Ecology <br> - Biology/Physiology/Behavior <br> - Biotechnology <br> - Chemistry <br> - Computer Science <br> - Criminal Justice <br> - Criminology <br> - Economics <br> - Education <br> - Environmental Science <br> - Finance <br> - Financial Planning <br> - Global Business <br> - Management <br> - Marketing <br> - Mathematics <br> - Professional Sales |

## Writing Center

The Writing Center offers free sessions with peer writing tutors to discuss all aspects of the writing process, from brainstorming to composition and revising/editing skills. Writers at any level are encouraged to develop their ideas and engage in interactive discussions about their writing.

## Admissions \& Registration

- Admissions
- Registration


## Financial Aid and Tuition

The following information is for the 2020-2021 academic year. Sussex County Community College reserves the right to change the tuition and fees for subsequent semesters.

- Tuition
- Fees
- Financial Aid


## Student Services

- Advising and Counseling Center
- Athletics
- Campus Life Center
- Learning Resources
- Online Tools for Students
- Students Rights and Responsibilities
- Textbooks
- Veterans Affairs

The Office of Student Services coordinates the delivery of outstanding services and activities which enhance a student's academic experience. Services include Athletics, Campus Life, Advising and Counseling Center, Financial Aid, Disabilities Program, EOF, Testing Services, International Students, Adult Basic Education Program and Veterans Services.

## Advising and Counseling Center

## Administration (B) Building • 973.300.2207

The Center provides a supportive and professional environment promoting the exploration and development of individual strengths that encourage academic success and personal growth.

The Center is dedicated to furthering the educational mission of Sussex County Community College by assisting students to be academically successful. Take advantage of the knowledge and resources available at the Advising and Counseling Center. Students can take advantage of:

## Academic Planning and Advising

Academic Planning and Advising is an essential part of a student's education and goal planning.

- Explore programs of study
- Select a program that matches your professional goals and creating an academic plan
- Choose the right courses each semester
- Find the services and support needed

Students should seek advisement in advance of the upcoming registration dates. Advising is ongoing and students should connect with their advisor to map out their academic plan early.

Following the Program Course Sequencing will help students to keep track of which courses they have taken and which courses are still required. Program Course Sequencing are available on the Colleges website under Academics, as well as in the Advising and Counseling Center.

The Center provides a supportive and professional environment promoting the exploration and development of individual strengths that encourage academic success and personal growth.

The Center is dedicated to furthering the educational mission of Sussex by assisting students to be academically successful.

## Students can get assistance with:

## Career Exploration

Finding a career path is a process that requires self-awareness and self-assessment. The Advising \& Counseling Center can assist students with career exploration to help identify a career path and the occupations and majors in that path.

## Personal Counseling

Short-term personal counseling is available to assist students in addressing non-academic problems that can adversely impact their ability to achieve personal and academic growth. All personal Sussex counseling sessions are confidential and free.

Relationship issues, anxiety, concern over alcohol or drug abuse and abusive situations are examples of the kinds of issues addressed. Referrals to community services or private practitioners may be made. ULifeline, a web-based mental health site, is available at www.ulifeline.org/schools /sccc. Counselors abide by the Code of Ethics for the American Counseling Association and the National Association of Social Workers.

## Transfer Counseling

Transfer information, including applications, transfer articulation agreements, catalogs and videos, transfer scholarships, and internet access to U.S. college sites, is available in the Advising and Counseling Center. Transfer Fairs of tri-state four-year colleges and universities are held on campus. Local colleges provide Instant Decision Transfer Days on our campus. Counselors use njtransfer.org, a web-based articulation system, for transfer within NJ.

Students should work closely with their counselor to ensure they are following the guidelines of the NJ Statewide Transfer Agreement.

## Athletics

Academic and Athletic (E) Building • 973.300.2230
Nickname: Skylanders
Sussex County Community College enhances the academic college experience with a wide array of extracurricular activities including a competitive intercollegiate athletics program. SCCC's intercollegiate sports include:

| Fall: | Men's and Women's Soccer, Football |
| :--- | :--- |
| Winter: | Men's and Women's Basketball, Wrestling |
| Spring: | Baseball, Men's and Women's Lacrosse \& Softball |
| Other: | ESports |

Sussex offers scholarship opportunities for participation in the Women's Soccer program and Men's Baseball. Sussex also offers Intramural programs based on student interest.

The College is a member of the National Junior College Athletic Association (NJCAA) and the Garden State Athletic Conference (GSAC). Athletic participation eligibility is determined by the NJCAA and adopted by the GSAC. The College adheres to all the rules set forth by the NJCAA and the GSAC.

The Campus Fitness Center is open Monday-Friday, 8am to 9 pm .

## Campus Life Center

## Student Center (D) Building • 973.300.2200

We believe that co-curricular learning ensures student success and we work hard to deliver quality programming for all students.
Throughout the year the Office of Campus Life offers leadership opportunities and plans events to meet the recreational, cultural and social interests of students. These activities include Broadway shows, dance performances, art exhibits, concerts and lectures. Most of these events are offered for free or at reduced prices to students.

## Student Ambassadors

Selected students represent the College as Student Ambassadors. Applications for the Student Ambassador Program are available in the Office of Campus Life located in the Student Center (D) Building. Ambassadors are selected based upon their academic performance and commitment to Sussex. They serve the College in recruitment and public relations activities. They also conduct campus tours and provide assistance at various college events and activities. Ambassadors are awarded tuition aid for their service to the College.

## Student Clubs and Organizations

Student clubs and organizations are a major part of campus life at SCCC. The College encourages the active formation of and participation in departmental and/or interest clubs and organizations. Campus clubs will be chartered by the Student Government Association and approved by the Senior Vice President of Academic \& Student Affairs. Clubs are organized by and for students. A complete listing of student clubs and organizations is posted online at sussex.edu/campuslife.

## Student Government Association (SGA)

The SGA is a formal student group which provides the College with input on the college experience and is committed to enriching the campus life at Sussex. All enrolled students at Sussex are members of the SGA and have the rights, privileges and responsibilities as set forth in the by-laws.

## Student Publications

The College Hill is SCCC's online student newspaper. The College Hill is committed to providing a vehicle for the exchange of ideas, opinions and perspectives about events and activities affecting Sussex students. The College Hill is available at: sussex.edu/collegehillnews.

## Learning Resources

The College's Learning Resources are designed to enhance the pursuit of academic excellence for the entire College community. This is accomplished through a variety of special programs and services.

## ABE/HSE Study Programs

973.300.2158

The $\mathrm{ABE} / \mathrm{HSE}$ program provides individualized instruction tailored to the specific needs of each student and designed to improve skills in reading, writing, math, social studies and science. Students have the opportunity to increase their basic skills in these academic areas and to continue learning more advanced skills in order to prepare for the High School Equivalency (HSE) Exam. Assistance is also provided to connect students with information and resources for college enrollment, workforce development, employment and training services.

## Disabilities Assistance Program (DAP)

### 973.300 .2153

The Disabilities Assistance Program provides services for students who require academic and facilities accommodations to fulfill their higher education goals. The Disabilities Coordinator/ Advisor works with academic departments and student services offices to engage and support the intellectual and social development of students with disabilities.

## English for Speakers of Other Languages (ESOL)

Administration Building I 973.300.2157
Non-native speakers of English will find a variety of courses in our program designed to fit the needs of English language learners in achieving academic, career, and personal goals.

Incoming students meet personally with the program coordinator and are administered the Accuplacer for ESOL to assure proper placement.
Academic ESOL classes in grammar, writing, reading and vocabulary development, and listening and speaking are offered in beginner, intermediate, and advanced levels. Students are taught in small groups to enhance the learning experience and focus on preparing for transition into college courses.

The ESOL program also offers free life skills English classes in "American Language and Civics" in four levels; literacy, beginner, intermediate, and advanced.

## Tutoring

Tutoring is offered in all levels of math and science. Tutoring is offered in the College Library. Additional tutoring resources may be found at the Writing Center in the Student Center and in Degree Up in the Academic/Athletic Bldg. Schedules for tutoring are posted online at sussex.edu/tutoring.

## Online Tools for Students

Student Email - All registered students are issued an official Sussex email account. The account details are sent to new students in the mail prior to the start of the semester. All College communication including messages from faculty will be sent to the college issued email address.

Student Portal: my.sussex.edu - The student portal is a password protected student website where Sussex students can view grades, unofficial transcripts, schedules and financial aid records. Students can also register for classes and pay tuition through the portal.

Regroup Alert - Sussex utilizes a broadcast alerting service, Regroup Alert, to communicate timely information to students, faculty, staff and other members of the campus community by sending text alerts, email and/or recorded voice messages to participating students, faculty and staff. Sign up is required by the individual.

Pay Online and E-refund - Students are encouraged to pay tuition online with their student assigned ID and password. There is an interest-free payment plan for the spring and fall semesters. E-refund offers a convenient way for students to receive electronic refund checks back into their bank account.

Distance Learning Site - All students enrolled in online and blended (hybrid) classes will use this site for communication with instructors.

## Students Rights and Responsibilities

The central functions of an academic community are learning, teaching, research and scholarship. By accepting membership in the College, an individual joins a community ideally characterized by free inquiry, intellectual honesty, respect for the dignity of others and openness to constructive change. The rights and responsibilities exercised within the community must be compatible with these qualities.

The College places emphasis upon certain values which are essential to its nature as an academic community. Among these are freedom from personal force and violence and freedom of movement. Interference with any of these freedoms must be regarded as a serious violation of the personal rights upon which the community is based. Furthermore, the administrative processes and activities of the College cannot be ends in themselves, as such functions are vital to the orderly pursuit of the work of all members of the College. Therefore, interference with members of the College in performance of their normal duties and activities must be regarded as unacceptable obstruction of the essential processes of the College. Theft or willful destruction of the property of the College or its members must also be considered an unacceptable violation of the rights of individuals or the community as a whole. Physical violence or the threat of same is also considered to be an unacceptable violation of rights.

Moreover, it is the responsibility of all members of the academic community to maintain an atmosphere in which violations of rights are unlikely to occur.

All students accepted at Sussex County Community College acknowledge with their enrollment an obligation to abide by the College regulations and policies as established by the Board of Trustees, by the faculty and administration of the College.

Students are responsible for their own actions and are expected to maintain the highest standard of conduct at all times and in all places. Each must, of course, respect the rights and privileges of all instructors and other students.

The essential and unavoidable condition of the mutual commitment to personal and academic integrity must be respected at all times and in all situations. Implicit in this mandate is the expectation that all work submitted by the student as his/her own is the result of independent effort. Any attempt to plagiarize or copy another's work, during examinations or in class work, will render the record of the student suspect and may warrant academic penalty or other disciplinary action.

The College reserves the right to dismiss any student whose continued attendance, in the judgment of the administration, is detrimental to the College or its students. Rules and regulations pertaining to student behavior are provided in the Student Code of Conduct which is appended to this statement.

Furthermore, Sussex County Community College respects the rights of students in its firm commitment to a policy of Equal Opportunity and Affirmative Action and will implement this policy to assure that the benefits, services, activities, programs and employment opportunities offered by this institution are available to all persons regardless of race, religion, color, national origin, ancestry, sex, handicap, marital or veteran status and in accordance with state and federal laws: Title VI, Title VII, Civil Rights Act of 1964; Executive order 11246, as amended; Title IX, Educational Amendments of 1972; section 503 and 504, ehabilitation Act of 1973, as amended; Veterans Assistance Act of 1972 as amended.

Sussex County Community College also respects the rights of students in its firm commitment to the provisions of the Federal Family Educational Rights and Privacy Act of 1974 (FERPA) which gives students the right to inspect educational records maintained about them by the College, the right to a hearing to challenge the contents of these records and the right to make explanation for challenged information. The College will maintain the confidentiality of student records except with respect to those special cases noted in the legislation.

Finally, all students at Sussex County Community College have attendant financial rights and responsibilities.

## Students have the following financial rights:

1. To know what financial aid programs are available at the school;
2. To know the deadlines for submitting applications for each of the financial aid programs;
3. To know how financial aid is distributed; how distribution decisions are made and the basis for these decisions;
4. To know how the financial need was determined, including how costs for tuition and fees, room and board, travel, books and supplies, personal and miscellaneous expenses, etc., are considered in student budgets;
5. To know what resources (such as parental contribution, other financial aid, student's assets, etc.) were considered in the calculation of their needs;
6. To know how much of the financial need as determined by the institution has been met;
7. To request an explanation of the various programs in the student aid package;
8. To know the school's refund policy;
9. To know what portion of the financial aid received must be repaid and what portion is grant aid. If the aid is a loan, students have the right to know what the interest rate is, the total amount that must be repaid, the payback procedures, the length of time available to repay the loan and when repayment begins;
10. To know how the school determines whether students are making satisfactory progress and what happens if they are not.

## Students have the following responsibilities:

1. To complete all application forms accurately and submit them on time to the appropriate office.
2. To provide correct information. In most instances misreporting information on financial aid application forms is a violation of law and may be considered a criminal offense which could result in indictment under the U.S. Criminal Code.
3. To return all additional documentation, verification, corrections and/or new information requested by either the Financial Aid Office or the agency to which the application was submitted;
4. To read and understand all forms they are asked to sign;
5. To accept responsibility for all agreements they sign;
6. To perform the work agreed upon when accepting a college work-study award;
7. To be aware of and comply with deadlines for application or reapplication for aid;
8. To be aware of the school's refund procedures;
9. To consider this information carefully before deciding to attend a school. All schools must provide information to prospective students about the schools' programs and performance.

## Textbooks

Textbooks can be ordered from the eCampus online store. sussex.edu/campus-store.

## Veterans Affairs

## Student Center (D) Building D110B•973.300.2109

The Veterans Services Coordinator is available to assist veterans and their dependents in the application and processing of requests for veterans' benefits and to provide support and resources in the transition to civilian and campus life.

A Veterans Resource Center and lounge, the Student Veterans Organization (SVO), SALUTE - the national honor society for veterans are some the of services offered. Contact the Veterans Services Coordinator at (973) 300-2109. Information on the Post $911 / \mathrm{GI}$ BILL® is also available at https://www.benefits.va.gov/gibill/post911_gibill.asp

## Community Education \& Activities

- Alumni Association
- Art Gallery
- Betty June Silconas Poetry Center
- EDTV, Channel 20
- Foundation
- Public Safety Training Academy
- Radio Station - WRSK LP 97.5 FM
- Teen Arts

Sussex offers Community Education and Activities to provide a variety of quality, relevant and essential educational programs to individuals, businesses and the community to help fulfill employer training needs, as well as individual career and/or personal training. Additional services include the Lace Program, NJ Small Business Development Center, NJBIA \& NJCCC Workforce Development, Rider Education, Senior Life Center and Senior Walking.

## Art Gallery

Art work from faculty, students and area artists is featured throughout the year in the Art Gallery, Building C, and in the Atrium of the Performing Arts Center. The schedule of shows is presented with the Performing Arts schedule and posted online.

## Betty June Silconas Poetry Center

The Betty June Silconas Poetry Center (BJS) honors the memory of Betty June Silconas, a Sparta resident, who celebrated life in her poems. The joy and love she had for family, friends, and her home are evident in her work. Ms. Silconas never sought to be recognized. She wrote for the bliss she experienced as she chronicled the events in her life: seasons, celebrations, and her spirituality. Thanks to a generous donation from her family, the Center is a place where anyone can come to read and write poetry. Sponsored events such as readings and workshops are also held.

## EDTV, Channel 20

Sussex hosts a local educational access television station on cable through the facilities of Service Electric Cable TV. EDTV provides educational programming, course support, college and high school programs, sports and local programming of community interest. Sussex broadcast students help support the programming and gain valuable experience in their field of interest.

## Foundation

The College Foundation enhances the College's mission of providing educational excellence and cultural opportunities to the residents of Sussex County and beyond. The Foundation supports this mission through fund-raising and friendraising efforts on the College's behalf. Funds are generated through annual giving campaigns, special events, and direct contributions. The funds raised support student scholarships, infrastructure, and expansion.

Scholarships are available for the fall and spring semesters. The timeframe and process is posted on the website and applications can be submitted online.

## Scholarships

The Advising and Counseling Center has information available on local, national and transfer scholarships. Internet access to specific scholarship sites is also available. The College Foundation maintains a number of locally endowed and in-house scholarships that are designed to assist qualified students with the cost of attending Sussex. These Foundation Scholarship applications are available online at sussex.edu/scholarships.

## Public Safety Training Academy

Sussex County Public Safety Training Academy (PSTA) is located 5 miles from the SCCC's main campus in Frankford Twp. The Academy offers relevant, quality training, educational programs and opportunities to the fire service, law enforcement, emergency medical personnel, government employees and the general public in all aspects of public safety.

The facility is accredited by the State Division of Fire Safety to deliver state fire service courses and is also licensed for live burns and various simulators by the Division. The Fire Service trains over 1500 people annually in courses such as Firefighter 1, Firefighter 2, Firefighter 3, Strategies \& Tactics and Incident Management, as well as other state \& federally approved courses. It is also the hub for police service training as well as HAZMAT and Special Operations training and EMT Training.

The Academy also trains local businesses and institutions in various types of fire safety both at the Academy and at the employer's location. A Summer Fire Academy is held July for high school students, as well as an antique fire truck show in October.

## Radio Station - WRSK LP 97.5 FM

The College offers listeners a College Radio Station that is broadcasted from the College campus. WRSK LP 97.5 FM, Radio Skylanders is the home for Cruzin Oldies, the voice of Sussex County Community College.

## Teen Arts

SCCC hosts the annual Teen Arts Festival every spring featuring works from area Middle and High School Students. Works are displayed throughout the campus.

## Programs Offered (A to Z)

3D Computer Arts Option, A.A.S. - Graphic Design

This program is designed to prepare students for entry-level positions in the game and graphics industry. Studio-intensive courses include the rapidly advancing technology of computer graphics and a wide spectrum of digital visual media including 3-D modeling and animation, texture and lighting, compositing, digital film and video effects, and creating graphics for the Internet utilizing industry-standard software. Graduates will have the introductions necessary to consider careers in graphic design, 2-D conceptual art, 3-D character building, 3-D object modeling, 2-D texture art, or interactive design.

Approximately one-half of all program graduates go on to complete a baccalaureate degree in game art, animation, graphic design, film, video, or illustration.

## Upon completion of this program, graduates will be able to:

- Analyze the history of visual culture and design theory, and apply historical relevance in the context of modern industry issues and trends.
- Conceptualize, design, and plan animated works while exercising store development and artistic techniques.
- Execute technical, aesthetic, and conceptual decisions based on understanding the functions of traditional design and computer-based graphics.
- Use the principle techniques of 3-D modeling and animation for content related to film and game design.
- Collaborate with diverse teams of creative contributors, production personnel, and clients while working with creative constraints and deadlines.
- Produce a professional portfolio of representative projects.
- Apply knowledge of intellectual property issues.
- Introduction to a career in various industries including game art, illustration, video, film web, desktop publishing, and advertising.


## First Year

Fall Semester

## COLL 101 - Foundations for Success

## Credits: 3

This is a student-centered course covering numerous strategies to encourage students to become active and empowered learners. A primary goal of this course is to help students make the most out of their college experience. Students will obtain information about college life and culture and develop strategies and techniques to enhance success in their academic, personal and professional lives. The course is infused with opportunities to understand, practice and implement critical thinking. Students will also gain practical information to help prepare to transfer to a four-year
university or enter the workforce directly. All topics will be presented in both theory and practice. This course is required of all degree-seeking candidates and must be taken within the initial 16 credits after entry.

## ENGL 101 - English Composition I

Credits: 3
This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects which include personal, rhetorical, and expository models. Research skills are introduced.

## GRAD 101 - Design I

Credits: 3
This course is an exploration of the fundamental principles of design through a series of weekly lectures, discussions, and short readings reinforced by studio assignments and critiques. This class focuses on developing the ability to skillfully use and combine core design elements and utilize design principles while mastering the craft of materials to convey meaning. Assignments are organized and designed to engage students with optimal learning opportunities in developing critical thinking skills and professional vocabulary allowing for further study. Although this course is not a software-oriented course student will be introduced to the computer utilizing Adobe Illustrator and Photoshop to gain very basic skills.

## GRAD 105 - Vector Graphics \& Page Design

## Credits: 3

This course emphasizes techniques and applications used to produce published documents for both Internet and print media. Students will learn to design documents, publications, and related projects using industry standard software on both MAC and PC platforms. An emphasis is placed on basic computer graphic skills through practical experience with two-dimensional paint and draw programs, as well as layout programs for print and web. Projects covered include advertising design, page layout, computer illustrations, digital imaging, and the scanning and manipulation of images. Lab Fee Required.

Prerequisite: Any COMS course

## GRAD 153 - Character Design

## Credits: 3

This course is designed to introduce the student to the essential craft of developing characters for stories, games, and other forms of video entertainment. Before any of these entertainment forms can be pursued, an artist must develop successful characters. Students will learn that the thousands of hours of work and countless frames of video involved in these endeavors all depend on the success of the artist's vision, and they will have the opportunity to study different forms of character development ranging from the elegant lines of Japanese Anime to the poignant expressions of King Kong. Pencil, paper, clay, and polymer will all be used along with sketched storyboards to help character designer's work with authors and directors to identify and realize projects. Lab Fee Required.

Total Semester Hours: 15

## Spring Semester

- MAST 000 - Math/Science/Technology Gen Ed Requirement Credits: 3


## ARTA 103 - Art History I

## Credits: 3

This course surveys visual artistic expression from the Neolithic period to the fourteenth century, including ancient, medieval and non-European art forms. The development of artistic concepts in the ancient world, gender, and non-western art are central topics in this general survey course.

Prerequisite: ENGL 021, ENGL 032 or Placement into ENGL 101

## GRAD 107 - Drawing for Designers

## Credits: 3

This is a studio course where students will observe and create in the physical world away from the computer. This course suggests that real-world observation is invaluable in the planning of traditional illustration, digital illustration, 2D graphics, and 3D generated images. Areas of instruction will include graphic design drawing elements (such as line, value, texture, color, and composition), perspective, architecture, and environments. The course will also emphasize basic drawing techniques, anatomy for the artist, life drawing, lighting, texturing, and storyboarding. Students will learn how to efficiently work with pencil, charcoal, ink, markers, and mixed media. Lab Fee Required.

## GRAD 128 - Digital Imagery \& Editing

## Credits: 3

This course provides students with the intensive exploration of advanced digital imaging as it applies to photography creating PDF documents, optimizing web graphics and complex layered images. Students will perfect their ability to creatively use digital imaging software to create sophisticated graphics for print and the web. Further study and practical application will be applied to creating documents for both the Internet and print mediums. An emphasis is placed on developing quality portfolio pieces. Lab Fee Required.

Prerequisite: GRAD 105

## GRAD 158-3D Modeling

## Credits: 3

This course is designed to introduce the student to the basic concepts of modeling, texturing, and lighting and their application to 3D projects. Students will learn how artists build and sculpt 3D models, give them detailed textures, and light them in dozens of different ways using computer software. Topics include user interface, polygonal modeling, NURBS modeling, 3D cameras, lighting execution, textures and mapping. Lab Fee Required.

Prerequisite: COMS 110 or COMS 113

Total Semester Hours: 15

Fall Semester

## ENGL 201 - Effective Speaking

Credits: 3
This is a course in public speaking which stresses speech organization, effective delivery and critical listening skills. A strong emphasis is placed on student performance to help the student gain speech practice and develop self-confidence in a variety of speaking situations.

Prerequisite: ENGL 015 and ENGL 031

## ARTA 104 - Art History II

## Credits: 3

This course surveys the history of art from the fourteenth through the twenty first centuries. The development of artistic concepts in the contemporary world, art and gender, and non-western art and architecture are central topics in this general survey course. Emphasis is place on viewing art forms in context of culture and gender and understanding the philosophical foundations and critical theories that support and influence them

Prerequisite: ENGL 021, ENGL 032 or Placement into ENGL 101

- GSOC 000 - Social Science Gen Ed Requirement Credits: 3


## GRAD 162 - Character Modeling in 3D

## Credits: 3

This course introduces students to the art of 3D anatomy and sculpting. Using conceptual drawings and sculptures, students will learn to visualize and render their creations in a 3D perspective. Utilizing 3DS Max, bones and controllers will be added to these characters, enabling them to become animated works of art. Lab Fee Required.

Prerequisite: GRAD 153 and GRAD 158

## GRAD 163-3D Environments

## Credits: 3

This course is designed to introduce the student to advanced, organic modeling techniques, advanced texturing, and lighting and their applications to 3D Environments. Students will learn how to utilize these advanced techniques to construct a virtual environment with creativity and appeal. Topics include organic modeling and edge flow, environmental textures and their applications, 3D cameras and the viewer perspective and advanced lighting.

Prerequisite: GRAD 158

## GRAD 164 - Character Animation in 3D


#### Abstract

Credits: 3 This course is designed to help the student develop skill in the animation of inanimate objects, character and interactivity between the two. Students will use a predetermined character to develop weight, emotion, and interactivity with personality and purpose. The course will expose students to traditional animation techniques, such as keyframing, pose-to-pose, and then help students see how these techniques apply to sophisticated 3D animation software such as 3DMAX. Lab Fee Required.


Prerequisite: GRAD 158

## GRAD 202-3D Level Design

## Credits: 3

3D Level Design introduces students to the art of the game world. Utilizing Autodesk 3DS Max and Unreal Tournament 3 Editor, students will learn to manipulate "in-game" assets in order to construct a fluid, seamless, and creative environment to virtually explore and interact with. Along with development comes quality assurance, which is another in-depth process that we explore in this class. Testing our game world and making sure the characters inside of it can traverse terrain and obstacles with ease.

## GRAD 235 - Video and Motion Graphics

## Credits: 3

This course introduces students to software products (editing suites and special effects) that are now widely used in the gaming and entertainment industries for editing and graphic manipulation. Students will learn to use specialized compositing tools to edit scenes, insert graphic effects, place sound effects and blend music to create a final professional product. Software packages used in this class include Adobe's After Effects ${ }^{\circledR}$ and Premiere ${ }^{\circledR}$.

## GRAD 282 - Portfolio/Demo Reel Preparation and Presentation

## Credits: 2

In this course, students will develop a digital portfolio/demo reel of professional quality geared to the area of the industry the student is most interested in and representative of technical and creative skills and career objectives. Excellent portfolio organization and resume presentation will be stressed. Cover letters, interviewing styles and image presentation will be discussed. Students will write their goals, both short and long range, create a resume and develop a digital portfolio/demo reel for critique, suitable for presentation to a school, client or job interview.

## Credits: 1

This course is designed for 3D Computer Arts majors who have demonstrated advanced skill levels and for those who have potential to perform professionally in a work environment. Internships include practical work experience in an on or off campus business or project (i.e. 3D studios, graphic design businesses or corporate art departments). Students are required to complete 45 hours in the field. Lab Fee Required.

Prerequisite: GRAD 101, GRAD 105, GRAD 107, GRAD 128, GRAD 144, GRAD 153, GRAD 158, GRAD 162, GRAD 163

Total Semester Hours: 15

Summer Session

Total Program Hours: 60

# Math, Science, Technology, Humanities, and Social Science Gen Ed Requirement 

Choose from the list of approved General Education courses in the College catalog.

## Developmental Courses

Students may need to first take some developmental courses that are designed to prepare students for the college-level coursework in their academic plan. This may add to the students' completion time. The number of credits students take each semester will determine when the student will complete his/her program of study.

## Accounting, A.S.

This program is designed primarily for students who wish to pursue a baccalaureate degree in accounting or finance at a four-year institution. Graduates of this program have also successfully entered the workplace in a variety of entry-level accounting-related positions. The program offers not only an extensive background in accounting but also a strong fundamental knowledge of the major functions of business and industry.

## Upon completion of this program, graduates will be able to:

- Demonstrate knowledge of generally accepted accounting principles (GAAP).
- Describe and implement all the steps in the accounting cycle.
- Construct and interpret basic financial statements (balance sheets, income statements, the statement of cash flow, etc.).
- Identify and develop effective internal control systems.
- Identify unethical accounting practices and describe the basic aspects of the Sarbane-Oxley Act as related to ethical accounting practices.
- Utilize computer spreadsheet programs to record various types of accounting information and perform basic day-to-day accounting operations.


## First Year

## Credits: 3

This is a student-centered course covering numerous strategies to encourage students to become active and empowered learners. A primary goal of this course is to help students make the most out of their college experience. Students will obtain information about college life and culture and develop strategies and techniques to enhance success in their academic, personal and professional lives. The course is infused with opportunities to understand, practice and implement critical thinking. Students will also gain practical information to help prepare to transfer to a four-year university or enter the workforce directly. All topics will be presented in both theory and practice. This course is required of all degree-seeking candidates and must be taken within the initial 16 credits after entry.

## ENGL 101 - English Composition I

## Credits: 3

This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects which include personal, rhetorical, and expository models. Research skills are introduced.

## COMS 110-Computer Concepts \& Applications

## Credits: 3

This course is designed to provide the student with a level of knowledge necessary to function in today's technological society. Topics include computer and network terminology, hardware, software, and processing concepts. A large portion of the class time is dedicated to exercises performed using integrated software packages. Lab Fee Required.

Corequisite: COMS 110S

## ACCT 101 - Accounting Princ. I Financial

## Credits: 3

This course is a study of accounting principles and procedures. The accounting cycle is covered for a service industry. Additional topics include accounting for merchandising operations; cash and short-term investments; inventory; the acquisition, allocation, and disposal of tangible and intangible assets; and current liabilities.

## BUSA 101 - Intro. to Business

## Credits: 3

This course is designed to provide the student with an overview of all critical business functions. Topics include forms of business ownership, legal aspects of business, human resource management, finance, marketing, accounting, management information systems, international business and contemporary business issues. Students taking this course are prepared for more advanced courses in business.

Winter Session

Spring Semester

## ENGL 102 - English Composition II

## Credits: 3

This course introduces students to short fiction, poetry, drama, and the novel. Written assignments are based on the readings. Writing skills learned in Composition I are further developed. Students will write a research paper which demonstrates understanding of literary criticism.

Prerequisite: ENGL 101 (Grade of C or better)

## MATH 108 - Statistics

## Credits: 3

This course includes the following topics: organization of data, measures of central tendency and dispersion, probability, the normal and binomial distributions, confidence intervals, hypothesis testing, analysis of variance, and correlation.

Prerequisite: MATH 017 (Grade of C or betterI) or MATH 023 (Grade of C or betterI) or appropriate algebra placement score

## ACCT 102 - Accounting Princ. II Managerial

## Credits: 3

This course addresses managerial accounting concepts which are necessary for decision-making, performance evaluation, planning, and control. Emphasis is placed on using accounting data as a tool to enhance the information's usefulness to the firm's management. The course deals with corporate equity, the management cycle, product costing methods and standards, responsibility accounting and segment analysis, budgeting, costbehaviors, activity-based systems, statement analysis, and preparation of the statement of cash flow. Quantitative methods necessary for managerial accounting will be emphasized.

Prerequisite: ACCT 101 (Grade of C or better)

## ECON 101 - Macroeconomics

## Credits: 3

This course is an analysis of major economic concepts. Topics include the elements of national income; the economic roles of government and labor; classical economics; monetary institutions and policies; the Keynesian model and modern fiscal policy; the macroeconomic aspects of world trade.

Credits: 3
This course is an introduction to the judicial process as it pertains to business law. Topics include the history of business law, contracts, business torts, white-collar crime, UCC sales, paper and securities. An in-depth study of rights and obligations as they apply to contract law is performed.

Total Semester Hours: 15

Summer Session

## Second Year

## Fall Semester

- LSCI 000 - Science Gen Ed Requirement Credits: 3
- MATH 900 - Math Gen Ed Requirement Credits: 3
- GSOC 000 - Social Science Gen Ed Requirement Credits: 3


## ACCT 107 - Computerized Accounting

Credits: 3
This course is designed to provide students with a working knowledge of accounting software packages used in industry. The software packages will be representative of the various types on the market. Students will use the following accounting modules: general ledger, accounts receivable, accounts payable, fixed assets, payroll, and cash receipts/payments. Lab Fee Required.

Prerequisite: ACCT 101 (Grade of C or better)

- ACCT 000 - Program Elective Credits: 3

Total Semester Hours: 15

## Winter Session

## Spring Semester

- MATH 900 - Math Gen Ed Requirement Credits: 3
- ACCT 000 - Program Elective Credits: 3
- GHMN 000 - Humanities Gen Ed Requirement Credits: 3
- ACCT 000 - Program Elective Credits: 3
- GSOC 000 - Social Science Gen Ed Requirement Credits: 3


## Science General Education Courses (Recommended)

Recommended courses are listed below but students can also choose from the list of approved General Education courses in the College catalog.

## BIOS 101 - General Biology

## Credits: 4

This course introduces the student to the principles of modem biology. Emphasis is on the chemistry, structure, heredity, reproduction, development, ecology, and evolution of living things. For non-science majors. Lab Fee Required.

Corequisite: BIOS 101L

## BIOS 122 - Intro. to Environmental Science

Credits: 4
This course is designed to explore the factors influencing the environment and to increase awareness of environmental problems. Topics include air, land, and water resources, ecology, waste management, and the human effects on the environment. Lab exercises and field trips will supplement the theory presented. Lab Fee Required.

Corequisite: BIOS 122L

## PHYS 107 - Introductory Meteorology

## Credits: 4

This introductory course consists of five areas of concentration-atmospheric components; weather systems; upper air dynamics; satellite and radar interpretation of severe and weather elements; a review of historical weather events and their social and geographical effects; systems examined include hurricanes; severe thunderstorms and the mesosyclone; forms of precipitation; hourly observations; cloud identification; interpretation NCEP/NOAH data for forecast modeling data.

Corequisite: PHYS 107L

## Humanities and Social Science General Education Courses

Choose from the list of approved courses in the College catalog.

## MATH General Education Courses

Take two in sequence

## MATH 110 - Pre-Calculus I

Credits: 3
This course is designed to strengthen algebraic skills and give students the math confidence to proceed with calculus and other higher forms of mathematics. Topics include the study of functions, graphing techniques, polynomial, rational, exponential and logarithmic functions and systems of equations and inequalities.

Prerequisite: MATH 040 (Grade of C or betterI) or appropriate pre-calculus placement score

## MATH 111 - Business Calculus

Credits: 3
This course introduces students to the techniques of differential and integral calculus. Emphasis is placed on the applications of limits derivatives and integrals in the field of business.

## MATH 112 - Pre-Calculus II

Credits: 3
This course is a continuation of Pre-Calculus I. It emphasizes mastery of the basic concepts of trigonometry, vectors, and conic sections. Topics include trigonometric functions, applied and analytical trigonometry, and an introduction to analytic geometry.

Corequisite: MATH 110

## MATH 113 - Calculus I

## Credits: 4

This course includes a review of algebraic and transcendental functions and their graphs; study of the concepts of limits and continuity, the derivative and its applications; indeterminate forms; introduction to integration and its applications.

Prerequisite: MATH 110 and MATH 112 (Grades of C or better) or appropriate pre-calculus placement score

## MATH 114 - Calculus II

## Credits: 4

This course is the second semester of a three semester sequence of introductory calculus. Topics include integration techniques, applications of integration, delete in.... forms infinite series, parametric equations, and polar coordinates.

## ACCT 205 - Payroll Accounting

Credits: 3
This course is designed to prepare students to enter into the payroll accounting profession. Students learn the various federal and state requirements that govern payroll record keeping and reporting. The student will study ways to implement the requirements in both a manual and an automated payroll environment.

Prerequisite: ACCT 101 (Grade of C or better)

## BUSA 220 - Principles of Marketing

## Credits: 3

This course is an introduction to the basic principles and practices in industrial, consumer, and international marketing. Topics include product development, pricing, distribution, and promotion. The course prepares students for advanced study in specialized areas of marketing, retailing, and sales.

Prerequisite: BUSA 101

## ECON 102 - Microeconomics

## Credits: 3

This course is an exploration of economic factors that affect the firm and individual consumers. Topics include the laws of supply and demand, elasticity, consumer demand and utility theory, production, pricing, competitive behavior, monopoly and imperfect competition, labor economics, international trade.

## BUSA 190 - Business Applications using Electronic Spreadsheets

Credits: 3
This course presents a practical approach for implementing spreadsheet software in the planning and developing of budgets, cash flows, financial statements, and other business records. Emphasis is placed on the financial functions available in the programs and the development of macros. Basic data base management is also incorporated. Lab Fee Required.

Prerequisite: ACCT 101

## Developmental Courses

Sussex has embraced a practice of directed self-choice whereby students are encouraged, through guided conversations with an advisor, to best determine their readiness for this course. Students should be aware that Developmental Studies exist and are available to help strengthen skills and encourage success. Pursuing testing and/or developmental courses is entirely up to the student. Further, testing, though providing a valuable reference point for reflection, does not create for the student an obligation to follow Accuplacer recommendations.

The exception to this is where students seek enrollment in higher-level math courses. Students wishing to enroll in the following math courses are required to take and adhere to placement guidance from, the Advanced Algebra and Functions test, as part of Accuplacer, through the college's

# Agricultural Business, A.A.S. 

The Associate in Applied Science Degree in Agricultural Business is designed for individuals with a strong interest in occupations that relate to farming, nursery production, landscape design, landscape maintenance, the production of organic fruits and vegetables, and similar agricultural endeavors.

Students interested in operating their own agricultural businesses need some knowledge of standard business practices, business planning, marketing, and supervision in addition to technical skills such as plant propagation, production at scale, greenhouse management, pest control, and related issues.

## Upon completion of this program, graduates will be able to:

- Demonstrate proficiency in written and oral skills when communicating about agricultural business topics.
- Demonstrate the ability to analyze agribusiness data in the free market and global economies.
- Demonstrate the ability to retrieve and critically evaluate information from a variety of agribusiness sources.
- Research, develop, organize, and write a business/marketing plan for an agribusiness enterprise.
- Demonstrate readiness for employment in the field of agribusiness.


## First Year

## Fall Semester

## COLL 101 - Foundations for Success

## Credits: 3

This is a student-centered course covering numerous strategies to encourage students to become active and empowered learners. A primary goal of this course is to help students make the most out of their college experience. Students will obtain information about college life and culture and develop strategies and techniques to enhance success in their academic, personal and professional lives. The course is infused with opportunities to understand, practice and implement critical thinking. Students will also gain practical information to help prepare to transfer to a four-year university or enter the workforce directly. All topics will be presented in both theory and practice. This course is required of all degree-seeking candidates and must be taken within the initial 16 credits after entry.

## ENGL 101 - English Composition I

## Credits: 3

This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects which include personal, rhetorical, and expository models. Research skills are introduced.

Credits: 3
This course surveys several basic concepts of mathematics designed to give non-scientific/non-technical majors an understanding of the breadth of mathematics in areas other than computational application. Topics include: logic, financial management, geometry, measurement, probability and statistics.

Prerequisite: MATH 017/MATH 023 (Grade of C or better) or appropriate algebra placement score

## AGSC 101 - Intro. to Agricultural Science

## Credits: 3

This course introduces students to career opportunities and the general concepts of horticulture which includes plant taxonomy, physiology, crops, and their general management.

## BIOS 101 - General Biology

## Credits: 4

This course introduces the student to the principles of modem biology. Emphasis is on the chemistry, structure, heredity, reproduction, development, ecology, and evolution of living things. For non-science majors. Lab Fee Required.

Corequisite: BIOS 101L

Total Semester Hours: 16

## Winter Session

## Spring Semester

## ENGL 125 - Tech. Writing \& Communication I

## Credits: 3

This course focuses on expository writing for business, industrial, and scientific fields, emphasizing the principles for organizing, writing, and revising clear, readable documents and reports. Students will practice written, oral, reading, and reasoning skills. Research skills will be advanced.

## CHEM 100 - Introductory Chemistry

## Credits: 4

This course includes the basics of inorganic, organic, and biochemistry. The emphasis is on environmental issues, and on energy production and utilization in living organisms. Lab experiments illustrate the concepts studied. Lab Fee Required.

Corequisite: CHEM 100L
Prerequisite: MATH 017 or MATH 023 or the approved score on the College Placement Test

Credits: 3
This course is designed to provide the student with an overview of all critical business functions. Topics include forms of business ownership, legal aspects of business, human resource management, finance, marketing, accounting, management information systems, international business and contemporary business issues. Students taking this course are prepared for more advanced courses in business.

## COMS 110-Computer Concepts \& Applications

## Credits: 3

This course is designed to provide the student with a level of knowledge necessary to function in today's technological society. Topics include computer and network terminology, hardware, software, and processing concepts. A large portion of the class time is dedicated to exercises performed using integrated software packages. Lab Fee Required.

## Corequisite: COMS 110S

- GHMN 000 - Humanities Gen Ed Requirement Credits: 3

Total Semester Hours: 16

Summer Session

Second Year

## Fall Semester

## AGSC 107 - Agriculture Pest Control \& Mgmt.

## Credits: 4

This course is designed to introduce the student to the fundamental theories, principles, and practices of pest control for agriculture and ornamental horticulture crops. Diagnostic skills for insect, disease, and weed identification are presented.

Corequisite: AGSC 107L

## BUSA 211 - Mgmt. \& Organizational Behavior

## Credits: 3

This course is an introduction to management structure and transformational processes in organizations. Topics include planning, organizing, staffing, organizational control, motivation, group dynamics behavior, leadership, managing change and contemporary issues.

Credits: 3
This course is a comprehensive hands-on study of Office Automation which provides the student with extended knowledge of Windows, word processing, electronic spreadsheets, and data base management. Lab Fee Required.

Prerequisite: COMS 110 or Higher

## ECON 102 - Microeconomics

## Credits: 3

This course is an exploration of economic factors that affect the firm and individual consumers. Topics include the laws of supply and demand, elasticity, consumer demand and utility theory, production, pricing, competitive behavior, monopoly and imperfect competition, labor economics, international trade.

- AGBS 000 - Option Elective Credits: 3

Total Semester Hours: 16

## Winter Session

## Spring Semester

## AGSC 201 - Agricultural Marketing

Credits: 3
This course covers the practices used in the marketing of farm products. Principles of farm cooperatives, farm markets and stores, crop planning, methods of distribution, research procedures and marketing problems facing the farmer today will be discussed.

Prerequisite: BUSA 101 (Grade of C or better)

## AGSC 240 - Agricultural Science Internship

## Credits: 3

This course is a capstone experience offering students the opportunity to integrate work experience and classroom instruction through the joint efforts of the employer, the College, and the student. Trainees, with the assistance of their teacher-coordinator and worksite supervisor(s), pursue their occupation career objective through group and individualized instruction. Lab Fee Required.

Prerequisite: 9 Credits in Agricultural Business or Horticultural Science, Permission of Program Coordinator

## Credits: 3

This course is an introduction to the judicial process as it pertains to business law. Topics include the history of business law, contracts, business torts, white-collar crime, UCC sales, paper and securities. An in-depth study of rights and obligations as they apply to contract law is performed.

- AGBS 000 - Option Elective Credits: 3

Total Semester Hours: 12

Summer Session

## Total Program Hours: 60

## Humanities General Education Courses (Recommended)

Recommended courses listed below but student can also choose from the list of approved General Education courses in the College catalog.

## SPAN 101 - Elementary Spanish I

Credits: 3
This is an introductory course in Spanish emphasizing the fundamentals of speaking, reading, writing, and listening. The course focuses on building basic vocabulary and introducing students to the Hispanic culture. It is designed for students with no Spanish experience.

## HUMN 101 - Survey of World Culture I

## Credits: 3

This survey course explores the evolution of western and non-western key ideas in art, music, and literature from prehistoric times to the 14th century. Emphasis is placed on the comparison of social, economic, religious, and political forces in the arts in a variety of cultures and diverse people.

## HUMN 102 - Survey of World Culture II

## Credits: 3

This survey course explores the evolution of western and non-western key ideas in art, music, and literature from the 15 th to 21 st century societies. Emphasis is placed on the comparison of social, economic, religious, and political forces in the arts in a variety of cultures and diverse people.

Credits: 3
This course is an examination of United States history from the age of discovery through the Civil War. Particular emphasis will be placed on the social, economic, and political forces that were responsible for the development of the new nation.

## HIST 106 - U.S. History II

## Credits: 3

This course is an examination of United States history from Reconstruction through the present. Particular emphasis will be placed on major themes in United States' politics, society, economics, and diplomacy.

## Option Electives (Recommended)

In addition to the recommended courses students may also choose from any ACCT, BIOS, BUSA, HORT or MATH 108 courses listed in the College catalog.

## ACCT 101 - Accounting Princ. I Financial

## Credits: 3

This course is a study of accounting principles and procedures. The accounting cycle is covered for a service industry. Additional topics include accounting for merchandising operations; cash and short-term investments; inventory; the acquisition, allocation, and disposal of tangible and intangible assets; and current liabilities.

## BUSA 110 - Business Communications

## Credits: 3

This course is an exploration of the communication process in business. Topics include communication theory, styles of communication, business letters and reports, resume writing, employment letters and interviews, oral communication, business presentations, and communication technology. The use of computers in business is also covered.

Prerequisite: COMS 110, ENGL 101

## BIOS 130 - Introduction to Botany

## Credits: 4

This course is designed to study the structural and functional adaptations of algae and plants to the environment. It includes the study of the following processes: Seed germination, growth, photosynthesis, reproduction, and transport. Plant evolution and their relationship to the environment and to humans will be discussed. The laboratory component of the course includes field and laboratory studies of plant diversity, morphology and physiology. Students will design and carry out their own independent investigations. Lab Fee Required.

Corequisite: BIOS 130L
Prerequisite: BIOS 110 or Permission of Instructor

Credits: 4
This course acquaints the student, through in class lectures and hands on labs, with the techniques and facilities needed for plant propagation in the greenhouse and nursery industry.

Corequisite: HORT 102L

## HORT 201 - Introduction to Soil Science

## Credits: 4

This course acquaints the student, through in class lectures and hands on labs, with soil concepts, plant nutrients, and their influence on plant growth. Emphasis will be placed on soil testing, nutrient deficiency symptoms, and fertilizer requirements.

Corequisite: HORT 201L

## Developmental Courses

Sussex has embraced a practice of directed self-choice whereby students are encouraged, through guided conversations with an advisor, to best determine their readiness for this course. Students should be aware that Developmental Studies exist and are available to help strengthen skills and encourage success. Pursuing testing and/or developmental courses is entirely up to the student. Further, testing, though providing a valuable reference point for reflection, does not create for the student an obligation to follow Accuplacer recommendations.

The exception to this is where students seek enrollment in higher-level math courses. Students wishing to enroll in the following math courses are required to take and adhere to placement guidance from, the Advanced Algebra and Functions test, as part of Accuplacer, through the college's testing center, for admission into any of the following courses: MATH 110, MATH 112, and MATH 113. Please note, courses in other disciplines may also require advanced mathematics placement. Students should check with their advisor.

## Anthropology Option, A.A. - Liberal Arts

The Anthropology Option is primarily designed to prepare students to transfer into the junior year of a baccalaureate degree program in anthropology. In addition, students seeking admission into cultural area studies programs such as African-American Studies, Latina/o Studies, and Women's Studies would receive a solid academic foundation on which to build.

## Upon completion of this program, graduates will be able to:

- Demonstrate critical analysis and empathy skills.
- Identify ethical issues in anthropological research.
- Demonstrate an understanding of human origins and past and present cultures.
- Apply classroom knowledge to issues of globalization, human diversity, human ecology, language, and religion.
- View societies from evolutionary and cross-cultural perspectives.


## First Year

Credits: 3
This is a student-centered course covering numerous strategies to encourage students to become active and empowered learners. A primary goal of this course is to help students make the most out of their college experience. Students will obtain information about college life and culture and develop strategies and techniques to enhance success in their academic, personal and professional lives. The course is infused with opportunities to understand, practice and implement critical thinking. Students will also gain practical information to help prepare to transfer to a four-year university or enter the workforce directly. All topics will be presented in both theory and practice. This course is required of all degree-seeking candidates and must be taken within the initial 16 credits after entry.

## ENGL 101 - English Composition I

## Credits: 3

This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects which include personal, rhetorical, and expository models. Research skills are introduced.

## ANTH 101 - Introduction to Anthropology

## Credits: 3

This course is an integrated overview of the four fields of anthropology. Physical anthropology, cultural anthropology, linguistics, and archeology are explored as subfields and together as an integrated whole. Emphasis is placed on the study of the social and biological origins of human culture, religious diversity, linguistic diversity, and patterns of social inequalities.

- GHMN 000 - Humanities Gen Ed Requirement Credits: 3
- GTEC 000 - Technology Gen Ed Requirement Credits: 3

Total Semester Hours: 15

Winter Session

## Spring Semester

## ENGL 102 - English Composition II

## Credits: 3

This course introduces students to short fiction, poetry, drama, and the novel. Written assignments are based on the readings. Writing skills learned in Composition I are further developed. Students will write a research paper which demonstrates understanding of literary criticism.

Prerequisite: ENGL 101 (Grade of C or better)

- HIST 001 - History Gen Ed Requirement Credits: 3


## MATH 108 - Statistics

Credits: 3
This course includes the following topics: organization of data, measures of central tendency and dispersion, probability, the normal and binomial distributions, confidence intervals, hypothesis testing, analysis of variance, and correlation.

Prerequisite: MATH 017 (Grade of C or betterI) or MATH 023 (Grade of C or betterI) or appropriate algebra placement score

- GHMN 000 - Humanities Gen Ed Requirement Credits: 3
- GSOC 000 - Social Science Gen Ed Requirement Credits: 3

Total Semester Hours: 15

Summer Session

Second Year

## Fall Semester

## ENGL 201 - Effective Speaking

Credits: 3
This is a course in public speaking which stresses speech organization, effective delivery and critical listening skills. A strong emphasis is placed on student performance to help the student gain speech practice and develop self-confidence in a variety of speaking situations.

Prerequisite: ENGL 015 and ENGL 031

## ANTH 120 - Cultural Anthropology

## Credits: 3

This course is a study of a broad range of human behavior from a cross-cultural perspective including language and communication, concepts of love \& beauty, marriage \& the family, economic systems \& political organization and religion \& magic. This course provides a background to human cultural origins and variability.

- PHIL 000 - Philosophy Gen Ed Requirement Credits: 3
- LSCI 000 - Science Gen Ed Requirement Credits: 4
- GSOC 000 - Social Science Gen Ed Requirement Credits: 3


## ANTH 115 - Biological Anthropology

## Credits: 4

This course examines how Homo sapiens evolved. It starts with a core understanding of scientific methodology, evolutionary theory, and the genetic code. The paleontological record and methodologies for dating fossils and artifacts are studied. Anatomy, behavior, and classification of non-human primates with emphasis on the common ancestry Homo sapiens share with them are studied. Comparison and contrasting primate and hominin fossil records over the last 8 million years are also studied. Students will examine Paleolithic artifacts that highlight critical periods of human evolution. The course surveys human phenotypic diversity across clinical gradations. The interplay between anatomically modern human biology and cultural behavior is shown to be a key to understanding human evolution.

Prerequisite: Proficiency in Reading, Writing \& Math on College Placement Test or equivalency.

- HIST 001 - History Gen Ed Requirement Credits: 3
- LSCI 000 - Science Gen Ed Requirement Credits: 4
- ANTH 000 - Anthropology Option Elective Credits: 3

Total Semester Hours: 14

Summer Session

## Total Program Hours: 60

## Philosophy and Social Science General Education Courses

Choose from the list of approved courses in the College catalog.

## Humanities General Education Courses (Recommended)

Recommended courses listed below but student can also choose from the list of approved Humanities General Education courses in the College catalog.

## AMSL 101 - American Sign Language I

Credits: 3
This course is designed to develop basic communicative skills in American Sign Language. This course will emphasize grammatical structures,
sign vocabulary, fingerspelling, numbers, expressive and receptive skills, facial grammar and non-manual communication, and the anatomy and physiology of the human hearing system and hearing loss. Additionally, this course provides an introduction to the culture of the Deaf community.

Corequisite: ENGL 021 and ENGL 032

## AMSL 102 - American Sign Language II

## Credits: 3

This course strengthens students' expressive and receptive skills in American Sign Language, broadens their understanding of the Deaf community, culture and language, and provides an additional vocabulary base of several hundred signs from American Sign Language. This course instructs the student in the use of classifiers as well as providing them with an introduction to the idiomatic vocabulary of American Sign Language.

Prerequisite: AMSL 101

## SPAN 101 - Elementary Spanish I

## Credits: 3

This is an introductory course in Spanish emphasizing the fundamentals of speaking, reading, writing, and listening. The course focuses on building basic vocabulary and introducing students to the Hispanic culture. It is designed for students with no Spanish experience.

- SPAN 101 - Elementary Spanish I Credits: 3


## Science General Education Courses (Recommended)

Recommended courses listed below but student can also choose from the list of approved Science General Education courses in the College catalog.

## BIOS 101 - General Biology

Credits: 4
This course introduces the student to the principles of modem biology. Emphasis is on the chemistry, structure, heredity, reproduction, development, ecology, and evolution of living things. For non-science majors. Lab Fee Required.

Corequisite: BIOS 101L

## BIOS 102 - Intro. to Human Biology

## Credits: 4

This course is an introduction to human anatomy and physiology for the non-biology major. It is designed to develop an appreciation for the structure and functions of the human body; to point out the relationship of body systems to health and disease; and to emphasize human biology as it relates to everyday living experiences. Lab Fee Required.

Corequisite: BIOS 102L

Credits: 4
This course is designed to explore the factors influencing the environment and to increase awareness of environmental problems. Topics include air, land, and water resources, ecology, waste management, and the human effects on the environment. Lab exercises and field trips will supplement the theory presented. Lab Fee Required.

Corequisite: BIOS 122L

## BIOS 130 - Introduction to Botany

## Credits: 4

This course is designed to study the structural and functional adaptations of algae and plants to the environment. It includes the study of the following processes: Seed germination, growth, photosynthesis, reproduction, and transport. Plant evolution and their relationship to the environment and to humans will be discussed. The laboratory component of the course includes field and laboratory studies of plant diversity, morphology and physiology. Students will design and carry out their own independent investigations. Lab Fee Required.

Corequisite: BIOS 130L
Prerequisite: BIOS 110 or Permission of Instructor

## CHEM 100-Introductory Chemistry

## Credits: 4

This course includes the basics of inorganic, organic, and biochemistry. The emphasis is on environmental issues, and on energy production and utilization in living organisms. Lab experiments illustrate the concepts studied. Lab Fee Required.

Corequisite: CHEM 100L
Prerequisite: MATH 017 or MATH 023 or the approved score on the College Placement Test

## GEOL 110 - Historical Geology

## Credits: 4

This course will introduce the student to the study of planet Earth through time. The class will study the concepts of stratigraphy (the study of strata) and the fossils they contain. This course will concentrate on the geologic history of North America with special attention to the Appalachian Basin and New Jersey. This course will discuss the history of the Earth, geological processes and biological history. This course will include labs and several field trips to observe concepts taught in the lectures. Lab Fee Required.

Corequisite: GEOL 110L
Prerequisite: GEOL 101

## History General Education Courses (Recommended)

Recommended courses listed below but student can also choose from the list of approved History General Education\ courses in the College catalog. Must choose a level I \& II sequence.

## Credits: 3

This course emphasizes the political, social, economic, technological, and cultural forces that influenced the historical development of Western Civilization to 1648. Major topics include: Ancient Civilizations, Greece and Rome, Middle Ages, Renaissance, and Reformation.

## HIST 102 - Hist of Western Civilization II

Credits: 3
This course is a survey of Western Civilization since 1648 with emphasis on the concepts and historical movements vital to understanding the modem world. Major topics include the development of law and government, the emergence of the major ideologies of the nineteenth and twentieth centuries, the industrial revolution and economic modernization, 20th century "isms" and the impact of social and cultural development in Western Europe.

## Technology General Education Courses

Choose from the list of approved Technology General Education courses in the College catalog.

## Anthropology Option Electives (Choose One)

## ANTH 131 - Principles of Archaeology

Credits: 3
This is an introductory course in archeology. A major focus is on the interpretation of material culture to answer questions about human evolution and cultural developments in the broad spectrum of the human experience. Key interpretative events in the archeological record are explored as lessons for understanding present day cultural conflicts. New and traditional archeological methods and technologies are studied. Case studies in the reconstructing of extinct societies and cultures, including Paleolithic North America, empiric Africa, prehistoric Europe, Prehispanic Mesoamerica, and ancient Asia, are explored.

## ANTH 133 - Archaeology Field Methods

## Credits: 3

This course offers an introduction to the tools and field methods of archaeology. Students will participate in a scientific endeavor rather than a simulation. Field instruction will be carried out at an archaeological site registered with the New Jersey State Museum. Topics will include mapping sites, site preparation, grid set-up, shovel testing, trowel excavation, recording data, the basics of soils classification, and artifact identification and interpretation. Emphasis will be placed on the relevance of archaeology for understanding the history of local communities. Students will become familiar with the methods and theory behind historical archaeology, Pre-Contact archaeology, colonial archaeology and preindustrial archaeology.

Credits: 3
This course examines the spectrum of human interaction with the supernatural. A major focus is on belief systems and practitioners that make the supernatural meaningful and relevant to people's lives. Modern and traditional beliefs and rituals are studied from a cross-cultural perspective, including many from American culture. The universality of the religious experience, religion's role in creating social structures, and altered states of consciousness are also studied.

## Developmental Courses

Sussex has embraced a practice of directed self-choice whereby students are encouraged, through guided conversations with an advisor, to best determine their readiness for this course. Students should be aware that Developmental Studies exist and are available to help strengthen skills and encourage success. Pursuing testing and/or developmental courses is entirely up to the student. Further, testing, though providing a valuable reference point for reflection, does not create for the student an obligation to follow Accuplacer recommendations.

The exception to this is where students seek enrollment in higher-level math courses. Students wishing to enroll in the following math courses are required to take and adhere to placement guidance from, the Advanced Algebra and Functions test, as part of Accuplacer, through the college's testing center, for admission into any of the following courses: MATH 110, MATH 112, and MATH 113. Please note, courses in other disciplines may also require advanced mathematics placement. Students should check with their advisor.

## Architecture Design Option, A.F.A. - Studio Arts

The Architecture Design Option develops an understanding and ability to create within the discipline of architecture through the study of art, art history, theory, technology, and studio work. The degree is intended to provide students with the necessary portfolio to transfer seamlessly to a Bachelor of Fine Arts program majoring in Architectural Design.

## Upon completion of this program, graduates will be able to:

- Use the techniques, skills, and modern engineering tools necessary for designing a physical structure.
- Analyze the strength and weaknesses of architectural designs in history.
- Examine connections between theory and practice in the field of Architecture
- Design a structure that meets the desired needs within realistic constraints, i.e., economic, environmental, social, political, ethical, health, safety, and sustainability.
- Create a portfolio of hand-drawn and digital drawings.

First Year

Fall Semester

## COLL 101 - Foundations for Success

## Credits: 3

This is a student-centered course covering numerous strategies to encourage students to become active and empowered learners. A primary goal of this course is to help students make the most out of their college experience. Students will obtain information about college life and culture and develop strategies and techniques to enhance success in their academic, personal and professional lives. The course is infused with opportunities to understand, practice and implement critical thinking. Students will also gain practical information to help prepare to transfer to a four-year university or enter the workforce directly. All topics will be presented in both theory and practice. This course is required of all degree-seeking candidates and must be taken within the initial 16 credits after entry.

Credits: 3
This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects which include personal, rhetorical, and expository models. Research skills are introduced.

## ARTA 103 - Art History I

## Credits: 3

This course surveys visual artistic expression from the Neolithic period to the fourteenth century, including ancient, medieval and non-European art forms. The development of artistic concepts in the ancient world, gender, and non-western art are central topics in this general survey course.

Prerequisite: ENGL 021, ENGL 032 or Placement into ENGL 101

- MATH 900 - Math Gen Ed Requirement Credits: 3
- GTEC 000 - Technology Gen Ed Requirement Credits: 3

Total Semester Hours: 15

## Winter Session

## Spring Semester

## ENGL 102 - English Composition II

## Credits: 3

This course introduces students to short fiction, poetry, drama, and the novel. Written assignments are based on the readings. Writing skills learned in Composition I are further developed. Students will write a research paper which demonstrates understanding of literary criticism.

Prerequisite: ENGL 101 (Grade of C or better)

## ARTA 108 - Basic Drawing

## Credits: 3

This course introduces students to the basic foundations of drawing methods, including a broad-based survey of art history and appreciation. Students experiment with a variety of materials: pencil, charcoal, and conte-crayon practicing 1,2 and 3 point perspective, and elemental architectural drawing techniques within an historical context. Students explore various elements of personal expression while comparing their efforts to major works of art. The course also introduces the art of still life, landscape, portrait, life drawing, gesture and contour drawing and classical drawing techniques. Studio fee required.

## ARTA 104 - Art History II

## Credits: 3

This course surveys the history of art from the fourteenth through the twenty first centuries. The development of artistic concepts in the contemporary world, art and gender, and non-western art and architecture are central topics in this general survey course. Emphasis is place on viewing art forms in context of culture and gender and understanding the philosophical foundations and critical theories that support and influence them

Prerequisite: ENGL 021, ENGL 032 or Placement into ENGL 101

## ARTA 101 - Basic Design

Credits: 3
This course provides an introduction to the practical and theoretical applications of two-dimensional design. This is a lecture course where students explore methods for developing their intuitive responses to form and shape, line, color and value, space, and other basic elements of composition and design.

- ARTA 002 - Studio Art Elective Credits: 3

Total Semester Hours: 15

Summer Session

Second Year

## Fall Semester

- MATH 900 - Math Gen Ed Requirement Credits: 3


## ARTA 110 - Intro to Color

## Credits: 3

This course develops an understanding of the expressive and compositional qualities of color and its role in the creation of art and design through lectures and experiment. Various color theories and their applications are explored with reference to works of art. Students create compositions using color as the primary criteria for expression. Studio fee required.

## ARTA 115 - Three Dimensional Design

## Credits: 3

This course introduces the basic concepts of three-dimensional design. In a workshop setting students examine three-dimensional relationships and explore methods of shaping and structuring space. Lab Fee Required.

## ARTA 150 - Life Drawing I

## Credits: 3

This course establishes the basic vocabulary necessary to begin drawing the human form. It defines the concepts of the "nude" as an art form and as a point of departure for all other forms of drawing. Emphasis is placed on gesture and contour drawings, use of drawing materials, anatomy studies, and drawing the human form in traditional ways. Studio Fee Required.

## COMS 225 - Computer Aided Design

## Credits: 3

This course is an introduction to the principles of Computer-Aided Design (CAD) and the operation of CAD Systems. Students will use data entry devices to prepare working diagrams and schematic designs on industrial level workstations with Auto CAD. Lab Fee Required.

Prerequisite: Prior exposure to microcomputers and/or drafting

## Total Semester Hours: 15

Winter Session

## Spring Semester

## SOCA 101 - Intro. to Sociology

## Credits: 3

This course is an introduction to the analysis and description of structures and dynamics of human society. Emphasis is placed on the application of scientific methods of observation and analysis of social groups, intergroup relations, social change, social stratification, and social institutions.

## DESN 120 - History of Design

## Credits: 3

This broad based survey course tracks major developments in the field of design in the areas of architecture, furniture design, fashion, industrial design and interior design emphasizing multi-cultural and historical contexts. The development of schools and trends, the relationships between historical, cultural, and political movements and the interaction of art, design, and culture are fully explored.

## PHYS 110 - Physics I

Credits: 4
This course is designed to introduce students to problem-solving techniques in physics. Topics include forces, energy, mechanics, momentum, heat, and kinetic theory. Includes applications to the life sciences and everyday life. Lab Fee Required.

## ARTA 262 - Portfolio for Architecture Design

Credits: 2
This lecture course explains architectural design in an historical context and compares students' work to multi-cultural models. Students create individual artist statements and construct professional portfolios of original designs to enable transfer to a four-year degree program and/or internship in architecture.

Prerequisite: Instructor Permission Required

- ARTA 002 - Studio Art Elective Credits: 3

Total Semester Hours: 15

Summer Semester

## Total Program Hours: 60

## Math General Education Requirement Courses (Recommended)

Recommended courses listed below but student can also choose from the list of approved General Education Requirements courses in the College catalog.

## MATH 110 - Pre-Calculus I

## Credits: 3

This course is designed to strengthen algebraic skills and give students the math confidence to proceed with calculus and other higher forms of mathematics. Topics include the study of functions, graphing techniques, polynomial, rational, exponential and logarithmic functions and systems of equations and inequalities.

Prerequisite: MATH 040 (Grade of C or betterI) or appropriate pre-calculus placement score

## MATH 112 - Pre-Calculus II

## Credits: 3

This course is a continuation of Pre-Calculus I. It emphasizes mastery of the basic concepts of trigonometry, vectors, and conic sections. Topics include trigonometric functions, applied and analytical trigonometry, and an introduction to analytic geometry.

Corequisite: MATH 110

## COMS 110 - Computer Concepts \& Applications

Credits: 3
This course is designed to provide the student with a level of knowledge necessary to function in today's technological society. Topics include computer and network terminology, hardware, software, and processing concepts. A large portion of the class time is dedicated to exercises performed using integrated software packages. Lab Fee Required.

Corequisite: COMS 110S

## Studio Art Elective

Choose from any ARTA course designations.

## Developmental Courses

Sussex has embraced a practice of directed self-choice whereby students are encouraged, through guided conversations with an advisor, to best determine their readiness for this course. Students should be aware that Developmental Studies exist and are available to help strengthen skills and encourage success. Pursuing testing and/or developmental courses is entirely up to the student. Further, testing, though providing a valuable reference point for reflection, does not create for the student an obligation to follow Accuplacer recommendations.

The exception to this is where students seek enrollment in higher-level math courses. Students wishing to enroll in the following math courses are required to take and adhere to placement guidance from, the Advanced Algebra and Functions test, as part of Accuplacer, through the college's testing center, for admission into any of the following courses: MATH 110, MATH 112, and MATH 113. Please note, courses in other disciplines may also require advanced mathematics placement. Students should check with their advisor.

## Art Education Option, A.F.A. - Studio Arts

Students enrolled in the Art Education Option Program acquire strong knowledge and skills through both Studio Arts and Art Education curricula employing a wide range of 2D and 3D as well as digital and graphic design media and processes. Students gain a conception of art education that integrates art making, art history, visual culture, art criticism, philosophies of art, art education theory, social-justice influences, and communitybased artistic engagements. Also addressed in the curriculum are the ways interdisciplinary aspects of art education can affect societal beliefs, values, and behaviors.

## Upon completion of this program, graduates will be able to:

- Exhibit a competency to lead visual art activities for children or adults.
- Exhibit knowledge of art history, art curriculum, and program development.
- Demonstrate the ability to design an individualized course of study that explores ways of reaching art students in and through the arts.
- Demonstrate through art education the intrinsic societal value of the visual arts.
- Demonstrate analytical skills and explore relationships of the arts to other sectors in education.
- Create a portfolio of visual art exercises to be used in classes.

Fall Semester

## COLL 101 - Foundations for Success

## Credits: 3

This is a student-centered course covering numerous strategies to encourage students to become active and empowered learners. A primary goal of this course is to help students make the most out of their college experience. Students will obtain information about college life and culture and develop strategies and techniques to enhance success in their academic, personal and professional lives. The course is infused with opportunities to understand, practice and implement critical thinking. Students will also gain practical information to help prepare to transfer to a four-year university or enter the workforce directly. All topics will be presented in both theory and practice. This course is required of all degree-seeking candidates and must be taken within the initial 16 credits after entry.

## ENGL 101 - English Composition I

## Credits: 3

This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects which include personal, rhetorical, and expository models. Research skills are introduced.

## ARTA 103 - Art History I

## Credits: 3

This course surveys visual artistic expression from the Neolithic period to the fourteenth century, including ancient, medieval and non-European art forms. The development of artistic concepts in the ancient world, gender, and non-western art are central topics in this general survey course.

Prerequisite: ENGL 021, ENGL 032 or Placement into ENGL 101

## ARTA 101 - Basic Design

## Credits: 3

This course provides an introduction to the practical and theoretical applications of two-dimensional design. This is a lecture course where students explore methods for developing their intuitive responses to form and shape, line, color and value, space, and other basic elements of composition and design.

- GTEC 000 - Technology Gen Ed Requirement Credits: 3

Total Semester Hours: 15

## Spring Semester

## ENGL 102 - English Composition II

Credits: 3
This course introduces students to short fiction, poetry, drama, and the novel. Written assignments are based on the readings. Writing skills learned in Composition I are further developed. Students will write a research paper which demonstrates understanding of literary criticism.

Prerequisite: ENGL 101 (Grade of C or better)

## ARTA 104 - Art History II

## Credits: 3

This course surveys the history of art from the fourteenth through the twenty first centuries. The development of artistic concepts in the contemporary world, art and gender, and non-western art and architecture are central topics in this general survey course. Emphasis is place on viewing art forms in context of culture and gender and understanding the philosophical foundations and critical theories that support and influence them

Prerequisite: ENGL 021, ENGL 032 or Placement into ENGL 101

## ARTA 108 - Basic Drawing

## Credits: 3

This course introduces students to the basic foundations of drawing methods, including a broad-based survey of art history and appreciation. Students experiment with a variety of materials: pencil, charcoal, and conte-crayon practicing 1,2 and 3 point perspective, and elemental architectural drawing techniques within an historical context. Students explore various elements of personal expression while comparing their efforts to major works of art. The course also introduces the art of still life, landscape, portrait, life drawing, gesture and contour drawing and classical drawing techniques. Studio fee required.

## ARTA 110 - Intro to Color

## Credits: 3

This course develops an understanding of the expressive and compositional qualities of color and its role in the creation of art and design through lectures and experiment. Various color theories and their applications are explored with reference to works of art. Students create compositions using color as the primary criteria for expression. Studio fee required.

## EDUC 202 - Historical and Philosophical Patterns in Education

## Credits: 3

This course examines the societal philosophies which have influenced the historical development of educational theory and practice.

Second Year

Fall Semester

## PSYC 101 - Introduction to Psychology

## Credits: 3

This course is an introduction to the science of human behavior and mental processes. Emphasis is placed on the relationship between the nervous system and behavior, learning, perception, development, motivation, personality, attitude formation and prejudice, psychopathology and psychotherapy.

Prerequisite: Proficient in all Developmental English Courses

## ARTA 115 - Three Dimensional Design

## Credits: 3

This course introduces the basic concepts of three-dimensional design. In a workshop setting students examine three-dimensional relationships and explore methods of shaping and structuring space. Lab Fee Required.

## ARTA 150 - Life Drawing I

## Credits: 3

This course establishes the basic vocabulary necessary to begin drawing the human form. It defines the concepts of the "nude" as an art form and as a point of departure for all other forms of drawing. Emphasis is placed on gesture and contour drawings, use of drawing materials, anatomy studies, and drawing the human form in traditional ways. Studio Fee Required.

## ARTA 175-Ceramics I

## Credits: 3

This beginning studio course introduces the basic principles and techniques of form making in ceramic media, as well as fundamentals of idea research and transformation. A variety of processes, such as hand building and wheelthrowing, are covered; slipping, glazing and firing techniques are also introduced. The history of ceramics complements studio practice. Students also learn safe use of appropriate equipment and studio organization. Offered through the SCCC/PVCC Alliance, this course will utilize the PVCC Ceramics Studio. Lab Fee Required.

Credits: 3
This course is an introduction to the basic materials and techniques of the oil/acrylic medium. Still life, models, and landscape subjects are explored, and historical and contemporary masterworks are used as references. The emphasis is upon composition, color, and experimentation with paint as a foundation for developing a personal visual language. Lab Fee Required.

Total Semester Hours: 15

## Winter Session

Spring Semester

## SOCA 101 - Intro. to Sociology

## Credits: 3

This course is an introduction to the analysis and description of structures and dynamics of human society. Emphasis is placed on the application of scientific methods of observation and analysis of social groups, intergroup relations, social change, social stratification, and social institutions.

## EDUC 286 - Principles \& Practices of Teaching as a Profession

## Credits: 3

This course introduces the basic elements of teaching, such as classroom management, literacy, diversity of learners, lesson planning, multicultural education, and teaching methodologies. Students observe in a public school setting, interview a teacher. Effective speaking and writing skills are an integral part of the assessment of students in this course. Students utilize professional teaching standards to assess their teaching styles and abilities as future teachers. Familiarity with the New Jersey Core Curriculum Content Standards is also a component of this course.

Prerequisite: 32 Credits with a GPA of 2.75

## PSYC 280 - Educational Psychology

## Credits: 3

This course explores the application of psychological principles to the educational environment. Theories of learning, memory, cognition, and behavior management are used to help the student who is a prospective teacher find an optimal instructional approach.

Prerequisite: PSYC 101

## ARTA 260 - Portfolio Development

## Credits: 3

This course prepares students to graduate with the professional skills necessary for gallery representation or transfer to a four-year fine art institution, as reflected in a prepared portfolio. Each student creates an articulate "artist's statement" and a finished professional portfolio of original artwork. Studio Fee Required.

# Studio Art Elective Courses (Recommended) 

Recommended courses listed below but student can also choose from any ARTA, PHOT or ARTA/PHOT designations

## ARTA 135 - Alternative Processes in Photography

## Credits: 3

This studio course introduces the art and/or photography student to hand coated photographic processes that may include cyanotype, gum bichromate, vandyke printing as well as experimental methods allowing for artistic expression. Methods for production of enlarged duplicate negatives will be covered. Art and painting students will be challenged to explore the various expressive methods using film as a point of departure. Offered Spring Only. Studio Fee Required.

## Technology General Education Courses

Choose from the list of approved General Education courses in the College catalog.

## Developmental Courses

Sussex has embraced a practice of directed self-choice whereby students are encouraged, through guided conversations with an advisor, to best determine their readiness for this course. Students should be aware that Developmental Studies exist and are available to help strengthen skills and encourage success. Pursuing testing and/or developmental courses is entirely up to the student. Further, testing, though providing a valuable reference point for reflection, does not create for the student an obligation to follow Accuplacer recommendations.

The exception to this is where students seek enrollment in higher-level math courses. Students wishing to enroll in the following math courses are required to take and adhere to placement guidance from, the Advanced Algebra and Functions test, as part of Accuplacer, through the college's testing center, for admission into any of the following courses: MATH 110, MATH 112, and MATH 113. Please note, courses in other disciplines may also require advanced mathematics placement. Students should check with their advisor.

## Automotive Service Technology, A.A.S.

This program is designed to meet the demand for trained automotive technicians. The student participates in hands-on experiences in testing, troubleshooting, and repairing automobiles. Learning is reinforced by a work-site cooperative employment experience at a local automotive company.

This program is offered in the evening on a part-time basis only.

## Upon completion of this program, graduates will be able to:

- Evaluate, diagnose, and repair various automotive systems.
- Identify specifications related to the inspection, repair, and adjustment of automotive systems.
- Use various test equipment to diagnose and repair defects.
- Apply basic electrical theory using wiring diagrams and schematics to diagnose and repair automotive electrical circuits.
- Explain the operation of, and perform service on automatic and manual transmissions and transaxles, and differentials.
- Analyze defects of automotive air conditioning and climate control systems and identify necessary preventative maintenance or corrective repairs.
- Discuss the theory of alignment, braking, suspension and steering systems, problem diagnosis and correction of braking, suspension, steering, and alignment problems.


## First Year

Fall Semester

## COLL 101 - Foundations for Success

## Credits: 3

This is a student-centered course covering numerous strategies to encourage students to become active and empowered learners. A primary goal of this course is to help students make the most out of their college experience. Students will obtain information about college life and culture and develop strategies and techniques to enhance success in their academic, personal and professional lives. The course is infused with opportunities to understand, practice and implement critical thinking. Students will also gain practical information to help prepare to transfer to a four-year university or enter the workforce directly. All topics will be presented in both theory and practice. This course is required of all degree-seeking candidates and must be taken within the initial 16 credits after entry.

## ENGL 101 - English Composition I

## Credits: 3

This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects which include personal, rhetorical, and expository models. Research skills are introduced.

## COMS 110-Computer Concepts \& Applications

## Credits: 3

This course is designed to provide the student with a level of knowledge necessary to function in today's technological society. Topics include computer and network terminology, hardware, software, and processing concepts. A large portion of the class time is dedicated to exercises performed using integrated software packages. Lab Fee Required.

Credits: 3
This course is designed as an entry-level survey of automotive systems and their repair. It is a prerequisite for all other automotive technology courses. With approval of the program coordinator, appropriate ASE certification may be substituted for this course. Lab Fee Required.

Corequisite: AOTE 110

## AOTE 110 - Automotive Electrical Systems

## Credits: 3

This course is designed to apply knowledge of electricity and electronics specifically to automotive systems. Topics include starting, charging, fuel injections, ignition, body electrical systems, and electrical accessories. This course helps prepare students for ASE certification. Lab Fee Required.

Corequisite/Prerequisite: AOTE 101

Total Semester Hours: 15

## Winter Session

## Spring Semester

## ENGL 201 - Effective Speaking

## Credits: 3

This is a course in public speaking which stresses speech organization, effective delivery and critical listening skills. A strong emphasis is placed on student performance to help the student gain speech practice and develop self-confidence in a variety of speaking situations.

Prerequisite: ENGL 015 and ENGL 031

## MATH 105 - Technical Mathematics

## Credits: 3

This course is intended for students who have introductory algebra proficiency, and who need to apply mathematical concepts in a technical program. The purpose of the course is to prepare AAS students for the mathematical aspects of their work in the technical trades.

Prerequisite: Proficiency on the College Placement Examination or grade of C or better in MATH $017 / \mathrm{MATH} 023$.

AOTE 120 - Automotive Brake Systems

## Credits: 3

This course will explore the automotive brake system in depth. Diagnosis and repair of both drum and disk brake systems, power brake boosters, master and wheel cylinders will be covered. Traction control and anti-lock brake systems are covered from operating principles through diagnosis and repair. This course helps prepare students for ASE certification. Lab Fee Required.

Prerequisite: AOTE 101 and AOTE 110

## AOTE 118 - Auto. Heating \& Air Conditioning

## Credits: 3

This course focuses on the principles of operation and service techniques of automobile air conditioning systems. Topics include component familiarization, testing, diagnosing, charging and repair. This course helps prepare students for ASE certification. Lab Fee Required.

Corequisite/Prerequisite: AOTE 101 and AOTE 110

- AOTE 000 - Program Elective Credits: 3

Total Semester Hours: 15

Summer Session

## Second Year

## Fall Semester

## AOTE 130 - Steering \& Suspension Systems

## Credits: 3

This course will explore the automotive steering and suspension systems in depth. Detailed instruction of design, operating principles and service of these systems will be covered. Tires, tire construction, steering geometry and alignment angles are studied. Proper techniques and procedures for complete front-end service, wheel alignment, wheel balance and steering mechanisms is covered. This course helps prepare students for ASE certification. Lab Fee Required.

Prerequisite: AOTE 101 and AOTE 110

## AOTE 203 - Engine Construction, Operation \& Service

Credits: 3
This course will cover proper diagnosis, disassembly, inspection and rebuilding techniques. Use of diagnostic, measuring and machine shop equipment will be included as the students disassemble and rebuild a complete engine. This course helps prepare students for ASE certification. Lab Fee Required.

Prerequisite: AOTE 101

Credits: 3
This course will cover the principles of manual transmissions, their operation and service. Topics will include drivelines, differentials, clutches, U-joints, RWD, FWD, and 4-wheel drive. This course helps prepare students for ASE certification. Lab Fee Required.

Prerequisite: AOTE 101

## AOTE 206 - Auto. Transmissions \& Transaxles

## Credits: 3

This course will emphasize the theory, operation and diagnosis of automatic transmissions and transaxles. Rebuilding of automatic transmissions will be introduced. This course helps prepare students for ASE certification. Lab Fee Required.

Prerequisite: AOTE 101

- GHMN 000 - Humanities Gen Ed Requirement Credits: 3

Total Semester Hours: 15

Winter Session

## Spring Semester

## AOTE 208 - Advanced Automotive Electronics

## Credits: 3

This course reviews basic fundamentals then proceeds into semi-conductors, amplifiers, integrated circuits and microprocessors as they relate to the automobile. Practical application of theory is stressed as part of diagnoses, trouble shooting, repair and use of diagnostic equipment. This course helps prepare students for ASE certification. Lab Fee Required.

Prerequisite: AOTE 101

## AOTE 215 - Automotive Engine Performance

## Credits: 3

This course will cover engine mechanical ignition and fuel system diagnosis and repair. The students will use latest diagnostic procedures and equipment as well as appropriate service bulletins and manuals to obtain necessary tune-up specifications. This course helps prepare students for ASE certification. Lab Fee Required.

Prerequisite: AOTE 101

Credits: 3
This course is designed to have the automotive technology student gain practical experience and enhance class/lab learning. The student spends a total of 135 hours in a repair facility.

Prerequisite: All AOTE technical courses or permission of the Program Coordinator

- GSOC 000 - Social Science Gen Ed Requirement Credits: 3
- GHMN 000 - Humanities Gen Ed Requirement Credits: 3

Total Semester Hours: 15

Summer Session

## Total Program Hours: 60

## Humanities or Social Science General Education Courses

Choose from the list of approved Humanities or Social Science courses listed in the College catalog.

## Program Electives (Recommended)

Recommended courses listed below but student can also choose from any course with a AOTE, BUSA or COMS designation.

## DESL 102 - Diesel Engines

Credits: 3
This course introduces students, in a lecture and lab setting, to the basic principles of diesel engines and systems. The course covers component nomenclature, function, and analysis, as is the proper usage of hand tools, measuring instruments, and equipment. Lab fee required.

## WELD 110 - Thermal Cutting and Oxyfuel Welding

## Credits: 3

This course acts as an introduction on various types of thermal cutting and oxyfuel welding and brazing procedures currently used in the industry. Training in the course follows the American Welding Society (AWS) standards of acceptance. Lab Fee Required.

Prerequisite: Proficiency on the English and Basic Math portion of the Placement Test

## WELD 101 - Welding Safety

Credits: 1
This course will familiarize students with the knowledge on welding safety procedures, normal operating procedures; while also covering safe operation and hazards associated with welding.

## AOTE 261 - Service Center Education Class

## Credits: 1

This course is designed for automotive students who are on internship. The course teaches/reinforces work skills and attitudes, cooperative work behavior, and workplace expectations.

## Developmental Courses

Sussex has embraced a practice of directed self-choice whereby students are encouraged, through guided conversations with an advisor, to best determine their readiness for this course. Students should be aware that Developmental Studies exist and are available to help strengthen skills and encourage success. Pursuing testing and/or developmental courses is entirely up to the student. Further, testing, though providing a valuable reference point for reflection, does not create for the student an obligation to follow Accuplacer recommendations.

The exception to this is where students seek enrollment in higher-level math courses. Students wishing to enroll in the following math courses are required to take and adhere to placement guidance from, the Advanced Algebra and Functions test, as part of Accuplacer, through the college's testing center, for admission into any of the following courses: MATH 110, MATH 112, and MATH 113. Please note, courses in other disciplines may also require advanced mathematics placement. Students should check with their advisor.

## Automotive Service Technology, Certificate

This program is designed to meet the demand for trained automotive technicians. The student participates in hands-on experiences in testing, troubleshooting and repairing automobiles.

This program is offered in the evening on a part-time basis only.

# Upon completion of this program, graduates will be able to: 

- Evaluate, diagnose, and repair various automotive systems.
- Identify specifications related to the inspection, repair, and adjustment of automotive systems.
- Use various test equipment to diagnose and repair defects.
- Identify the basic electrical circuits and diagnose automotive electrical systems.
- Apply basic electrical theory using wiring diagrams and schematics to diagnose and repair automotive electrical circuits.


## First Year

Fall Semester

## Credits: 3

This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects which include personal, rhetorical, and expository models. Research skills are introduced.

## AOTE 101 - Automotive Fundamentals

Credits: 3
This course is designed as an entry-level survey of automotive systems and their repair. It is a prerequisite for all other automotive technology courses. With approval of the program coordinator, appropriate ASE certification may be substituted for this course. Lab Fee Required.

Corequisite: AOTE 110

## AOTE 110 - Automotive Electrical Systems

## Credits: 3

This course is designed to apply knowledge of electricity and electronics specifically to automotive systems. Topics include starting, charging, fuel injections, ignition, body electrical systems, and electrical accessories. This course helps prepare students for ASE certification. Lab Fee Required.

## Winter Session

## Spring Semester

## AOTE 120 - Automotive Brake Systems

## Credits: 3

This course will explore the automotive brake system in depth. Diagnosis and repair of both drum and disk brake systems, power brake boosters, master and wheel cylinders will be covered. Traction control and anti-lock brake systems are covered from operating principles through diagnosis and repair. This course helps prepare students for ASE certification. Lab Fee Required.

Prerequisite: AOTE 101 and AOTE 110

## AOTE 208 - Advanced Automotive Electronics

## Credits: 3

This course reviews basic fundamentals then proceeds into semi-conductors, amplifiers, integrated circuits and microprocessors as they relate to the automobile. Practical application of theory is stressed as part of diagnoses, trouble shooting, repair and use of diagnostic equipment. This course helps prepare students for ASE certification. Lab Fee Required.

## COMS 110-Computer Concepts \& Applications

## Credits: 3

This course is designed to provide the student with a level of knowledge necessary to function in today's technological society. Topics include computer and network terminology, hardware, software, and processing concepts. A large portion of the class time is dedicated to exercises performed using integrated software packages. Lab Fee Required.

Corequisite: COMS 110S

Total Semester Hours: 9

Summer Session

Second Year

Fall Semester

## AOTE 130 - Steering \& Suspension Systems

## Credits: 3

This course will explore the automotive steering and suspension systems in depth. Detailed instruction of design, operating principles and service of these systems will be covered. Tires, tire construction, steering geometry and alignment angles are studied. Proper techniques and procedures for complete front-end service, wheel alignment, wheel balance and steering mechanisms is covered. This course helps prepare students for ASE certification. Lab Fee Required.

Prerequisite: AOTE 101 and AOTE 110

## AOTE 203 - Engine Construction, Operation \& Service

## Credits: 3

This course will cover proper diagnosis, disassembly, inspection and rebuilding techniques. Use of diagnostic, measuring and machine shop equipment will be included as the students disassemble and rebuild a complete engine. This course helps prepare students for ASE certification. Lab Fee Required.

Prerequisite: AOTE 101

AOTE 204-Manual Trans. \& Drivelines

This course will cover the principles of manual transmissions, their operation and service. Topics will include drivelines, differentials, clutches, U-joints, RWD, FWD, and 4-wheel drive. This course helps prepare students for ASE certification. Lab Fee Required.

Prerequisite: AOTE 101

## AOTE 206 - Auto. Transmissions \& Transaxles

## Credits: 3

This course will emphasize the theory, operation and diagnosis of automatic transmissions and transaxles. Rebuilding of automatic transmissions will be introduced. This course helps prepare students for ASE certification. Lab Fee Required.

Prerequisite: AOTE 101

Total Semester Hours: 12

## Winter Session

## Spring Semester

## AOTE 118 - Auto. Heating \& Air Conditioning

## Credits: 3

This course focuses on the principles of operation and service techniques of automobile air conditioning systems. Topics include component familiarization, testing, diagnosing, charging and repair. This course helps prepare students for ASE certification. Lab Fee Required.

Corequisite/Prerequisite: AOTE 101 and AOTE 110

## AOTE 215 - Automotive Engine Performance

## Credits: 3

This course will cover engine mechanical ignition and fuel system diagnosis and repair. The students will use latest diagnostic procedures and equipment as well as appropriate service bulletins and manuals to obtain necessary tune-up specifications. This course helps prepare students for ASE certification. Lab Fee Required.

Prerequisite: AOTE 101

Total Semester Hours: 6

Summer Session

Sussex has embraced a practice of directed self-choice whereby students are encouraged, through guided conversations with an advisor, to best determine their readiness for this course. Students should be aware that Developmental Studies exist and are available to help strengthen skills and encourage success. Pursuing testing and/or developmental courses is entirely up to the student. Further, testing, though providing a valuable reference point for reflection, does not create for the student an obligation to follow Accuplacer recommendations.

The exception to this is where students seek enrollment in higher-level math courses. Students wishing to enroll in the following math courses are required to take and adhere to placement guidance from, the Advanced Algebra and Functions test, as part of Accuplacer, through the college's testing center, for admission into any of the following courses: MATH 110, MATH 112, and MATH 113. Please note, courses in other disciplines may also require advanced mathematics placement. Students should check with their advisor.

## Baking and Pastry Arts Option, A.A.S. - Technical Studies

The Baking \& Pastry Arts program option is designed for students who are interested in becoming a professional pastry chef or obtaining skills for a career in the culinary industry. Student success is a priority in this student-focused program offering a comprehensive curriculum and actual practice in all aspects of the baking \& pastry arts. Emphasis will be on the technical and management skills needed to work in restaurants and food service operations. Students will have the opportunity to apply and practice skills acquired in a real-world environment. This program provides a solid foundation for a great and exciting culinary career.

# Upon completion of this program, graduates will be able to: 

1. Demonstrate proficiency in basic industry terminology.
2. Practice standards in behavior, grooming, and dress that are expected of an industry professional.
3. Learn standards of sanitation and food safety as established by the SERV SAFE® program.
4. Utilize proficiency in techniques of preparation and presentation.
5. Develop skills in knife, tool, and equipment handling and apply principles of food preparation to produce a variety of food products.
6. Describe the characteristics, functions, and food sources of the major nutrients and how to maximize nutrient retention in menu planning, food preparation and storage.
7. Analyze quality customer service including guest service, supervisory management, the ability to work with others, and handling multiple tasks simultaneously.
8. Apply the principles of menu planning and layout to the development of menus.
9. Summarize the overall concept of purchasing and receiving practices in foodservice operations.

First Year

Fall Semester

## HOST 101 - Introduction to Hotel, Restaurant, and Institutional Management

## Credits: 3

This course is designed to provide the student with an overview of the hospitality industry and focuses on the role of the professional manager within the industry. Topics include hotel and restaurant operation; meeting, event, and convention planning; travel and tourism; recreation and leisure management; gaming and casino operation; hospitality marketing; and human resource management within the framework of the hospitality industry. Career opportunities within the industry will also be addressed, as well as the ethical operation of hospitality enterprises

## Credits: 1

This course provides the student with an in-depth study of food microbiology and a review of significant food-borne illnesses. Emphasis will be placed on food safety and adherence to local, state and federal regulations that address food service sanitation. The course is intended to prepare students for the National Restaurant Association Educational Foundation Certification exam and the New Jersey State Department of Health Food Service Managers Sanitation course exam

## Total Semester Hours: 16

Winter Session

## Summer Session

Second Year

Spring Semester

## Total Semester Hours: 14

Winter Session

## Summer Session

## Fall Semester

Total Semester Hours: 15

## Total Semester Hours: 15

## Biology Option, A.S. - Science/Mathematics

# According to the National Research Council, students should be able to demonstrate that: 

- Science is an evidence-based way of thinking about the natural world and understanding how it operates.
- Science is a process with rules of operation that allow our understanding of the natural world to evolve.
- Science is based on reproducible evidence and observations that contain uncertainties.
- The sciences are related to each other, mathematics, and everyday life.
- Science is driven by globalization, technology, and new instrumentation and measurement tools.
- Scientific meanings of theory and law are different than popular meanings.

First Year

## Fall Semester

## COLL 101 - Foundations for Success

## Credits: 3

This is a student-centered course covering numerous strategies to encourage students to become active and empowered learners. A primary goal of this course is to help students make the most out of their college experience. Students will obtain information about college life and culture and develop strategies and techniques to enhance success in their academic, personal and professional lives. The course is infused with opportunities to understand, practice and implement critical thinking. Students will also gain practical information to help prepare to transfer to a four-year university or enter the workforce directly. All topics will be presented in both theory and practice. This course is required of all degree-seeking candidates and must be taken within the initial 16 credits after entry.

## ENGL 101 - English Composition I

## Credits: 3

This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects which include personal, rhetorical, and expository models. Research skills are introduced.

## MATH 110 - Pre-Calculus I

## Credits: 3

This course is designed to strengthen algebraic skills and give students the math confidence to proceed with calculus and other higher forms of mathematics. Topics include the study of functions, graphing techniques, polynomial, rational, exponential and logarithmic functions and systems of equations and inequalities.

Prerequisite: MATH 040 (Grade of C or betterI) or appropriate pre-calculus placement score

Credits: 4
This course is designed to familiarize the student with the general principles and unifying concepts of biological science. Topics include scientific investigations, the physical and chemical properties of living matter, cell structure and function, energy transformations, genetics, evolution and diversity. Lab Fee Required.

Corequisite: BIOS 110L
Prerequisite: MATH 040 or the approved score on the College Level Math Placement Test

## CHEM 110 - College Chemistry I

## Credits: 4

This course covers general chemical principles and their applications in research and industry. Topics include matter and measurement; math in chemistry; atoms; molecules, and ions; elemental periodicity; stoichiometry; formulas and, equations; the mole; intramolecular and intermolecular bonds; reaction types including redox and acid/base; properties and reactions of solutions, gases, and the solid state; industrial processes. The lab component covers materials separation, analytical methods and instruments, qualitative and quantitative analysis; and lab report writing skills. This course is scheduled during the day in the fall semester, and during the evening in the spring semester. Lab Fee Required.

Corequisite: MATH 110, CHEM 110L

Total Semester Hours: 17

## Winter Session

## Spring Semester

## ENGL 102 - English Composition II

## Credits: 3

This course introduces students to short fiction, poetry, drama, and the novel. Written assignments are based on the readings. Writing skills learned in Composition I are further developed. Students will write a research paper which demonstrates understanding of literary criticism.

Prerequisite: ENGL 101 (Grade of C or better)

## MATH 108 - Statistics

## Credits: 3

This course includes the following topics: organization of data, measures of central tendency and dispersion, probability, the normal and binomial distributions, confidence intervals, hypothesis testing, analysis of variance, and correlation.

Prerequisite: MATH 017 (Grade of C or betterI) or MATH 023 (Grade of C or betterI) or appropriate algebra placement score

## BIOS 112 - Biology II

## Credits: 4

This course is a continuation of Biology I and maintains its emphasis on major biological concepts and connections. Topics include plant and animal structure and function, reproduction, development, and ecology. Lab Fee Required.

Corequisite: BIOS 112L
Prerequisite: BIOS 110 (Grade of C or better)

## CHEM 112 - College Chemistry II

## Credits: 4

This course is a continuation of CHEM 110, College Chemistry I. Topics include chemical kinetics; chemical equilibrium; chemical thermodynamics, electrochemistry, nuclear chemistry, main-group element chemistry, metals and metallurgy, transition metals and coordination chemistry, environmental chemistry; introduction to organic and biological chemistry. The lab component covers kinetics, electrochemistry, and coordination compounds. The course is scheduled during the day in the spring semester, and during the evening in the fall semester. Lab Fee Required.

Corequisite: CHEM 112L
Prerequisite: CHEM 110 (Grade of C or better)

Total Semester Hours: 14

Summer Session

Second Year

## Fall Semester

## BIOS 124 - Ecology

## Credits: 4

This course is designed to familiarize the student with the basic concepts of ecology and field biology. Topics include ecosystems, communities, population dynamics, and energy flow. Lab exercises and fieldwork will supplement the theory. Lab Fee Required.

Corequisite: BIOS 124L
Prerequisite: MATH 110

- LSCI 000 - Science Gen Ed Requirement Credits: 4


## COMS 110-Computer Concepts \& Applications

## Credits: 3

This course is designed to provide the student with a level of knowledge necessary to function in today's technological society. Topics include computer and network terminology, hardware, software, and processing concepts. A large portion of the class time is dedicated to exercises performed using integrated software packages. Lab Fee Required.

## Spring Semester

## BIOS 210 - Microbiology

## Credits: 4

This course involves a systematic study of microorganisms. Topics include the classification, structure, function, genetics, ecology, and control of microbes. Clinical aspects, infection and immunity, and industrial aspects of microbiology will also be covered. Lab Fee Required.

Corequisite: BIOS 210L
Prerequisite: One previous semester of science

- BIOS 000 - Option Elective Credits: 4
- GHMN 000 - Humanities Gen Ed Requirement Credits: 3
- GSOC 000 - Social Science Gen Ed Requirement Credits: 3


## COLL 210 - Capstone for Biological and Clinical Sciences


#### Abstract

Credits: 1 This capstone course is designed to assist students in the transition from the community college experience to a four year educational institution. Students are required to creatively analyze, synthesize, and evaluate knowledge gained during previous semesters. Students will read several papers from the current research literature in their area of interest and will write a review paper on that topic. Additional assignments are designed to involve students in critical thinking and problem-solving. Throughout the semester students will engage in self-reflection activities related to their major and overall community college experience.


Prerequisite: Must have completed 45 credits

Total Semester Hours: 15

Summer Session

## Total Program Hours: 60

## Humanities General Education Courses (Recommended)

Recommended courses listed below but student can also choose from the list of approved General Education courses in the College catalog.

## HUMN 101 - Survey of World Culture I

Credits: 3
This survey course explores the evolution of western and non-western key ideas in art, music, and literature from prehistoric times to the 14th century. Emphasis is placed on the comparison of social, economic, religious, and political forces in the arts in a variety of cultures and diverse people.

## HUMN 102 - Survey of World Culture II

## Credits: 3

This survey course explores the evolution of western and non-western key ideas in art, music, and literature from the 15th to 21st century societies. Emphasis is placed on the comparison of social, economic, religious, and political forces in the arts in a variety of cultures and diverse people.

## PHIL 205 - Contemporary Ethical Issues

Credits: 3
This course is an introduction to the study of moral theories and their justification, including an examination of contemporary moral concerns as test cases.

## AMSL 101 - American Sign Language I

## Credits: 3

This course is designed to develop basic communicative skills in American Sign Language. This course will emphasize grammatical structures, sign vocabulary, fingerspelling, numbers, expressive and receptive skills, facial grammar and non-manual communication, and the anatomy and physiology of the human hearing system and hearing loss. Additionally, this course provides an introduction to the culture of the Deaf community.

Corequisite: ENGL 021 and ENGL 032

## SPAN 101 - Elementary Spanish I

## Credits: 3

This is an introductory course in Spanish emphasizing the fundamentals of speaking, reading, writing, and listening. The course focuses on building basic vocabulary and introducing students to the Hispanic culture. It is designed for students with no Spanish experience.

Credits: 3
This course is a survey of Western Civilization since 1648 with emphasis on the concepts and historical movements vital to understanding the modem world. Major topics include the development of law and government, the emergence of the major ideologies of the nineteenth and twentieth centuries, the industrial revolution and economic modernization, 20th century "isms" and the impact of social and cultural development in Western Europe.

## Social Science General Education Courses (Recommended)

Recommended courses listed below but student can also choose from the list of approved General Education courses in the College catalog.

## ANTH 101 - Introduction to Anthropology

## Credits: 3

This course is an integrated overview of the four fields of anthropology. Physical anthropology, cultural anthropology, linguistics, and archeology are explored as subfields and together as an integrated whole. Emphasis is placed on the study of the social and biological origins of human culture, religious diversity, linguistic diversity, and patterns of social inequalities.

## POLS 101 - Intro. to Political Science

## Credits: 3

This course provides a general introduction to the discipline of political science. The course focuses on the major sub-disciplines of political science including practical theory, international relations, comparative politics, and identity politics. The course is designed to encourage active student participation in the political process.

## PSYC 101 - Introduction to Psychology

## Credits: 3

This course is an introduction to the science of human behavior and mental processes. Emphasis is placed on the relationship between the nervous system and behavior, learning, perception, development, motivation, personality, attitude formation and prejudice, psychopathology and psychotherapy.

Prerequisite: Proficient in all Developmental English Courses

## SOCA 101 - Intro. to Sociology

## Credits: 3

This course is an introduction to the analysis and description of structures and dynamics of human society. Emphasis is placed on the application of scientific methods of observation and analysis of social groups, intergroup relations, social change, social stratification, and social institutions.

Recommended courses are listed below but students can also choose from the list of approved Biology Elective courses in the College catalog.
BIOS 122 Intro. to Environmental Science Credits: 4

## CHEM 107 - Forensic Science

## Credits: 4

This course introduces the student to the basic principles of forensic science and the application of those principles in the collection, examination, evaluation, and interpretation of crime scene evidence. The course provides the student with the opportunity to explore the intersection of several scientific areas (e.g., biological, physical, chemical, medical, and behavioral science) as they apply to the investigation and resolution of crimes.

Corequisite: CHEM 107L
Prerequisite: MATH 010, MATH 015, MATH 017, or MATH 023 and MATH 040

## HORT 102 - Plant Propagation

Credits: 4
This course acquaints the student, through in class lectures and hands on labs, with the techniques and facilities needed for plant propagation in the greenhouse and nursery industry.

Corequisite: HORT 102L

## PHYS 110 - Physics I

## Credits: 4

This course is designed to introduce students to problem-solving techniques in physics. Topics include forces, energy, mechanics, momentum, heat, and kinetic theory. Includes applications to the life sciences and everyday life. Lab Fee Required.

Corequisite: PHYS 110L
Prerequisite: MATH 112 (Grade of C or better)

## Science General Education Courses (Recommended)

Recommended courses are listed below but students can also choose from the list of approved General Education courses in the College catalog.

## BIOS 102 - Intro. to Human Biology

## Credits: 4

This course is an introduction to human anatomy and physiology for the non-biology major. It is designed to develop an appreciation for the structure and functions of the human body; to point out the relationship of body systems to health and disease; and to emphasize human biology as it relates to everyday living experiences. Lab Fee Required.

## BIOS 130 - Introduction to Botany

## Credits: 4

This course is designed to study the structural and functional adaptations of algae and plants to the environment. It includes the study of the following processes: Seed germination, growth, photosynthesis, reproduction, and transport. Plant evolution and their relationship to the environment and to humans will be discussed. The laboratory component of the course includes field and laboratory studies of plant diversity, morphology and physiology. Students will design and carry out their own independent investigations. Lab Fee Required.

Corequisite: BIOS 130L
Prerequisite: BIOS 110 or Permission of Instructor

## Developmental Courses

Sussex has embraced a practice of directed self-choice whereby students are encouraged, through guided conversations with an advisor, to best determine their readiness for this course. Students should be aware that Developmental Studies exist and are available to help strengthen skills and encourage success. Pursuing testing and/or developmental courses is entirely up to the student. Further, testing, though providing a valuable reference point for reflection, does not create for the student an obligation to follow Accuplacer recommendations.

The exception to this is where students seek enrollment in higher-level math courses. Students wishing to enroll in the following math courses are required to take and adhere to placement guidance from, the Advanced Algebra and Functions test, as part of Accuplacer, through the college's testing center, for admission into any of the following courses: MATH 110, MATH 112, and MATH 113. Please note, courses in other disciplines may also require advanced mathematics placement. Students should check with their advisor.

## Bookkeeping, C.O.A.

This certificate is structured to build upon required prior coursework in financial and managerial accounting principles including computerized accounting and payroll accounting. Business applications using electronic spreadsheets will also be reviewed. The program will prepare students for entry-level bookkeeping positions and for positions as accounts receivable or accounts payable clerks.

## First Year

## Summer Session I

## ACCT 101 - Accounting Princ. I Financial

## Credits: 3

This course is a study of accounting principles and procedures. The accounting cycle is covered for a service industry. Additional topics include accounting for merchandising operations; cash and short-term investments; inventory; the acquisition, allocation, and disposal of tangible and intangible assets; and current liabilities.

## ACCT 102 - Accounting Princ. II Managerial


#### Abstract

Credits: 3 This course addresses managerial accounting concepts which are necessary for decision-making, performance evaluation, planning, and control. Emphasis is placed on using accounting data as a tool to enhance the information's usefulness to the firm's management. The course deals with corporate equity, the management cycle, product costing methods and standards, responsibility accounting and segment analysis, budgeting, costbehaviors, activity-based systems, statement analysis, and preparation of the statement of cash flow. Quantitative methods necessary for managerial accounting will be emphasized.


Prerequisite: ACCT 101 (Grade of C or better)

## ACCT 107 - Computerized Accounting

## Credits: 3

This course is designed to provide students with a working knowledge of accounting software packages used in industry. The software packages will be representative of the various types on the market. Students will use the following accounting modules: general ledger, accounts receivable, accounts payable, fixed assets, payroll, and cash receipts/payments. Lab Fee Required.

Prerequisite: ACCT 101 (Grade of C or better)

## ACCT 205 - Payroll Accounting

## Credits: 3

This course is designed to prepare students to enter into the payroll accounting profession. Students learn the various federal and state requirements that govern payroll record keeping and reporting. The student will study ways to implement the requirements in both a manual and an automated payroll environment.

Prerequisite: ACCT 101 (Grade of C or better)

Total Semester Hours: 9

## Spring Semester

## BUSA 190 - Business Applications using Electronic Spreadsheets

Credits: 3
This course presents a practical approach for implementing spreadsheet software in the planning and developing of budgets, cash flows, financial statements, and other business records. Emphasis is placed on the financial functions available in the programs and the development of macros. Basic data base management is also incorporated. Lab Fee Required.

# Building Construction Technology Option, A.A.S. - Technical Studies 

The Building Construction Technology Program is designed to provide students with the hands-on practice skills and training necessary to obtain employment in the Building Construction Industry. The program prepares students in leadership and planning, technical knowledge and emerging technologies, creative problem-solving sustainable practices, and ethical principles to successfully achieve academic and professional goals.

# Upon completion of this program, graduates will be able to: 

- Interpret and apply appropriate building and structural codes to industry standards.
- Interpret construction documents, blueprints, schematics, and sketches.
- Communicate information effectively, in both verbal and written forms.
- Demonstrate effective problem-solving skills based on knowledge and practice.
- Understand, integrate, and apply construction knowledge and skills professionally.
- Demonstrate professionalism with attitude, conduct and ethical work practices.
- Communicate skillfully with other industry professionals involved in the construction process.


## First Year

Fall Semester

## ENGL 101 - English Composition I

## Credits: 3

This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects which include personal, rhetorical, and expository models. Research skills are introduced.

## MATH 105 - Technical Mathematics

## Credits: 3

This course is intended for students who have introductory algebra proficiency, and who need to apply mathematical concepts in a technical program. The purpose of the course is to prepare AAS students for the mathematical aspects of their work in the technical trades.

Prerequisite: Proficiency on the College Placement Examination or grade of C or better in MATH 017/MATH 023.

Credits: 1

This course is a survey of the construction industry including a brief overview the overall construction processes from initial concept through startup of the complete facility, career opportunities in the construction industry, employability, and an introduction to the materials and systems used in construction, with an emphasis on vocabulary building. Students will become familiar with The U.S. Green Building Council Leadership in Energy and Environmental Design (LEED).

Corequisite: BCST 103 Construction Safety, Tools and Equipment

## BCST 103 - Construction, Safety, Tools \& Equipment

## Credits: 2

This course is designed to identify, reduce, and eliminate construction-related hazards by studying safety regulations and agencies. Students will survey hand and power tools typically used to perform construction work, the maintenance of tools and equipment, and emerging tool technology. Emphasis is on OSHA safety standards, hand and power tools and equipment safety, rigging, communication, health standards, confined space entry, hazardous materials, and right to know.

Corequisite: BCST 101 Introduction to Building Construction

## BCST 112 - Print Reading and Sketching

Credits: 3
This course is a thorough exploration into the structure of blueprints and reading them. Emphasis is on components of blueprints, basic technical diagrams, interpretation of building, piping and plumbing, electrical, air conditioning and refrigeration drawings. Students will practice techniques to create pictorial and multiple-view drawings in the style of a blueprint to convey information simply and completely. Lab Fee Required.

## BCST 125-Codes in Construction

## Credits: 1

This course explores the current International Residential Code (IRC) for residential buildings and the interpretation of code language, tables, and illustrations. Emphasis is on identification of requirements for building planning, foundations, floors, walls, ceilings, roof assemblies, and energy efficiency. Exploration into requirements for radon control, methods, and existing structures will be covered.

## BCST 130 - Construction Site Preparation and Layout

## Credits: 1

This course explores the current International Residential Code (IRC) for residential buildings and the interpretation of code language, tables, and illustrations. Emphasis is on identification of requirements for building planning, foundations, floors, walls, ceilings, roof assemblies, and energy efficiency. Exploration into requirements for radon control, methods, and existing structures will be covered.

Total Semester Hours: 14

Winter Session

## Spring Semester

## COMS 110-Computer Concepts \& Applications

Credits: 3
This course is designed to provide the student with a level of knowledge necessary to function in today's technological society. Topics include computer and network terminology, hardware, software, and processing concepts. A large portion of the class time is dedicated to exercises performed using integrated software packages. Lab Fee Required.

Corequisite: COMS 110S

## BCST 142 - Construction Materials and Methods I

## Credits: 3

This course is a study of residential and commercial building erection and fabrication techniques and construction materials. Proper terminology, usage and sustainability of traditional wood, steel, masonry, concrete materials and prefabricated/premanufactured methods and materials will be covered. Students will work to complete a construction project. Lab fee required.

Prerequisite: BCST 101 Introduction to Construction, BCST 103 Construction Safety, Tools and Equipment, BCST 112 Print Reading and Sketching, and BCST 125 Codes in Construction

## BCST 150 - Intro. to Electrical and Mechanical Systems

Credits: 2
This course is a study of electrical and mechanical systems, how they are built, and how they affect the construction project. Topics will include evaluation of construction drawings, air conditioning, heating, plumbing, fire protection, electrical power and lighting, and building control materials and systems. Lab fee required.

Prerequisite: BCST 101 Introduction to Construction, BCST 103 Construction Safety, Tools and Equipment, BCST 112 Print Reading and Sketching, and BCST 125 Codes in Construction

## BCST 210 - Roof Structures and Stairs

## Credits: 4

This course is a study of the construction of roof and stair structures. Design, materials and framing techniques will be explored. Topics include roof systems, rafter and truss design, framing, and the layout and installation of stairs. Lab fee required.

Prerequisite: BCST 101 Introduction to Construction, BCST 103 Construction Safety, Tools and Equipment, BCST 112 Print Reading and Sketching, and BCST 125 Codes in Construction

- GNED 000 - General Education Requirement Credits: 3

Total Semester Hours: 15

Fall Semester

## ENGL 125 - Tech. Writing \& Communication I

Credits: 3
This course focuses on expository writing for business, industrial, and scientific fields, emphasizing the principles for organizing, writing, and revising clear, readable documents and reports. Students will practice written, oral, reading, and reasoning skills. Research skills will be advanced.

## BCST 230 - Construction Materials and Methods II

Credits: 3
This course is a second level course covering topics of building materials and construction methods in residential and commercial construction applications. Students will continue to develop knowledge of building materials and advance their skills in a construction project. Proper terminology, usage and sustainability of traditional exterior and finishing materials will be covered. Students will work to complete a construction project. Lab fee required.

Prerequisite: BCST 142 Construction Materials and Methods I

## BCST 255 - Interior Finishes

## Credits: 2

This course introduces building materials and finishes used in interior applications. Student will learn the technical vocabulary and concepts associated with materials, construction, fabrication, and evaluation. Exploration of interior building materials in relationship to creative design solutions will be covered safeguarding human and environmental health. Safe and professional installation will be practiced as related to building construction, design, and occupation. Lab fee required.

Prerequisite: BCST 142 Construction Materials and Methods I, BCST 150 Introduction to Electrical and Mechanical Systems

## BCST 260 - Trim and Millwork

## Credits: 4

This course introduces students to concepts and procedures for fine woodworking practices. Students will explore cabinetmaking, cabinetry styles, human factors, working drawings, kitchen cabinets, industrial production cabinetmaking, health and safety, measuring and laying out materials, stationary power machines, hand and portable power tools, employment and experience building a basic cabinet system. Topics include lumber and millwork, manufactured panel products, veneers and plastic overlays, hardware, surfacing and shaping, turning, joint making, abrasives and sanding machines, gluing and clamping, bending and laminating wood, overlaying and inlaying veneer, installing plastic laminates, case construction, doors, drawers, and applying finishing materials. Lab fee required.

Prerequisite: BCST 230 Construction Materials and Methods II, BSCT 255 Interior Finishes, BCST 235 Weather Resistant Barriers and Finishes, BCST 245 Masonry Principles and Concrete Construction

- GHMN 000 - Humanities Credits: 3 OR
- GSOC 000 - Social Science Gen Ed Requirement Credits: 3

Winter Session

Spring Semester

## BCST 235 - Weather Resistant Barriers \& Finishes

Credits: 2
This course is a study of developing skills in the selection and installation of resistant systems, siding and roofing materials, soffit, and fascia. Student will explore code requirements of weather resistant barriers. Lab fee required.

Prerequisite: BCST 142 Construction Materials and Methods I, BSCT 150 Introduction to Electrical and Mechanical Systems, BCST 210 Roof Structures and Stairs

## BCST 245 - Masonry Principles \& Concrete Construction

## Credits: 4

This course is a study of masonry construction materials and methods and principles of concrete design. Students will focus on terms, definitions, and methods of construction practices related to masonry construction and concrete. Lab fee required.

## BCST 270 - Estimating, Planning, Scheduling and Management

## Credits: 4

This course offers students the opportunity to learn effective methods and techniques associated with the organization, planning and implementation of a construction project. Student will explore characteristics of a project including the planning process, organization, contract management, field record keeping, quality control, safety, project closeout and warranties/claims, and post project analysis. Topics will include cost estimating and budgeting methods, cash flow analysis, and time management, identification of needed resources, resource constraints and allocation. Lab fee required.

Prerequisite: BCST 230 Construction Materials and Methods II, BSCT 255 Interior Finishes, BCST 235 Weather Resistant Barriers and Finishes, BCST 245 Masonry Principles and Concrete Construction

## BCST 280 - Building Construction Internship

## Credits: 3

This course is designed to have the building construction student gain practical experience and enhance class/lab learning. The student spends a total of 135 hours in a construction environment.

Prerequisite: All BCST technical courses with the exception of BCST 260 Trim and Millwork and BCST 270 Estimating, Planning, Scheduling and Management, or permission of the Program Coordinator

- GNED 000 - General Education Requirement Credits: 3


# Humanities, Social Science, and General Education Courses 

Choose from the list of approved Humanities, Social Science, or General Education courses listed in the College catalog.

## Technical Studies Core or Program Electives Courses (Recommended)

** Technical Studies credits may be earned for corporate, industrial, or military training programs after review by a faculty assessor of related program. Individuals without sufficient technical training experience must select courses in one of the programs/options listed below to satisfy the Technical Studies credit requirements. All courses should be selected with assistance from a faculty advisor.

## BCST 150 - Intro. to Electrical and Mechanical Systems

## Credits: 2

This course is a study of electrical and mechanical systems, how they are built, and how they affect the construction project. Topics will include evaluation of construction drawings, air conditioning, heating, plumbing, fire protection, electrical power and lighting, and building control materials and systems. Lab fee required.

Prerequisite: BCST 101 Introduction to Construction, BCST 103 Construction Safety, Tools and Equipment, BCST 112 Print Reading and Sketching, and BCST 125 Codes in Construction

## BCST 210 - Roof Structures and Stairs

## Credits: 4

This course is a study of the construction of roof and stair structures. Design, materials and framing techniques will be explored. Topics include roof systems, rafter and truss design, framing, and the layout and installation of stairs. Lab fee required.

Prerequisite: BCST 101 Introduction to Construction, BCST 103 Construction Safety, Tools and Equipment, BCST 112 Print Reading and Sketching, and BCST 125 Codes in Construction

## BCST 230 - Construction Materials and Methods II

## Credits: 3

This course is a second level course covering topics of building materials and construction methods in residential and commercial construction applications. Students will continue to develop knowledge of building materials and advance their skills in a construction project. Proper terminology, usage and sustainability of traditional exterior and finishing materials will be covered. Students will work to complete a construction project. Lab fee required.

## BCST 255 - Interior Finishes

## Credits: 2

This course introduces building materials and finishes used in interior applications. Student will learn the technical vocabulary and concepts associated with materials, construction, fabrication, and evaluation. Exploration of interior building materials in relationship to creative design solutions will be covered safeguarding human and environmental health. Safe and professional installation will be practiced as related to building construction, design, and occupation. Lab fee required.

Prerequisite: BCST 142 Construction Materials and Methods I, BCST 150 Introduction to Electrical and Mechanical Systems

## BCST 260 - Trim and Millwork

## Credits: 4

This course introduces students to concepts and procedures for fine woodworking practices. Students will explore cabinetmaking, cabinetry styles, human factors, working drawings, kitchen cabinets, industrial production cabinetmaking, health and safety, measuring and laying out materials, stationary power machines, hand and portable power tools, employment and experience building a basic cabinet system. Topics include lumber and millwork, manufactured panel products, veneers and plastic overlays, hardware, surfacing and shaping, turning, joint making, abrasives and sanding machines, gluing and clamping, bending and laminating wood, overlaying and inlaying veneer, installing plastic laminates, case construction, doors, drawers, and applying finishing materials. Lab fee required.

Prerequisite: BCST 230 Construction Materials and Methods II, BSCT 255 Interior Finishes, BCST 235 Weather Resistant Barriers and Finishes, BCST 245 Masonry Principles and Concrete Construction

## BCST 235 - Weather Resistant Barriers \& Finishes

Credits: 2
This course is a study of developing skills in the selection and installation of resistant systems, siding and roofing materials, soffit, and fascia.
Student will explore code requirements of weather resistant barriers. Lab fee required.
Prerequisite: BCST 142 Construction Materials and Methods I, BSCT 150 Introduction to Electrical and Mechanical Systems, BCST 210 Roof Structures and Stairs

## BCST 245 - Masonry Principles \& Concrete Construction

Credits: 4
This course is a study of masonry construction materials and methods and principles of concrete design. Students will focus on terms, definitions, and methods of construction practices related to masonry construction and concrete. Lab fee required.

## BCST 280 - Building Construction Internship

Credits: 3
This course is designed to have the building construction student gain practical experience and enhance class/lab learning. The student spends a total of 135 hours in a construction environment.

Prerequisite: All BCST technical courses with the exception of BCST 260 Trim and Millwork and BCST 270 Estimating, Planning, Scheduling and Management, or permission of the Program Coordinator

## Select Courses from One of the following Programs(P)/Options(O):

## Business Management (P)

Computer Information Systems (P)
Engineering Science (O)
Graphic Design (P)
Machine Tool Technology (O)
Welding Technology (O)

## Technology General Education Courses (Recommended)

Recommended courses listed below but student can also choose from the list of approved General Education courses in the College catalog.

## COMS 110-Computer Concepts \& Applications

## Credits: 3

This course is designed to provide the student with a level of knowledge necessary to function in today's technological society. Topics include computer and network terminology, hardware, software, and processing concepts. A large portion of the class time is dedicated to exercises performed using integrated software packages. Lab Fee Required.

Corequisite: COMS 110S

## Developmental Courses

Sussex has embraced a practice of directed self-choice whereby students are encouraged, through guided conversations with an advisor, to best determine their readiness for this course. Students should be aware that Developmental Studies exist and are available to help strengthen skills and encourage success. Pursuing testing and/or developmental courses is entirely up to the student. Further, testing, though providing a valuable reference point for reflection, does not create for the student an obligation to follow Accuplacer recommendations.

The exception to this is where students seek enrollment in higher-level math courses. Students wishing to enroll in the following math courses are required to take and adhere to placement guidance from, the Advanced Algebra and Functions test, as part of Accuplacer, through the college's testing center, for admission into any of the following courses: MATH 110, MATH 112, and MATH 113. Please note, courses in other disciplines may also require advanced mathematics placement. Students should check with their advisor.

## Business Administration, A.S.

This program is structured to provide fundamental knowledge of business topics. Emphasis is placed on business theory and techniques used to solve contemporary business problems. This program is designed for students who intend to transfer to a four-year baccalaureate program.

# Upon completion of this program, graduates will be able to: 

- Explain the evolution of the private enterprise system in the American economy.
- Describe the impact of government, labor, free trade and globalization on U.S. business enterprises.
- Analyze contemporary business problems and propose effective solutions using case studies and business analysis applications.
- Examine ethical and legal implications of managerial decisions.
- Interpret basic financial statements and managerial reports.
- Identify the impact of leadership in defining organizational culture.
- Design and deliver effective presentations commonly used in business environments.


## First Year

## Fall Semester

## COLL 101 - Foundations for Success

## Credits: 3

This is a student-centered course covering numerous strategies to encourage students to become active and empowered learners. A primary goal of this course is to help students make the most out of their college experience. Students will obtain information about college life and culture and develop strategies and techniques to enhance success in their academic, personal and professional lives. The course is infused with opportunities to understand, practice and implement critical thinking. Students will also gain practical information to help prepare to transfer to a four-year university or enter the workforce directly. All topics will be presented in both theory and practice. This course is required of all degree-seeking candidates and must be taken within the initial 16 credits after entry.

## ENGL 101 - English Composition I

## Credits: 3

This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects which include personal, rhetorical, and expository models. Research skills are introduced.

## COMS 110-Computer Concepts \& Applications

## Credits: 3

This course is designed to provide the student with a level of knowledge necessary to function in today's technological society. Topics include computer and network terminology, hardware, software, and processing concepts. A large portion of the class time is dedicated to exercises performed using integrated software packages. Lab Fee Required.

Corequisite: COMS 110S

ACCT 101 - Accounting Princ. I Financial

Credits: 3

This course is a study of accounting principles and procedures. The accounting cycle is covered for a service industry. Additional topics include accounting for merchandising operations; cash and short-term investments; inventory; the acquisition, allocation, and disposal of tangible and intangible assets; and current liabilities.

## BUSA 101 - Intro. to Business

## Credits: 3

This course is designed to provide the student with an overview of all critical business functions. Topics include forms of business ownership, legal aspects of business, human resource management, finance, marketing, accounting, management information systems, international business and contemporary business issues. Students taking this course are prepared for more advanced courses in business.

Total Semester Hours: 15

## Winter Session

## Spring Semester

## ENGL 102 - English Composition II

## Credits: 3

This course introduces students to short fiction, poetry, drama, and the novel. Written assignments are based on the readings. Writing skills learned in Composition I are further developed. Students will write a research paper which demonstrates understanding of literary criticism.

Prerequisite: ENGL 101 (Grade of C or better)

## MATH 108 - Statistics

## Credits: 3

This course includes the following topics: organization of data, measures of central tendency and dispersion, probability, the normal and binomial distributions, confidence intervals, hypothesis testing, analysis of variance, and correlation.

Prerequisite: MATH 017 (Grade of C or betterI) or MATH 023 (Grade of C or betterI) or appropriate algebra placement score

## ACCT 102 - Accounting Princ. II Managerial

## Credits: 3

This course addresses managerial accounting concepts which are necessary for decision-making, performance evaluation, planning, and control. Emphasis is placed on using accounting data as a tool to enhance the information's usefulness to the firm's management. The course deals with corporate equity, the management cycle, product costing methods and standards, responsibility accounting and segment analysis, budgeting, costbehaviors, activity-based systems, statement analysis, and preparation of the statement of cash flow. Quantitative methods necessary for managerial accounting will be emphasized.

## ECON 101 - Macroeconomics

## Credits: 3

This course is an analysis of major economic concepts. Topics include the elements of national income; the economic roles of government and labor; classical economics; monetary institutions and policies; the Keynesian model and modern fiscal policy; the macroeconomic aspects of world trade.

## BUSA 205 - Business Law I

Credits: 3
This course is an introduction to the judicial process as it pertains to business law. Topics include the history of business law, contracts, business torts, white-collar crime, UCC sales, paper and securities. An in-depth study of rights and obligations as they apply to contract law is performed.

Total Semester Hours: 15

Summer Session

Second Year

Fall Semester

- LSCI 000 - Science Gen Ed Requirement Credits: 3


## MATH 110 - Pre-Calculus I

## Credits: 3

This course is designed to strengthen algebraic skills and give students the math confidence to proceed with calculus and other higher forms of mathematics. Topics include the study of functions, graphing techniques, polynomial, rational, exponential and logarithmic functions and systems of equations and inequalities.

Prerequisite: MATH 040 (Grade of C or betterI) or appropriate pre-calculus placement score

## COMS 120 - Computer Software Applications

Credits: 3
This course is a comprehensive hands-on study of Office Automation which provides the student with extended knowledge of Windows, word

## Prerequisite: COMS 110 or Higher

- GSOC 000 - Social Science Gen Ed Requirement Credits: 3


## BUSA 211 - Mgmt. \& Organizational Behavior

## Credits: 3

This course is an introduction to management structure and transformational processes in organizations. Topics include planning, organizing, staffing, organizational control, motivation, group dynamics behavior, leadership, managing change and contemporary issues.

Prerequisite: BUSA 101

Total Semester Hours: 15

Winter Session

## Spring Semester

- GHMN 000 - Humanities Gen Ed Requirement Credits: 3


## ENGL 201 - Effective Speaking

## Credits: 3

This is a course in public speaking which stresses speech organization, effective delivery and critical listening skills. A strong emphasis is placed on student performance to help the student gain speech practice and develop self-confidence in a variety of speaking situations.

Prerequisite: ENGL 015 and ENGL 031

- GSOC 000 - Social Science Gen Ed Requirement Credits: 3


## BUSA 220 - Principles of Marketing

## Credits: 3

This course is an introduction to the basic principles and practices in industrial, consumer, and international marketing. Topics include product development, pricing, distribution, and promotion. The course prepares students for advanced study in specialized areas of marketing, retailing, and sales.

Prerequisite: BUSA 101

## Credits: 3

This course is an exploration of economic factors that affect the firm and individual consumers. Topics include the laws of supply and demand, elasticity, consumer demand and utility theory, production, pricing, competitive behavior, monopoly and imperfect competition, labor economics, international trade.

## Total Semester Hours: 15

Summer Semester

## Total Program Hours: 60

## Science General Education Courses (Recommended)

Recommended courses listed below but student can also choose from the list of approved General Education courses in the College catalog.

## BIOS 101 - General Biology

## Credits: 4

This course introduces the student to the principles of modem biology. Emphasis is on the chemistry, structure, heredity, reproduction, development, ecology, and evolution of living things. For non-science majors. Lab Fee Required.

## Corequisite: BIOS 101L

## BIOS 122 - Intro. to Environmental Science

## Credits: 4

This course is designed to explore the factors influencing the environment and to increase awareness of environmental problems. Topics include air, land, and water resources, ecology, waste management, and the human effects on the environment. Lab exercises and field trips will supplement the theory presented. Lab Fee Required.

Corequisite: BIOS 122L

## PHYS 107 - Introductory Meteorology

## Credits: 4

This introductory course consists of five areas of concentration-atmospheric components; weather systems; upper air dynamics; satellite and radar interpretation of severe and weather elements; a review of historical weather events and their social and geographical effects; systems examined include hurricanes; severe thunderstorms and the mesosyclone; forms of precipitation; hourly observations; cloud identification; interpretation NCEP/NOAH data for forecast modeling data.

Corequisite: PHYS 107L

# Humanities General Education Courses (Recommended) 

Recommended courses listed below but student can also choose from the list of approved General Education courses in the College catalog.

## HIST 105 - U.S. History I

Credits: 3
This course is an examination of United States history from the age of discovery through the Civil War. Particular emphasis will be placed on the social, economic, and political forces that were responsible for the development of the new nation.

## HIST 106 - U.S. History II

Credits: 3
This course is an examination of United States history from Reconstruction through the present. Particular emphasis will be placed on major themes in United States' politics, society, economics, and diplomacy.

## Social Science General Education Courses (Recommended)

Recommended courses listed below but student can also choose from the list of approved General Education courses in the College catalog.

## PSYC 101 - Introduction to Psychology

## Credits: 3

This course is an introduction to the science of human behavior and mental processes. Emphasis is placed on the relationship between the nervous system and behavior, learning, perception, development, motivation, personality, attitude formation and prejudice, psychopathology and psychotherapy.

Prerequisite: Proficient in all Developmental English Courses

## SOCA 101 - Intro. to Sociology

## Credits: 3

This course is an introduction to the analysis and description of structures and dynamics of human society. Emphasis is placed on the application of scientific methods of observation and analysis of social groups, intergroup relations, social change, social stratification, and social institutions.

Sussex has embraced a practice of directed self-choice whereby students are encouraged, through guided conversations with an advisor, to best determine their readiness for this course. Students should be aware that Developmental Studies exist and are available to help strengthen skills and encourage success. Pursuing testing and/or developmental courses is entirely up to the student. Further, testing, though providing a valuable reference point for reflection, does not create for the student an obligation to follow Accuplacer recommendations.

The exception to this is where students seek enrollment in higher-level math courses. Students wishing to enroll in the following math courses are required to take and adhere to placement guidance from, the Advanced Algebra and Functions test, as part of Accuplacer, through the college's testing center, for admission into any of the following courses: MATH 110, MATH 112, and MATH 113. Please note, courses in other disciplines may also require advanced mathematics placement. Students should check with their advisor.

## Business Management, A.A.S.

This program is designed primarily to prepare students for immediate entry into the workforce. The program provides students with fundamental business knowledge and prepares them for careers in business, government, retail, and not-for-profit organizations.

## Upon completion of this program, graduates will be able to:

- Analyze contemporary business problems and propose effective solutions using case studies and business applications tools.
- Examine ethical and legal implications of managerial decisions.
- Interpret basic financial statements and managerial reports.
- Identify the impact of leadership in defining organizational culture.
- Design and deliver effective presentations commonly used in contemporary business environments.


## First Year

Fall Semester

## COLL 101 - Foundations for Success

## Credits: 3

This is a student-centered course covering numerous strategies to encourage students to become active and empowered learners. A primary goal of this course is to help students make the most out of their college experience. Students will obtain information about college life and culture and develop strategies and techniques to enhance success in their academic, personal and professional lives. The course is infused with opportunities to understand, practice and implement critical thinking. Students will also gain practical information to help prepare to transfer to a four-year university or enter the workforce directly. All topics will be presented in both theory and practice. This course is required of all degree-seeking candidates and must be taken within the initial 16 credits after entry.

## ENGL 101 - English Composition I

## Credits: 3

This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects which include personal, rhetorical, and expository models. Research skills are introduced.

Credits: 3
This course is designed to provide the student with a level of knowledge necessary to function in today's technological society. Topics include computer and network terminology, hardware, software, and processing concepts. A large portion of the class time is dedicated to exercises performed using integrated software packages. Lab Fee Required.

Corequisite: COMS 110S

## ACCT 101 - Accounting Princ. I Financial

## Credits: 3

This course is a study of accounting principles and procedures. The accounting cycle is covered for a service industry. Additional topics include accounting for merchandising operations; cash and short-term investments; inventory; the acquisition, allocation, and disposal of tangible and intangible assets; and current liabilities.

## BUSA 101 - Intro. to Business

## Credits: 3

This course is designed to provide the student with an overview of all critical business functions. Topics include forms of business ownership, legal aspects of business, human resource management, finance, marketing, accounting, management information systems, international business and contemporary business issues. Students taking this course are prepared for more advanced courses in business.

Total Semester Hours: 15

## Winter Session

## Spring Semester

## ENGL 102 - English Composition II

Credits: 3
This course introduces students to short fiction, poetry, drama, and the novel. Written assignments are based on the readings. Writing skills learned in Composition I are further developed. Students will write a research paper which demonstrates understanding of literary criticism.

Prerequisite: ENGL 101 (Grade of C or better)

- MATH 900 - Math Gen Ed Requirement Credits: 3


## ACCT 102 - Accounting Princ. II Managerial

## Credits: 3

This course addresses managerial accounting concepts which are necessary for decision-making, performance evaluation, planning, and control.

Emphasis is placed on using accounting data as a tool to enhance the information's usefulness to the firm's management. The course deals with corporate equity, the management cycle, product costing methods and standards, responsibility accounting and segment analysis, budgeting, costbehaviors, activity-based systems, statement analysis, and preparation of the statement of cash flow. Quantitative methods necessary for managerial accounting will be emphasized.

Prerequisite: ACCT 101 (Grade of C or better)

## ECON 101 - Macroeconomics

## Credits: 3

This course is an analysis of major economic concepts. Topics include the elements of national income; the economic roles of government and labor; classical economics; monetary institutions and policies; the Keynesian model and modern fiscal policy; the macroeconomic aspects of world trade.

## BUSA 205-Business Law I

## Credits: 3

This course is an introduction to the judicial process as it pertains to business law. Topics include the history of business law, contracts, business torts, white-collar crime, UCC sales, paper and securities. An in-depth study of rights and obligations as they apply to contract law is performed.

Total Semester Hours: 15

Summer Session

Second Year

## Fall Semester

## COMS 120-Computer Software Applications

## Credits: 3

This course is a comprehensive hands-on study of Office Automation which provides the student with extended knowledge of Windows, word processing, electronic spreadsheets, and data base management. Lab Fee Required.

Prerequisite: COMS 110 or Higher

- GSOC 000 - Social Science Gen Ed Requirement Credits: 3


## BUSA 110 - Business Communications

## Credits: 3

This course is an exploration of the communication process in business. Topics include communication theory, styles of communication, business letters and reports, resume writing, employment letters and interviews, oral communication, business presentations, and communication technology. The use of computers in business is also covered.

Prerequisite: COMS 110, ENGL 101

## BUSA 211 - Mgmt. \& Organizational Behavior

Credits: 3
This course is an introduction to management structure and transformational processes in organizations. Topics include planning, organizing, staffing, organizational control, motivation, group dynamics behavior, leadership, managing change and contemporary issues

Prerequisite: BUSA 101

## BUSA 235 - Intro. to International Business

## Credits: 3

This course provides an introduction to the global business environment. Topics include an overview of international business, the global economy, managing an international business, cultural diversity, international trade and investment, international marketing, and multinational accounting and business operations.

Prerequisite: BUSA 101 or Permission of Instructor

Total Semester Hours: 15

Winter Session

## Spring Semester

## BUSA 220 - Principles of Marketing

## Credits: 3

This course is an introduction to the basic principles and practices in industrial, consumer, and international marketing. Topics include product development, pricing, distribution, and promotion. The course prepares students for advanced study in specialized areas of marketing, retailing, and sales.

Prerequisite: BUSA 101

## BUSA 125 - Principles of Supervision

Credits: 3
This course covers the functions of first and middle-level supervisory positions. Topics include leadership, problem- solving, motivation, human relations, communications, employee discipline, conflict resolution, teamwork, and stress management. This course is not recommended for

## BUSA 120 - Small Business Management

## Credits: 3

This course is designed to introduce the student to the principles and practices of successful small business operations. Topics include new product planning, product management, sales forecasting, consumer behavior, promotion and pricing, finance, staffing, international markets and contemporary business issues. Students acquire an overview of essential small business management skills.

- GHMN 000 - Humanities Gen Ed Requirement Credits: 3
- GSOC 000 - Social Science Gen Ed Requirement Credits: 3

Total Semester Hours: 15

Summer Session

## Total Program Hours: 60

## Humanities General Education Courses (Recommended)

Recommended courses listed below but student can also choose from the list of approved General Education courses in the College catalog.

## HIST 105 - U.S. History I

Credits: 3
This course is an examination of United States history from the age of discovery through the Civil War. Particular emphasis will be placed on the social, economic, and political forces that were responsible for the development of the new nation.

## HIST 106 - U.S. History II

## Credits: 3

This course is an examination of United States history from Reconstruction through the present. Particular emphasis will be placed on major themes in United States' politics, society, economics, and diplomacy.

## PSYC 101 - Introduction to Psychology

## Credits: 3

This course is an introduction to the science of human behavior and mental processes. Emphasis is placed on the relationship between the nervous system and behavior, learning, perception, development, motivation, personality, attitude formation and prejudice, psychopathology and psychotherapy.

Prerequisite: Proficient in all Developmental English Courses

## SOCA 101 - Intro. to Sociology

## Credits: 3

This course is an introduction to the analysis and description of structures and dynamics of human society. Emphasis is placed on the application of scientific methods of observation and analysis of social groups, intergroup relations, social change, social stratification, and social institutions.

## Math General Education Courses (Recommended)

Recommended courses listed below but student can also choose from the list of approved General Education courses in the College catalog.

## MATH 104 - Contemporary Mathematics

## Credits: 3

This course surveys several basic concepts of mathematics designed to give non-scientific/non-technical majors an understanding of the breadth of mathematics in areas other than computational application. Topics include: logic, financial management, geometry, measurement, probability and statistics.

Prerequisite: MATH 017/MATH 023 (Grade of C or better) or appropriate algebra placement score

## MATH 108 - Statistics

## Credits: 3

This course includes the following topics: organization of data, measures of central tendency and dispersion, probability, the normal and binomial distributions, confidence intervals, hypothesis testing, analysis of variance, and correlation.

Prerequisite: MATH 017 (Grade of C or betterI) or MATH 023 (Grade of C or betterI) or appropriate algebra placement score

## Developmental Courses

encourage success. Pursuing testing and/or developmental courses is entirely up to the student. Further, testing, though providing a valuable reference point for reflection, does not create for the student an obligation to follow Accuplacer recommendations.

The exception to this is where students seek enrollment in higher-level math courses. Students wishing to enroll in the following math courses are required to take and adhere to placement guidance from, the Advanced Algebra and Functions test, as part of Accuplacer, through the college's testing center, for admission into any of the following courses: MATH 110, MATH 112, and MATH 113. Please note, courses in other disciplines may also require advanced mathematics placement. Students should check with their advisor.

## Chemistry Option, A.S. - Science/Mathematics

Students who wish to pursue a bachelor's degree at a four-year institution, majoring in chemistry or chemical engineering, should pursue the A.S. Science/Mathematics Chemistry Option. As part of this option, students can expect to make laboratory measurements, as well as do inorganic synthesis, organic synthesis, titration, pH , refractive index, gas chromatography, ultraviolet/visible spectroscopy, and infrared spectroscopy. Depending on your specific course of study, you may also learn polarimetry and gel electrophoresis.

## Upon completion of this program, graduates will be able to:

- Conduct experiments using good safety practices, ethical methods, and modern lab equipment to collect observations and measurements of the natural world.
- Apply scientific theories and laws in chemistry that are consistent with observations of the natural world.
- Interpret and communicate scientific information in various forms including writing, graphs, tables, diagrams, and equations.
- Design all or part of an experiment.

First Year

Fall Semester

## COLL 101 - Foundations for Success

## Credits: 3

This is a student-centered course covering numerous strategies to encourage students to become active and empowered learners. A primary goal of this course is to help students make the most out of their college experience. Students will obtain information about college life and culture and develop strategies and techniques to enhance success in their academic, personal and professional lives. The course is infused with opportunities to understand, practice and implement critical thinking. Students will also gain practical information to help prepare to transfer to a four-year university or enter the workforce directly. All topics will be presented in both theory and practice. This course is required of all degree-seeking candidates and must be taken within the initial 16 credits after entry.

## ENGL 101 - English Composition I

## Credits: 3

This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects which include personal, rhetorical, and expository models. Research skills are introduced.

Credits: 4
This course includes a review of algebraic and transcendental functions and their graphs; study of the concepts of limits and continuity, the derivative and its applications; indeterminate forms; introduction to integration and its applications.

Prerequisite: MATH 110 and MATH 112 (Grades of C or better) or appropriate pre-calculus placement score

## CHEM 110 - College Chemistry I

## Credits: 4

This course covers general chemical principles and their applications in research and industry. Topics include matter and measurement; math in chemistry; atoms; molecules, and ions; elemental periodicity; stoichiometry; formulas and , equations; the mole; intramolecular and intermolecular bonds; reaction types including redox and acid/base; properties and reactions of solutions, gases, and the solid state; industrial processes. The lab component covers materials separation, analytical methods and instruments, qualitative and quantitative analysis; and lab report writing skills. This course is scheduled during the day in the fall semester, and during the evening in the spring semester. Lab Fee Required.

Corequisite: MATH 110, CHEM 110L

Total Semester Hours: 14

Winter Session

## Spring Semester

## ENGL 102 - English Composition II

## Credits: 3

This course introduces students to short fiction, poetry, drama, and the novel. Written assignments are based on the readings. Writing skills learned in Composition I are further developed. Students will write a research paper which demonstrates understanding of literary criticism.

Prerequisite: ENGL 101 (Grade of C or better)

## MATH 114 - Calculus II

## Credits: 4

This course is the second semester of a three semester sequence of introductory calculus. Topics include integration techniques, applications of integration, delete in.... forms infinite series, parametric equations, and polar coordinates.

Prerequisite: MATH 113 (Grade of C or better)

## CHEM 112 - College Chemistry II

## Credits: 4

This course is a continuation of CHEM 110, College Chemistry I. Topics include chemical kinetics; chemical equilibrium; chemical
thermodynamics, electrochemistry, nuclear chemistry, main-group element chemistry, metals and metallurgy, transition metals and coordination chemistry, environmental chemistry; introduction to organic and biological chemistry. The lab component covers kinetics, electrochemistry, and coordination compounds. The course is scheduled during the day in the spring semester, and during the evening in the fall semester. Lab Fee Required.

Corequisite: CHEM 112L
Prerequisite: CHEM 110 (Grade of C or better)

## COMS 114 - Intro. to Computer Science I

## Credits: 3

This course introduces the student to the fundamentals of computer science using an emphasis on programming methodology and problem solving. Topics include introductory concepts of computer systems, algorithm design, programming languages, software engineering, and data abstraction with related applications. A high level programming language is completely discussed and is used as a means to demonstrate concepts. Lab Fee Required.

Total Semester Hours: 14

Summer Session

## Second Year

Fall Semester

## CHEM 210-Organic Chemistry

## Credits: 5

Lecture includes naming, drawing, stereochemistry, physical properties, NMR, IR, GC/MS, UV/VIS, reactions, and mechanisms of alkanes, alcohols, and ethers. Mechanisms include free radical, nucleophilic substitution, elimination, and addition. Laboratory topics are chemical hygiene and safety, as well as microscale and macroscale techniques for identification and purification of organic compounds. Lab Fee Required.

Corequisite: CHEM 210L
Prerequisite: CHEM 112 with grade of C or better

## MATH 213-Calculus III

Credits: 4
This course is a continuation of Calculus II. Topics include analytic geometry in three dimensions, functions of several variables, partial derivatives, multiple integrals, vectors, and introduction to vector calculus.

Prerequisite: MATH 114 (Grade of C or better)

Credits: 4
This course will introduce the student to problem solving and laboratory techniques in calculus based physics. Topics include vectors, forces, mechanics, kinematics, fluids, thermodynamics, and waves. Lab Fee Required.

Corequisite: PHYS 120L
Prerequisite: MATH 113, MATH 114 (Grade of C or better) (MATH 114 may be taken concurrently)

- GSOC 000 - Social Science Gen Ed Requirement Credits: 3

Total Semester Hours: 16

## Winter Session

## Spring Semester

## CHEM 212-Organic Chemistry II

## Credits: 5

This course is a continuation of Organic Chemistry I. Lecture includes naming, drawing, stereochemistry, physical properties, reactions, and mechanisms of alkenes, alkynes, conjugated systems, aromatic compounds, aldehydes, ketones, enols, enolates, carboxylic acids, carboxcyclic acid derivatives, amines, amine derivatives, and ester enolates. Mechanisms include electrophilic aromatic substitution, ipso substitution, electrocylic, nucleophilic addition, and nucleophilic addition/elimination. Lab Fee Required.

Corequisite: CHEM 212L
Prerequisite: CHEM 210 with grade of C or better

## PHYS 121 - Physics II with Calculus

## Credits: 4

This course is a continuation of Physics I with Calculus. Topics include electromagnetism, circuits, electromagnetic waves, optics, and relativity. Lab Fee Required.

Corequisite: MATH 213 (Grade of C), PHYS 121L
Prerequisite: PHYS 120 (Grade of C)

- GHMN 000 - Humanities Gen Ed Requirement Credits: 3
- GSOC 000 - Social Science Gen Ed Requirement Credits: 3


## COLL 211 - Capstone for Mathematics and Chemistry

## Credits: 1

This capstone course is for Engineering/Physics Option students who have completed all Engineering/Physics-related course requirements and have a total of 45 completed credits. It is designed to assist students in the transition from the community college experience to a four-year educational institution. Students will engage in analysis, writings, and problem-solving work that shall require them to think critically and reflect on the knowledge gained during their community college experience.

Summer Session

## Total Program Hours: 60

## Humanities General Education Courses (Recommended)

Recommended courses listed below but student can also choose from the list of approved General Education courses in the College catalog.

## AMSL 101 - American Sign Language I

## Credits: 3

This course is designed to develop basic communicative skills in American Sign Language. This course will emphasize grammatical structures, sign vocabulary, fingerspelling, numbers, expressive and receptive skills, facial grammar and non-manual communication, and the anatomy and physiology of the human hearing system and hearing loss. Additionally, this course provides an introduction to the culture of the Deaf community.

Corequisite: ENGL 021 and ENGL 032

## HUMN 101 - Survey of World Culture I

## Credits: 3

This survey course explores the evolution of western and non-western key ideas in art, music, and literature from prehistoric times to the 14th century. Emphasis is placed on the comparison of social, economic, religious, and political forces in the arts in a variety of cultures and diverse people.

## PHIL 205 - Contemporary Ethical Issues

## Credits: 3

This course is an introduction to the study of moral theories and their justification, including an examination of contemporary moral concerns as test cases.

## SPAN 101 - Elementary Spanish I

This is an introductory course in Spanish emphasizing the fundamentals of speaking, reading, writing, and listening. The course focuses on building basic vocabulary and introducing students to the Hispanic culture. It is designed for students with no Spanish experience.

## Social Science General Education Courses (Recommended)

Recommended courses listed below but student can also choose from the list of approved General Education courses in the College catalog.

## ANTH 101 - Introduction to Anthropology

Credits: 3
This course is an integrated overview of the four fields of anthropology. Physical anthropology, cultural anthropology, linguistics, and archeology are explored as subfields and together as an integrated whole. Emphasis is placed on the study of the social and biological origins of human culture, religious diversity, linguistic diversity, and patterns of social inequalities.

## PSYC 101 - Introduction to Psychology

## Credits: 3

This course is an introduction to the science of human behavior and mental processes. Emphasis is placed on the relationship between the nervous system and behavior, learning, perception, development, motivation, personality, attitude formation and prejudice, psychopathology and psychotherapy.

Prerequisite: Proficient in all Developmental English Courses

## SOCA 101 - Intro. to Sociology

## Credits: 3

This course is an introduction to the analysis and description of structures and dynamics of human society. Emphasis is placed on the application of scientific methods of observation and analysis of social groups, intergroup relations, social change, social stratification, and social institutions.

## Developmental Courses

Sussex has embraced a practice of directed self-choice whereby students are encouraged, through guided conversations with an advisor, to best determine their readiness for this course. Students should be aware that Developmental Studies exist and are available to help strengthen skills and encourage success. Pursuing testing and/or developmental courses is entirely up to the student. Further, testing, though providing a valuable reference point for reflection, does not create for the student an obligation to follow Accuplacer recommendations.

The exception to this is where students seek enrollment in higher-level math courses. Students wishing to enroll in the following math courses are required to take and adhere to placement guidance from, the Advanced Algebra and Functions test, as part of Accuplacer, through the college's testing center, for admission into any of the following courses: MATH 110, MATH 112, and MATH 113. Please note, courses in other disciplines may also require advanced mathematics placement. Students should check with their advisor.

The Associate of Applied Science degree program in Early Childhood Education (Child Development Specialist) prepares students to be education assistants and teacher aides in schools, child care centers, and similar settings. Students in the program will have successfully completed 300 hours of supervised field experience in which they worked effectively with children and their families, other staff, and administration.

## Upon completion of this program, graduates will be able to:

- Use theories and knowledge of growth and development to understand the multiple influences that promote child development and learning.
- Build relationships with families and the community to create a respectful and reciprocal community of learning to support children and families.
- Support young children through the use of observation, documentation, and assessment techniques and strategies.
- Create, implement and evaluate effective early childhood curricula while implementing the philosophy of developmentally appropriate practices.
- Exhibit characteristics of an early childhood professional by following the National Association for the Education of Young Children (NAEYC) ethical guidelines, participating in professional organizations and professional development, and advocating for children and families.
- Program Goals are based on NAEYC Associate Degree Program Standards.

First Year

## Fall Semester

## COLL 101 - Foundations for Success

## Credits: 3

This is a student-centered course covering numerous strategies to encourage students to become active and empowered learners. A primary goal of this course is to help students make the most out of their college experience. Students will obtain information about college life and culture and develop strategies and techniques to enhance success in their academic, personal and professional lives. The course is infused with opportunities to understand, practice and implement critical thinking. Students will also gain practical information to help prepare to transfer to a four-year university or enter the workforce directly. All topics will be presented in both theory and practice. This course is required of all degree-seeking candidates and must be taken within the initial 16 credits after entry.

## ENGL 101 - English Composition I

## Credits: 3

This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects which include personal, rhetorical, and expository models. Research skills are introduced.

## MATH 104 - Contemporary Mathematics

## Credits: 3

This course surveys several basic concepts of mathematics designed to give non-scientific/non-technical majors an understanding of the breadth of mathematics in areas other than computational application. Topics include: logic, financial management, geometry, measurement, probability and statistics.

OR

## MATH 106 - Mathematical Concepts

## Credits: 3

This course surveys several basic concepts of mathematics designed to give non-scientific/non-technical majors an understanding of the breadth of mathematics in areas other than computational application. Topics include: problem solving, the real number system, linear and quadratic equations, exponents and logarithms, graphs and functions, and graph theory.

Prerequisite: Proficiency on the College Placement Examination or Grade of C or Better in MATH 017/MATH 023

## CDEV 101 - Intro. to Early Childhood Educ.

## Credits: 3

This course presents an overview of early childhood education. Observing and assessing children in a pre-school setting will be part of the course. Any student thinking of parenthood or a career working with young children would benefit from this course.

## PSYC 101 - Introduction to Psychology

## Credits: 3

This course is an introduction to the science of human behavior and mental processes. Emphasis is placed on the relationship between the nervous system and behavior, learning, perception, development, motivation, personality, attitude formation and prejudice, psychopathology and psychotherapy.

Prerequisite: Proficient in all Developmental English Courses

Total Semester Hours: 15

## Winter Session

## Spring Semester

## ENGL 102 - English Composition II

## Credits: 3

This course introduces students to short fiction, poetry, drama, and the novel. Written assignments are based on the readings. Writing skills learned in Composition I are further developed. Students will write a research paper which demonstrates understanding of literary criticism.

Prerequisite: ENGL 101 (Grade of C or better)

Credits: 3
This course is designed to provide the student with a level of knowledge necessary to function in today's technological society. Topics include computer and network terminology, hardware, software, and processing concepts. A large portion of the class time is dedicated to exercises performed using integrated software packages. Lab Fee Required.

Corequisite: COMS 110S

## CDEV 160 - Child Health and Nutrition

Credits: 3
This course is for early childhood educators. Emphasis is on nutrition and good health practices and their effect on the growing child, meal planning and preparation, and developmentally appropriate ways to convey health and nutrition information to young children.

## CDEV 260 - Methods of Teaching Infants \& Toddlers

## Credits: 3

This course examines various methods and techniques that put the infant and toddler curriculum into motion. Teaching techniques are examined in relation to the skill development and readiness activities to be accomplished in early childhood.

## PSYC 111 - Child Psychology

## Credits: 3

This course studies human behavior from prenatal development to puberty. Emphasis is placed upon physical, social, intellectual and personality development during childhood.

## Prerequisite: PSYC 101

Total Semester Hours: 15

Summer Session

## Second Year

## Fall Semester

Credits: 3
This course will give techniques for each childhood professionals to use when integrating children with special needs into classrooms.
Prerequisite: ENGL 101, PSYC 101

## CDEV 150 - Lang. Devel. \& Lang. Arts in Early Childhood Education

## Credits: 3

This course studies the natural development of language and verbal abilities. Emphasis is on techniques for the encouragement and support of language and communication skills, readiness for reading, and other intellectual processes.

## CDEV 270 - Curriculum Studies in Early Childhood Education

## Credits: 3

This course assists early childhood professionals in developing a more complete understanding of curriculum and curriculum planning for young children. Students learn how to individualize, adapt, create, and implement integrated learning activities.

## CDEV 280 - Child Care Internship I

Credits: 3
This course is designed to help students apply the interpersonal and theoretical skills developed in the classroom through field experience. Students are placed in selected child care centers that offer direct learning experiences and supervision.

Prerequisite: CDEV 101, CDEV 150, CDEV 270, CDEV 271 and permission of Early Childhood Program Coordinator

Total Semester Hours: 15

Winter Session

Spring Semester

- CDSC 000 - Program Elective Credits: 3


## CDEV 285 - Child Care Internship II

## Credits: 3

This is a capstone experience and affords students the opportunity for practical application of skills learned in classroom experience. Students are placed in selected child care centers or schools that offer direct learning experience and supervision.

Prerequisite: CDEV 101, CDEV 280, PSYC 111 and Permission of Early Childhood Program Coordinator

## SOCA 101 - Intro. to Sociology

## Credits: 3

This course is an introduction to the analysis and description of structures and dynamics of human society. Emphasis is placed on the application of scientific methods of observation and analysis of social groups, intergroup relations, social change, social stratification, and social institutions.

## ENGL 201 - Effective Speaking

## Credits: 3

This is a course in public speaking which stresses speech organization, effective delivery and critical listening skills. A strong emphasis is placed on student performance to help the student gain speech practice and develop self-confidence in a variety of speaking situations.

Prerequisite: ENGL 015 and ENGL 031

- GHMN 000 - Humanities Gen Ed Requirement Credits: 3

Total Semester Hours: 15

Summer Session

## Total Program Hours: 60

## Humanities General Education Courses

## HIST 105 - U.S. History I

## Credits: 3

This course is an examination of United States history from the age of discovery through the Civil War. Particular emphasis will be placed on the social, economic, and political forces that were responsible for the development of the new nation.

## ENGL 203 - American Literature I

Credits: 3
This course is a study of American thought and writing from colonial times through the post-Civil War period. Attention will be given to American social, religious, economic and political thinking as reflected in the works of American authors.

## ENGL 204 - American Literature II

## Credits: 3

This course focuses on major works in American Literature from the Civil War to the present. Attention will be given to the social, economic, and historical context of the works, as well as to the content, style, and themes of the individual authors.

Prerequisite: ENGL 102

## HUMN 101 - Survey of World Culture I

## Credits: 3

This survey course explores the evolution of western and non-western key ideas in art, music, and literature from prehistoric times to the 14th century. Emphasis is placed on the comparison of social, economic, religious, and political forces in the arts in a variety of cultures and diverse people.

## HUMN 102 - Survey of World Culture II

## Credits: 3

This survey course explores the evolution of western and non-western key ideas in art, music, and literature from the 15th to 21st century societies. Emphasis is placed on the comparison of social, economic, religious, and political forces in the arts in a variety of cultures and diverse people.

## Program Elective Courses

## AMSL 101 - American Sign Language I

## Credits: 3

This course is designed to develop basic communicative skills in American Sign Language. This course will emphasize grammatical structures, sign vocabulary, fingerspelling, numbers, expressive and receptive skills, facial grammar and non-manual communication, and the anatomy and physiology of the human hearing system and hearing loss. Additionally, this course provides an introduction to the culture of the Deaf community.

Corequisite: ENGL 021 and ENGL 032

## CDEV 272 - Music \& Art in Early Childhood Education

## Credits: 3

The creative process will be explored through music and art experiences. Students will learn new ways to communicate feelings and knowledge. An awareness and sensitivity to the world around us and individuality will be stressed.

Credits: 3
This course examines the societal philosophies which have influenced the historical development of educational theory and practice.

## SOCA 215 - Perspectives On Race, Gender, Class and Culture

Credits: 3
This course explores the effects of social structure and of dominant and sub-cultural norms and values on individuals, families and groups. Racism, sexism, homophobia, ageism, class bias and rigid gender roles are examined in depth with focus on the effects of advanced industrial capitalism on these phenomena.

Prerequisite: SOCA 101

## Developmental Courses

Sussex has embraced a practice of directed self-choice whereby students are encouraged, through guided conversations with an advisor, to best determine their readiness for this course. Students should be aware that Developmental Studies exist and are available to help strengthen skills and encourage success. Pursuing testing and/or developmental courses is entirely up to the student. Further, testing, though providing a valuable reference point for reflection, does not create for the student an obligation to follow Accuplacer recommendations.

The exception to this is where students seek enrollment in higher-level math courses. Students wishing to enroll in the following math courses are required to take and adhere to placement guidance from, the Advanced Algebra and Functions test, as part of Accuplacer, through the college's testing center, for admission into any of the following courses: MATH 110, MATH 112, and MATH 113. Please note, courses in other disciplines may also require advanced mathematics placement. Students should check with their advisor.

## Child Development Specialist, Certificate

This program prepares students for employment in child care centers and preschools as group teachers and assistant teachers working under the supervision of head teachers.

## Upon completion of this program, graduates will be able to:

- Use theories and knowledge of growth and development to understand the multiple influences that promote child development and learning.
- Build relationships with families and the community to create a respectful and reciprocal community of learning to support children and families.
- Support young children through the use of observation, documentation, and assessment techniques and strategies.
- Create, implement and evaluate effective early childhood curricula while implementing the philosophy of developmentally appropriate practices.
- Exhibit characteristics of an early childhood professional by following the National Association for the Education of Young Children (NAEYC) ethical guidelines, participating in professional organizations and professional development, and advocating for children and families.
- Program Goals are based on NAEYC Associate Degree Program Standards.

First Year

## PSYC 101 - Introduction to Psychology

## Credits: 3

This course is an introduction to the science of human behavior and mental processes. Emphasis is placed on the relationship between the nervous system and behavior, learning, perception, development, motivation, personality, attitude formation and prejudice, psychopathology and psychotherapy.

Prerequisite: Proficient in all Developmental English Courses

CDEV 101 - Intro. to Early Childhood Educ.

## Credits: 3

This course presents an overview of early childhood education. Observing and assessing children in a pre-school setting will be part of the course. Any student thinking of parenthood or a career working with young children would benefit from this course.

## CDEV 150 - Lang. Devel. \& Lang. Arts in Early Childhood Education

Credits: 3
This course studies the natural development of language and verbal abilities. Emphasis is on techniques for the encouragement and support of language and communication skills, readiness for reading, and other intellectual processes.

## CDEV 270 - Curriculum Studies in Early Childhood Education

## Credits: 3

This course assists early childhood professionals in developing a more complete understanding of curriculum and curriculum planning for young children. Students learn how to individualize, adapt, create, and implement integrated learning activities.

## EDUC 202 - Historical and Philosophical Patterns in Education

## Credits: 3

This course examines the societal philosophies which have influenced the historical development of educational theory and practice.

OR

## EDUC 275 - Working with Special Needs Children

## Winter Session

## Spring Semester

## ENGL 101 - English Composition I

## Credits: 3

This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects which include personal, rhetorical, and expository models. Research skills are introduced.

## PSYC 111 - Child Psychology

Credits: 3
This course studies human behavior from prenatal development to puberty. Emphasis is placed upon physical, social, intellectual and personality development during childhood.

Prerequisite: PSYC 101

## CDEV 160 - Child Health and Nutrition

## Credits: 3

This course is for early childhood educators. Emphasis is on nutrition and good health practices and their effect on the growing child, meal planning and preparation, and developmentally appropriate ways to convey health and nutrition information to young children.

## CDEV 260 - Methods of Teaching Infants \& Toddlers

## Credits: 3

This course examines various methods and techniques that put the infant and toddler curriculum into motion. Teaching techniques are examined in relation to the skill development and readiness activities to be accomplished in early childhood.

Credits: 3
This course is designed to help students apply the interpersonal and theoretical skills developed in the classroom through field experience. Students are placed in selected child care centers that offer direct learning experiences and supervision.

Prerequisite: CDEV 101, CDEV 150, CDEV 270, CDEV 271 and permission of Early Childhood Program Coordinator

Total Semester Hours: 15

Summer Session

Total Program Hours: 30

## Developmental Courses

Sussex has embraced a practice of directed self-choice whereby students are encouraged, through guided conversations with an advisor, to best determine their readiness for this course. Students should be aware that Developmental Studies exist and are available to help strengthen skills and encourage success. Pursuing testing and/or developmental courses is entirely up to the student. Further, testing, though providing a valuable reference point for reflection, does not create for the student an obligation to follow Accuplacer recommendations.

The exception to this is where students seek enrollment in higher-level math courses. Students wishing to enroll in the following math courses are required to take and adhere to placement guidance from, the Advanced Algebra and Functions test, as part of Accuplacer, through the college's testing center, for admission into any of the following courses: MATH 110, MATH 112, and MATH 113. Please note, courses in other disciplines may also require advanced mathematics placement. Students should check with their advisor.

## Communications/Broadcast Option, A.A. - Liberal Arts

The Broadcasting Option is designed to empower students with the proper skills and knowledge to seek careers in the many phases of the media industry including television and film, radio and audio production, broadcast journalism, and video production. In addition, students are prepared for enrollment into four-year
institutions. Students acquire the technical knowledge supported by a strong basis in theory and creativity. They prepare for entry-level positions as directors, camera operators, composers, audio engineers, writers, and on-air talent within the industry. The Broadcasting option provides graduates with real-world experience through the facilities of EDTV20 the College's educational broadcast facility and our web-based radio station.

Production classes are hands-on, involving state-of-the-art studio and field audio and video production equipment, control room operation, sophisticated high-end digital video editing, lighting for video and film, writing, producing, and directing. This course of study will prepare students to utilize their learned technical skills to apply the theoretical and creative communications knowledge to sound and screen.

## Upon completion of this program, graduates will be able to:

- Achieve entry-level competence for a position in cable television, professional commercial broadcast facilities, and commercial industrial instructional and web based video and audio production facilities.
- Create short program segments and shows for cable television.
- Write, produce, direct, and edit news and segments of a variety of television and radio programs.
- Write, produce and edit radio and television commercials.
- Perform all competencies of on-air talent in news, sports broadcasting, and interviewing.
- Produce and broadcast live and tape delay sporting events.
- Operate efficiently all video and audio production equipment.

Fall Semester

## COLL 101 - Foundations for Success

Credits: 3
This is a student-centered course covering numerous strategies to encourage students to become active and empowered learners. A primary goal of this course is to help students make the most out of their college experience. Students will obtain information about college life and culture and develop strategies and techniques to enhance success in their academic, personal and professional lives. The course is infused with opportunities to understand, practice and implement critical thinking. Students will also gain practical information to help prepare to transfer to a four-year university or enter the workforce directly. All topics will be presented in both theory and practice. This course is required of all degree-seeking candidates and must be taken within the initial 16 credits after entry.

## ENGL 101 - English Composition I

## Credits: 3

This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects which include personal, rhetorical, and expository models. Research skills are introduced.

- MATH 900 - Math Gen Ed Requirement Credits: 3
- GTEC 000 - Technology Gen Ed Requirement Credits: 3


## COMM 101 - Intro. to Mass Communications

## Credits: 3

This course examines the technical and socio-economic evolutions of print and electronic media with an emphasis on current ethical issues. Publishing, broadcasting and other emerging media are studied in terms of social and personal impact.

Total Semester Hours: 15

Winter Session

## Spring Semester

Credits: 3
This course introduces students to short fiction, poetry, drama, and the novel. Written assignments are based on the readings. Writing skills learned in Composition I are further developed. Students will write a research paper which demonstrates understanding of literary criticism.

Prerequisite: ENGL 101 (Grade of C or better)

- GMSC 000 - Math/Science Gen Ed Requirement Credits: 3
- PHIL 000 - Philosophy Gen Ed Requirement Credits: 3
- HIST 001 - History Gen Ed Requirement Credits: 3


## COMM 130-Television Production I

Credits: 3
This course introduces students to the equipment and process used to produce television programs. In SCCC's on- campus studio, students will learn basic skills and terminology utilized in the television industry.

Total Semester Hours: 15

Summer Session

Second Year

## Fall Semester

## ENGL 201 - Effective Speaking

Credits: 3
This is a course in public speaking which stresses speech organization, effective delivery and critical listening skills. A strong emphasis is placed on student performance to help the student gain speech practice and develop self-confidence in a variety of speaking situations.

Prerequisite: ENGL 015 and ENGL 031

- GHMN 000 - Humanities Gen Ed Requirement Credits: 3
- GSOC 000 - Social Science Gen Ed Requirement Credits: 3


## ARTA 104 - Art History II

## Credits: 3

This course surveys the history of art from the fourteenth through the twenty first centuries. The development of artistic concepts in the contemporary world, art and gender, and non-western art and architecture are central topics in this general survey course. Emphasis is place on viewing art forms in context of culture and gender and understanding the philosophical foundations and critical theories that support and influence them

## COMM 203 - Writing for the Media

## Credits: 3

This course introduces techniques for writing commercials, interviews, news and dramatic material to be broadcast. Theory and formatting of this specialized type of writing are practiced and analyzed.

## Total Semester Hours: 15

## Winter Session

## Spring Semester

- LSCI 000 - Science Gen Ed Requirement Credits: 3
- GHMN 000 - Humanities Gen Ed Requirement Credits: 3
- HIST 001 - History Gen Ed Requirement Credits: 3
- GSOC 000 - Social Science Gen Ed Requirement Credits: 3

COMM 205-Radio \& Television Performance

Credits: 3
This course introduces students to the equipment and process used to perform on radio and television. Through broadcasting facilities at SCCC, students will learn basic skills to perform as announcers, radio newscasters, on air DJ's, TV news and sports reporters, and voiceover specialists.

Prerequisite: Writing for Radio and Television

Total Semester Hours: 15

Summer Semester

## Total Program Hours: 60

Recommended courses listed below but student can also choose from the list of approved Philosophy General Education courses in the College catalog.

## PHIL 110 - Philosophy \& the Meaning of Life

## Credits: 3

This course is an introduction to philosophical analysis through an examination of the recurring issue of philosophy and the meaning of life. Topics of discussion will include: nature and methodology of philosophy, reality, existence of God, human freedom, and the value of existence.

## Humanities \& Technology General Education Courses

Choose from the list of approved General Education courses in the College catalog.

## History General Education Courses

Recommended courses listed below but student can also choose from the list of approved History General Education\ courses in the College catalog. Must choose a level I \& II sequence.

## HIST 101 - Hist of Western Civilization I

## Credits: 3

This course emphasizes the political, social, economic, technological, and cultural forces that influenced the historical development of Western Civilization to 1648. Major topics include: Ancient Civilizations, Greece and Rome, Middle Ages, Renaissance, and Reformation.

## HIST 102 - Hist of Western Civilization II

## Credits: 3

This course is a survey of Western Civilization since 1648 with emphasis on the concepts and historical movements vital to understanding the modem world. Major topics include the development of law and government, the emergence of the major ideologies of the nineteenth and twentieth centuries, the industrial revolution and economic modernization, 20th century "isms" and the impact of social and cultural development in Western Europe.

## Social Science General Education Courses (Recommended)

Recommended courses listed below but student can also choose from the list of approved Social Science General Education courses in the College catalog.

## Credits: 3

This course is an introduction to the science of human behavior and mental processes. Emphasis is placed on the relationship between the nervous system and behavior, learning, perception, development, motivation, personality, attitude formation and prejudice, psychopathology and psychotherapy.

Prerequisite: Proficient in all Developmental English Courses

## SOCA 101 - Intro. to Sociology

## Credits: 3

This course is an introduction to the analysis and description of structures and dynamics of human society. Emphasis is placed on the application of scientific methods of observation and analysis of social groups, intergroup relations, social change, social stratification, and social institutions.

## Math/Science General Education Courses (Recommended)

Recommended courses listed below but student can also choose from the list of approved Math and Science General Education courses in the College catalog.

## MATH 104 - Contemporary Mathematics

## Credits: 3

This course surveys several basic concepts of mathematics designed to give non-scientific/non-technical majors an understanding of the breadth of mathematics in areas other than computational application. Topics include: logic, financial management, geometry, measurement, probability and statistics.

Prerequisite: MATH 017/MATH 023 (Grade of C or better) or appropriate algebra placement score

## MATH 108 - Statistics

## Credits: 3

This course includes the following topics: organization of data, measures of central tendency and dispersion, probability, the normal and binomial distributions, confidence intervals, hypothesis testing, analysis of variance, and correlation.

Prerequisite: MATH 017 (Grade of C or betterI) or MATH 023 (Grade of C or betterI) or appropriate algebra placement score

## PHYS 107 - Introductory Meteorology

## Credits: 4

This introductory course consists of five areas of concentration-atmospheric components; weather systems; upper air dynamics; satellite and radar interpretation of severe and weather elements; a review of historical weather events and their social and geographical effects; systems examined include hurricanes; severe thunderstorms and the mesosyclone; forms of precipitation; hourly observations; cloud identification; interpretation NCEP/NOAH data for forecast modeling data.

Credits: 4
This course is designed to explore the factors influencing the environment and to increase awareness of environmental problems and solutions. The student will learn scientific methods and scientific knowledge of issues of a sustainable future. Topics include population, energy, natural resources, food, water, biodiversity, waste management, global climate change, and the social, legal, ethical and cultural impacts of human interaction with the environment. Many issues will be examined from varying points of view, requiring comparisons of different attitudes and considerations. Ethical implications of action, policy, and situations will be examined. Lab exercises and service learning will supplement the theory presented. Volunteer work or the equivalent will be required. Purchase of lab equipment required.

Corequisite: BIOS 108L

## Developmental Courses

Sussex has embraced a practice of directed self-choice whereby students are encouraged, through guided conversations with an advisor, to best determine their readiness for this course. Students should be aware that Developmental Studies exist and are available to help strengthen skills and encourage success. Pursuing testing and/or developmental courses is entirely up to the student. Further, testing, though providing a valuable reference point for reflection, does not create for the student an obligation to follow Accuplacer recommendations.

The exception to this is where students seek enrollment in higher-level math courses. Students wishing to enroll in the following math courses are required to take and adhere to placement guidance from, the Advanced Algebra and Functions test, as part of Accuplacer, through the college's testing center, for admission into any of the following courses: MATH 110, MATH 112, and MATH 113. Please note, courses in other disciplines may also require advanced mathematics placement. Students should check with their advisor.

## Communications/Film Study Option, A.A. - Liberal Arts

As a popular art form, film is a prominent medium in our society. Students invest a great deal of time and money enjoying a medium that is capable of shaping audiences' cultural lives. The academic rationale for the Film Studies Option is to combine creative and critical thinking. As a result, students will receive a rigorous understanding of film criticism, screenwriting, and filmmaking. Film Studies will investigate the psychological, social, technical, and critical aspects of this medium, particularly focusing on how the medium can manipulate audiences.

Film Studies completes and complements the existing Communications Options in Journalism and Broadcasting. It is designed to be interdisciplinary in nature, drawing on the combined skills of professors from the Journalism, Broadcasting, and Fine Arts options.

Other courses in the program will include "Cinematography," "Writing for the Media," and "Critical Analysis of the Cinema," a course which has been running for nearly a decade and which has enjoyed a 100 percent transfer record to Rutgers, Montclair, and William Paterson universities, to name only a few four-year institutions.

## Upon completion of this program, graduates will be able to:

- Demonstrate an understanding of the cultural, social and political impact of film on contemporary society.
- Demonstrate an understanding of the technical and creative aspects of film.
- Exhibit an understanding of the history of cinematography.
- Demonstrate an understanding of the film industry in relation to journalism, broadcasting, and the fine arts.
- Strengthen and enhance the ability of individuals to write and think critically about the art of film in its cultural context.


## First Year

Fall Semester

Credits: 3
This is a student-centered course covering numerous strategies to encourage students to become active and empowered learners. A primary goal of this course is to help students make the most out of their college experience. Students will obtain information about college life and culture and develop strategies and techniques to enhance success in their academic, personal and professional lives. The course is infused with opportunities to understand, practice and implement critical thinking. Students will also gain practical information to help prepare to transfer to a four-year university or enter the workforce directly. All topics will be presented in both theory and practice. This course is required of all degree-seeking candidates and must be taken within the initial 16 credits after entry.

## ENGL 101 - English Composition I

## Credits: 3

This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects which include personal, rhetorical, and expository models. Research skills are introduced.

- MATH 900 - Math Gen Ed Requirement Credits: 3
- GTEC 000 - Technology Gen Ed Requirement Credits: 3


## COMM 101 - Intro. to Mass Communications

## Credits: 3

This course examines the technical and socio-economic evolutions of print and electronic media with an emphasis on current ethical issues. Publishing, broadcasting and other emerging media are studied in terms of social and personal impact.

Total Semester Hours: 15

## Winter Session

## Spring Semester

## ENGL 102 - English Composition II

## Credits: 3

This course introduces students to short fiction, poetry, drama, and the novel. Written assignments are based on the readings. Writing skills learned in Composition I are further developed. Students will write a research paper which demonstrates understanding of literary criticism.

Prerequisite: ENGL 101 (Grade of C or better)

- GMSC 000 - Math/Science Requirement Credits: 3
- PHIL 000 - Philosophy Gen Ed Requirement Credits: 3
- HIST 001 - History Gen Ed Requirement Credits: 3


## COMM 223 - The Gothic in Liter. \& Cinema

Credits: 3
ENGL 223 The Gothic in Literature and the Cinema will survey literature and cinema that are considered "Gothic." Characteristic themes will include authors' and directors' conceptions of death and decay, desire and sexuality, obsession and madness. The primary focus of the course will be on the study of literature and cinema. As a result, students will gain familiarity with and experience in: reading and analyzing literacy texts; using literary and cinematic terminology (e.g., genre, allegory, character narrative, misen-scene, montage, auteur, etc.); and writing critical essays that compare and contrast literary and cinematic works. Novels and films will include: Mary Shelly's Frankenstein, Bram Stoker's Dracula, Sheridan Le Fanu's Carmilla, Shirley Jackson's The Haunting of Hill House, and Richard Matheson's I Am Legend. In addition, the short stories of Poe, Hawthorne, duMaurier, and others will be read, and films based on these authors' work and/or themes will be discussed.

Prerequisite: ENGL 102 (Grade of C or better)

Total Semester Hours: 15

Summer Session

Second Year

## Fall Semester

## ENGL 201 - Effective Speaking

Credits: 3
This is a course in public speaking which stresses speech organization, effective delivery and critical listening skills. A strong emphasis is placed on student performance to help the student gain speech practice and develop self-confidence in a variety of speaking situations.

Prerequisite: ENGL 015 and ENGL 031

- GHMN 000 - Humanities Gen Ed Requirement Credits: 3
- GSOC 000 - Social Science Gen Ed Requirement Credits: 3


## ARTA 104 - Art History II

## Credits: 3

This course surveys the history of art from the fourteenth through the twenty first centuries. The development of artistic concepts in the contemporary world, art and gender, and non-western art and architecture are central topics in this general survey course. Emphasis is place on viewing art forms in context of culture and gender and understanding the philosophical foundations and critical theories that support and influence them

Prerequisite: ENGL 021, ENGL 032 or Placement into ENGL 101

Credits: 3
This course will explore the film genres, film terms, and styles by examining the racially, ethnically, culturally and sexually diverse themes of producers and directors throughout the world. The course also will provide a historical survey of the cinema. Emphasis will be on writing critical pieces that demonstrate knowledge of aesthetic principles and culturally diverse themes as they apply to film as an art form.

Prerequisite: ENGL 101

Total Semester Hours: 15

## Winter Session

## Spring Semester

- LSCI 000 - Science Gen Ed Requirement Credits: 3
- GHMN 000 - Humanities Gen Ed Requirement Credits: 3
- HIST 001 - History Gen Ed Requirement Credits: 3
- GSOC 000 - Social Science Gen Ed Requirement Credits: 3


## COMM 132-Cinematography

## Credits: 3

This course serves as an introduction to the filmmaker's art. Film theory and basic history will augment an intensive examination of the image making process. Lectures, labs, and practical assessments will be used in the production of several small projects and a cooperative long-form project.

Total Semester Hours: 15

Summer Session

## Total Program Hours: 60

## Philosophy General Education Courses (Recommended)

## PHIL 110 - Philosophy \& the Meaning of Life

Credits: 3
This course is an introduction to philosophical analysis through an examination of the recurring issue of philosophy and the meaning of life. Topics of discussion will include: nature and methodology of philosophy, reality, existence of God, human freedom, and the value of existence.

History General Education Courses

Recommended courses listed below but student can also choose from the list of approved History General Education\ courses in the College catalog. Must choose a level I \& II sequence.

## HIST 101 - Hist of Western Civilization I

## Credits: 3

This course emphasizes the political, social, economic, technological, and cultural forces that influenced the historical development of Western Civilization to 1648. Major topics include: Ancient Civilizations, Greece and Rome, Middle Ages, Renaissance, and Reformation.

## HIST 102 - Hist of Western Civilization II

## Credits: 3

This course is a survey of Western Civilization since 1648 with emphasis on the concepts and historical movements vital to understanding the modem world. Major topics include the development of law and government, the emergence of the major ideologies of the nineteenth and twentieth centuries, the industrial revolution and economic modernization, 20th century "isms" and the impact of social and cultural development in Western Europe.

## Humanities \& Technology General Education Courses

Choose from the list of approved Technology General Education courses in the College catalog.

## Social Science General Education Courses (Recommended)

Recommended courses listed below but student can also choose from the list of approved Social Science General Education courses in the College catalog.

## PSYC 101 - Introduction to Psychology

## Credits: 3

This course is an introduction to the science of human behavior and mental processes. Emphasis is placed on the relationship between the nervous system and behavior, learning, perception, development, motivation, personality, attitude formation and prejudice, psychopathology and psychotherapy.

Prerequisite: Proficient in all Developmental English Courses

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## Credits: 3

This course is an introduction to the analysis and description of structures and dynamics of human society. Emphasis is placed on the application of scientific methods of observation and analysis of social groups, intergroup relations, social change, social stratification, and social institutions.

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## MATH 104 - Contemporary Mathematics

## Credits: 3

This course surveys several basic concepts of mathematics designed to give non-scientific/non-technical majors an understanding of the breadth of mathematics in areas other than computational application. Topics include: logic, financial management, geometry, measurement, probability and statistics.

Prerequisite: MATH 017/MATH 023 (Grade of C or better) or appropriate algebra placement score

## MATH 108 - Statistics

## Credits: 3

This course includes the following topics: organization of data, measures of central tendency and dispersion, probability, the normal and binomial distributions, confidence intervals, hypothesis testing, analysis of variance, and correlation.

Prerequisite: MATH 017 (Grade of C or betterI) or MATH 023 (Grade of C or betterI) or appropriate algebra placement score

## PHYS 107 - Introductory Meteorology

## Credits: 4

This introductory course consists of five areas of concentration-atmospheric components; weather systems; upper air dynamics; satellite and radar interpretation of severe and weather elements; a review of historical weather events and their social and geographical effects; systems examined include hurricanes; severe thunderstorms and the mesosyclone; forms of precipitation; hourly observations; cloud identification; interpretation NCEP/NOAH data for forecast modeling data.

Corequisite: PHYS 107L

## Credits: 4

This course is designed to explore the factors influencing the environment and to increase awareness of environmental problems and solutions. The student will learn scientific methods and scientific knowledge of issues of a sustainable future. Topics include population, energy, natural resources, food, water, biodiversity, waste management, global climate change, and the social, legal, ethical and cultural impacts of human interaction with the environment. Many issues will be examined from varying points of view, requiring comparisons of different attitudes and considerations. Ethical implications of action, policy, and situations will be examined. Lab exercises and service learning will supplement the theory presented. Volunteer work or the equivalent will be required. Purchase of lab equipment required.

Corequisite: BIOS 108L

## Developmental Courses

Sussex has embraced a practice of directed self-choice whereby students are encouraged, through guided conversations with an advisor, to best determine their readiness for this course. Students should be aware that Developmental Studies exist and are available to help strengthen skills and encourage success. Pursuing testing and/or developmental courses is entirely up to the student. Further, testing, though providing a valuable reference point for reflection, does not create for the student an obligation to follow Accuplacer recommendations.

The exception to this is where students seek enrollment in higher-level math courses. Students wishing to enroll in the following math courses are required to take and adhere to placement guidance from, the Advanced Algebra and Functions test, as part of Accuplacer, through the college's testing center, for admission into any of the following courses: MATH 110, MATH 112, and MATH 113. Please note, courses in other disciplines may also require advanced mathematics placement. Students should check with their advisor.

## Communications/Journalism Option, A.A. - Liberal Arts

This associate degree program prepares students for transfer to a four-year college with a major in Journalism and/or Communications. The Journalism major can also serve as a basis for careers in newspapers, magazines, radio and television stations, websites, as well as public relations, advertising, and marketing departments and organizations. Students are given the opportunity to contribute to and work on SCCC publications such as the College Hill News.

## Upon completion of this program, graduates will be able to:

- Communicate with speed and accuracy.
- Understand how to interpret the source's information and quotes.
- Know how to use appropriate and trustworthy background information.
- Write according to style guide dictates.
- Compose with grammatical and mechanical precision.
- Distinguish among gossip, hearsay, innuendo, insinuation, and prediction.
- Adapt communicating styles to suit the particular demands of any medium.


## First Year

Fall Semester

## Credits: 3

This is a student-centered course covering numerous strategies to encourage students to become active and empowered learners. A primary goal of this course is to help students make the most out of their college experience. Students will obtain information about college life and culture and develop strategies and techniques to enhance success in their academic, personal and professional lives. The course is infused with opportunities to understand, practice and implement critical thinking. Students will also gain practical information to help prepare to transfer to a four-year university or enter the workforce directly. All topics will be presented in both theory and practice. This course is required of all degree-seeking candidates and must be taken within the initial 16 credits after entry.

## ENGL 101 - English Composition I

## Credits: 3

This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects which include personal, rhetorical, and expository models. Research skills are introduced.

- MATH 900 - Math Gen Ed Requirement Credits: 3
- GTEC 000 - Technology Gen Ed Requirement Credits: 3


## COMM 101 - Intro. to Mass Communications

## Credits: 3

This course examines the technical and socio-economic evolutions of print and electronic media with an emphasis on current ethical issues. Publishing, broadcasting and other emerging media are studied in terms of social and personal impact.

Total Semester Hours: 15

## Winter Session

## Spring Semester

## ENGL 102 - English Composition II

## Credits: 3

This course introduces students to short fiction, poetry, drama, and the novel. Written assignments are based on the readings. Writing skills learned in Composition I are further developed. Students will write a research paper which demonstrates understanding of literary criticism.

Prerequisite: ENGL 101 (Grade of C or better)

- GMSC 000 - Math/Science Gen Ed Requirement Credits: 3
- PHIL 000 - Philosophy Gen Ed Requirement Credits: 3
- HIST 001 - History Gen Ed Requirement Credits: 3


## PHOT 203 - Documentary/Photojournalism

## Credits: 3

This course explores the similarities of Documentary Photography and Photojournalism in two modules by combining emotional content with factual reportage. Balancing aesthetic content and form with information to produce meaningful documentary work, students learn to build coherent, intelligent, and emotive content relying on instinct and impulse to photograph events. Students learn to identify the consistencies of theme and structure in their work. Classes will include discussions on researching, shooting, editing and sequencing, critiques, and assignments. Students will be assigned approximately twelve documentary/photojournalism assignments. In a lab setting, students will gain proficiency in producing high quality photographic images for newspapers, magazines, and digital publications.

Total Semester Hours: 15

Summer Session

## Second Year

## Fall Semester

## ENGL 201 - Effective Speaking

## Credits: 3

This is a course in public speaking which stresses speech organization, effective delivery and critical listening skills. A strong emphasis is placed on student performance to help the student gain speech practice and develop self-confidence in a variety of speaking situations.

Prerequisite: ENGL 015 and ENGL 031

- GHMN 000 - Humanities Gen Ed Requirement Credits: 3


## POLS 101 - Intro. to Political Science

## Credits: 3

This course provides a general introduction to the discipline of political science. The course focuses on the major sub-disciplines of political science including practical theory, international relations, comparative politics, and identity politics. The course is designed to encourage active student participation in the political process.

## ARTA 104 - Art History II

## Credits: 3

This course surveys the history of art from the fourteenth through the twenty first centuries. The development of artistic concepts in the contemporary world, art and gender, and non-western art and architecture are central topics in this general survey course. Emphasis is place on viewing art forms in context of culture and gender and understanding the philosophical foundations and critical theories that support and influence

## ENGL 215 - Journalism I

Credits: 3
This course is an introduction to print journalism. Skills to be developed include news reporting, interviewing, copy editing, fact checking, proofreading, as well as writing editorials and feature stories.

Prerequisite: ENGL 101 (Grade of C or better) or Permission of Instructor.

Total Semester Hours: 15

## Winter Session

## Spring Semester

- LSCI 000 - Science Gen Ed Requirement Credits: 3
- GHMN 000 - Humanities Gen Ed Requirement Credits: 3
- HIST 001 - History Gen Ed Requirement Credits: 3
- GSOC 000 - Social Science Gen Ed Requirement Credits: 3


## ENGL 217 - Journalism II

Credits: 3
This course builds upon those reporting and writing skills acquired in Journalism I. Greater emphasis will be placed on gathering and evaluating news, and writing in-depth articles for various kinds of print media. In addition, the basics of newspaper design and editorial content will be covered through practical assignments related to the production of the college newspaper, The College Hill.

Prerequisite: ENGL 215 or COMM 219

Total Semester Hours: 15

Summer Session

## Total Program Hours: 60

Recommended courses listed below but student can also choose from the list of approved Philosophy General Education courses in the College catalog.

## PHIL 110 - Philosophy \& the Meaning of Life

## Credits: 3

This course is an introduction to philosophical analysis through an examination of the recurring issue of philosophy and the meaning of life. Topics of discussion will include: nature and methodology of philosophy, reality, existence of God, human freedom, and the value of existence.

## Technology \& Humanities General Education Courses

Choose from the list of approved courses in the College catalog.

## History General Education Courses

Recommended courses listed below but student can also choose from the list of approved History General Education\ courses in the College catalog. Must choose a level I \& II sequence.

## HIST 101 - Hist of Western Civilization I

## Credits: 3

This course emphasizes the political, social, economic, technological, and cultural forces that influenced the historical development of Western Civilization to 1648. Major topics include: Ancient Civilizations, Greece and Rome, Middle Ages, Renaissance, and Reformation.

## HIST 102 - Hist of Western Civilization II

## Credits: 3

This course is a survey of Western Civilization since 1648 with emphasis on the concepts and historical movements vital to understanding the modem world. Major topics include the development of law and government, the emergence of the major ideologies of the nineteenth and twentieth centuries, the industrial revolution and economic modernization, 20th century "isms" and the impact of social and cultural development in Western Europe.

## Social Science General Education Courses (Recommended)

Recommended courses listed below but student can also choose from the list of approved Social Science General Education courses in the College catalog.

## Credits: 3

This course provides a general introduction to the study of the American Political System. This course focuses on the U.S. Constitutional System, the institutions of government, and means of popular participation. The course is designed to encourage active student participation in the political process.

## Math/Science General Education Courses (Recommended)

Recommended courses listed below but student can also choose from the list of approved Math and Science General Education courses in the College catalog.

## MATH 104 - Contemporary Mathematics

## Credits: 3

This course surveys several basic concepts of mathematics designed to give non-scientific/non-technical majors an understanding of the breadth of mathematics in areas other than computational application. Topics include: logic, financial management, geometry, measurement, probability and statistics.

Prerequisite: MATH 017/MATH 023 (Grade of C or better) or appropriate algebra placement score

## MATH 108 - Statistics

## Credits: 3

This course includes the following topics: organization of data, measures of central tendency and dispersion, probability, the normal and binomial distributions, confidence intervals, hypothesis testing, analysis of variance, and correlation.

Prerequisite: MATH 017 (Grade of C or betterI) or MATH 023 (Grade of C or betterI) or appropriate algebra placement score

## PHYS 107 - Introductory Meteorology

## Credits: 4

This introductory course consists of five areas of concentration-atmospheric components; weather systems; upper air dynamics; satellite and radar interpretation of severe and weather elements; a review of historical weather events and their social and geographical effects; systems examined include hurricanes; severe thunderstorms and the mesosyclone; forms of precipitation; hourly observations; cloud identification; interpretation NCEP/NOAH data for forecast modeling data.

Corequisite: PHYS 107L

## BIOS 108 - Introduction to Environmental Sustainability

## Credits: 4

This course is designed to explore the factors influencing the environment and to increase awareness of environmental problems and solutions. The student will learn scientific methods and scientific knowledge of issues of a sustainable future. Topics include population, energy, natural resources, food, water, biodiversity, waste management, global climate change, and the social, legal, ethical and cultural impacts of human interaction with the environment. Many issues will be examined from varying points of view, requiring comparisons of different attitudes and
considerations. Ethical implications of action, policy, and situations will be examined. Lab exercises and service learning will supplement the theory presented. Volunteer work or the equivalent will be required. Purchase of lab equipment required.

Corequisite: BIOS 108L

## Developmental Courses

Sussex has embraced a practice of directed self-choice whereby students are encouraged, through guided conversations with an advisor, to best determine their readiness for this course. Students should be aware that Developmental Studies exist and are available to help strengthen skills and encourage success. Pursuing testing and/or developmental courses is entirely up to the student. Further, testing, though providing a valuable reference point for reflection, does not create for the student an obligation to follow Accuplacer recommendations.

The exception to this is where students seek enrollment in higher-level math courses. Students wishing to enroll in the following math courses are required to take and adhere to placement guidance from, the Advanced Algebra and Functions test, as part of Accuplacer, through the college's testing center, for admission into any of the following courses: MATH 110, MATH 112, and MATH 113. Please note, courses in other disciplines may also require advanced mathematics placement. Students should check with their advisor.

## Computer Information Systems, A.A.S.

This program is structured to provide fundamental knowledge of information technology and the skills necessary to succeed in today's business environment. This degree is not for transfer. The program is designed to prepare students for entry-level positions in business, industry, government, and not-for-profit organizations.

## Upon completion of this program, graduates will be able to:

- Demonstrate the ability to solve technical problems related to hardware and software.
- Demonstrate an understanding of operating systems.
- Develop effective communication skills within an organization.
- Demonstrate the ability to work both individually and as a team member.
- Exhibit professionalism and ethical behavior.
- Adapt to advancements in the area of technology.

First Year

## Fall Semester

## COLL 101 - Foundations for Success

## Credits: 3

This is a student-centered course covering numerous strategies to encourage students to become active and empowered learners. A primary goal of this course is to help students make the most out of their college experience. Students will obtain information about college life and culture and develop strategies and techniques to enhance success in their academic, personal and professional lives. The course is infused with opportunities to understand, practice and implement critical thinking. Students will also gain practical information to help prepare to transfer to a four-year university or enter the workforce directly. All topics will be presented in both theory and practice. This course is required of all degree-seeking candidates and must be taken within the initial 16 credits after entry.

## ENGL 101 - English Composition I

Credits: 3
This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects which include personal, rhetorical, and expository models. Research skills are introduced.

## COMS 113 - Intro. to Information Systems

## Credits: 3

This course is concerned with how organizations utilize information technology. The course deals with the operational activities involved in gathering, processing, storing, distributing and the use of information and its associated changing technologies. The case studies present students with managerial decision-making activities. Software platforms are used for the analysis. Lab Fee Required.

## BUSA 101 - Intro. to Business

## Credits: 3

This course is designed to provide the student with an overview of all critical business functions. Topics include forms of business ownership, legal aspects of business, human resource management, finance, marketing, accounting, management information systems, international business and contemporary business issues. Students taking this course are prepared for more advanced courses in business.

- GHMN 000 - Humanities Gen Ed Requirement Credits: 3


## Total Semester Hours: 15

Winter Session

Spring Semester

## ENGL 102 - English Composition II

## Credits: 3

This course introduces students to short fiction, poetry, drama, and the novel. Written assignments are based on the readings. Writing skills learned in Composition I are further developed. Students will write a research paper which demonstrates understanding of literary criticism.

Prerequisite: ENGL 101 (Grade of C or better)

## COMS 114 - Intro. to Computer Science I

Credits: 3

This course introduces the student to the fundamentals of computer science using an emphasis on programming methodology and problem solving. Topics include introductory concepts of computer systems, algorithm design, programming languages, software engineering, and data abstraction with related applications. A high level programming language is completely discussed and is used as a means to demonstrate concepts. Lab Fee Required.

## MATH 108 - Statistics

## Credits: 3

This course includes the following topics: organization of data, measures of central tendency and dispersion, probability, the normal and binomial distributions, confidence intervals, hypothesis testing, analysis of variance, and correlation.

Prerequisite: MATH 017 (Grade of C or betterI) or MATH 023 (Grade of C or betterI) or appropriate algebra placement score

## COMS 230-Networks and Telecommunications

## Credits: 3

This course is an introduction to data communications. Topics include various transmission systems, hardware, software and local area networks. Laboratory assignments will include the installation and maintenance of a local area network -Novell NetWare. . Lab Fee Required.

Prerequisite: COMS 113 or COMS 114 or COMS 120 or COMS 142

## COMS 155 - Web Site Development I

## Credits: 3

This course is an introduction to Web Site Development. Students will receive intensive hands-on experience in coding web pages, including linking, layout and design, forms, graphics, security concerns, and maintaining a Web Site. Lab Fee Required.

Prerequisite: COMS 110 or any course above COMS 110

Total Semester Hours: 15

Summer Session

Second Year

## Fall Semester

## ECON 101 - Macroeconomics

## Credits: 3

This course is an analysis of major economic concepts. Topics include the elements of national income; the economic roles of government and
labor; classical economics; monetary institutions and policies; the Keynesian model and modern fiscal policy; the macroeconomic aspects of world trade.

## COMS 115 - Intro. to Computer Science II

Credits: 3
This course is the continuation of COMS 114. Topics include intermediate to advanced programming techniques with logical data structures and the design and analysis of such structures. The course also covers techniques for program development, algorithm analysis, efficiency, along with abstraction, an introduction to data structures, searching, sorting, recursion and string manipulation. Lab Fee Required.

Prerequisite: COMS 114 or Equivalent

## COMS 218 - Database Management Systems

## Credits: 3

This course presents the concepts of database systems and data models. Topics include introductory to advanced design concepts, implementation, SQL, integrity, management and performance, web technologies, administration and security. Lab Fee Required.

Prerequisite: COMS 113 or COMS 114 or COMS 120 or COMS 142

- COMS 000 - Program Electives Credits: 6

Total Semester Hours: 15

Winter Session

## Spring Semester

## ECON 102 - Microeconomics

## Credits: 3

This course is an exploration of economic factors that affect the firm and individual consumers. Topics include the laws of supply and demand, elasticity, consumer demand and utility theory, production, pricing, competitive behavior, monopoly and imperfect competition, labor economics, international trade.

## COMS 210 - Systems Analysis \& Design

## Credits: 3

This course examines techniques of computer systems analysis and design with an emphasis on structuring a computer system based on the needs of the user. Final projects will provide students with practical use of contemporary system analysis and design tools. Lab Fee Required.

## Total Program Hours: 60

## Humanities General Education Courses (Recommended)

Recommended courses listed below but student can also choose from the list of approved General Education courses in the College catalog.

## HIST 101 - Hist of Western Civilization I

## Credits: 3

This course emphasizes the political, social, economic, technological, and cultural forces that influenced the historical development of Western Civilization to 1648. Major topics include: Ancient Civilizations, Greece and Rome, Middle Ages, Renaissance, and Reformation.

## Elective Courses (Recommended)

Recommended courses listed below but student can also choose from any COMS course.

## COMS 120-Computer Software Applications

## Credits: 3

This course is a comprehensive hands-on study of Office Automation which provides the student with extended knowledge of Windows, word processing, electronic spreadsheets, and data base management. Lab Fee Required.

Prerequisite: COMS 110 or Higher

## COMS 221-Operating Systems

## Credits: 3

This course is an introduction to the concepts and facilities of operating systems and control language software. Topics include multiprogramming, timesharing, virtual storage and the management of programs and data within the system. Different types of operating systems will be discussed. Lab Fee Required.

Credits: 3
This course is an introduction to the principles of Computer-Aided Design (CAD) and the operation of CAD Systems. Students will use data entry devices to prepare working diagrams and schematic designs on industrial level workstations with Auto CAD. Lab Fee Required.

Prerequisite: Prior exposure to microcomputers and/or drafting

## COMS 239 - Fund. of Computer Architecture

## Credits: 3

This course is an introduction to computer organization and architecture. Topics covered are the overview of the early Von Neumann model through modern architectural models. Topics also presented include data representation, digital logic, circuit diagrams, assembly language organization, processors, memory addressing, memory storage, input/output processing, and interfaces. Lab Fee Required.

Corequisite: COMS 114 or COMS 142

## COMS 240 - Computer Information Systems Internship

## Credits: 3

This is a college-supervised program in a data processing environment. The course is designed to expose students to the methods and procedures utilized by data processing professionals.

Prerequisite: COMS 120, COMS 206, COMS 214; Permission of the Program Coordinator

## Developmental Courses

Sussex has embraced a practice of directed self-choice whereby students are encouraged, through guided conversations with an advisor, to best determine their readiness for this course. Students should be aware that Developmental Studies exist and are available to help strengthen skills and encourage success. Pursuing testing and/or developmental courses is entirely up to the student. Further, testing, though providing a valuable reference point for reflection, does not create for the student an obligation to follow Accuplacer recommendations.

The exception to this is where students seek enrollment in higher-level math courses. Students wishing to enroll in the following math courses are required to take and adhere to placement guidance from, the Advanced Algebra and Functions test, as part of Accuplacer, through the college's testing center, for admission into any of the following courses: MATH 110, MATH 112, and MATH 113. Please note, courses in other disciplines may also require advanced mathematics placement. Students should check with their advisor.

## Computer Information Systems, Certificate

This program is structured to provide fundamental knowledge of information technology and the skills necessary to succeed in today's business environment. This degree is not for transfer. The program is designed to prepare students for entry-level positions in business, industry, government and not-for-profit organizations.

## Upon completion of this program, graduates will be able to:

- Demonstrate the ability to solve technical problems related to hardware and software.
- Demonstrate an understanding of operating systems.
- Develop effective communication skills within an organization.
- Demonstrate the ability to work both individually and as a team member.
- Exhibit professionalism and ethical behavior.
- Adapt to advancements in the area technology.


## First Year

## Fall Semester

## ENGL 101 - English Composition I

## Credits: 3

This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects which include personal, rhetorical, and expository models. Research skills are introduced.

## BUSA 101 - Intro. to Business

## Credits: 3

This course is designed to provide the student with an overview of all critical business functions. Topics include forms of business ownership, legal aspects of business, human resource management, finance, marketing, accounting, management information systems, international business and contemporary business issues. Students taking this course are prepared for more advanced courses in business.

## COMS 113 - Intro. to Information Systems

## Credits: 3

This course is concerned with how organizations utilize information technology. The course deals with the operational activities involved in gathering, processing, storing, distributing and the use of information and its associated changing technologies. The case studies present students with managerial decision-making activities. Software platforms are used for the analysis. Lab Fee Required.

## COMS 114 - Intro. to Computer Science I

Credits: 3
This course introduces the student to the fundamentals of computer science using an emphasis on programming methodology and problem solving. Topics include introductory concepts of computer systems, algorithm design, programming languages, software engineering, and data abstraction with related applications. A high level programming language is completely discussed and is used as a means to demonstrate concepts. Lab Fee Required.

Credits: 3
This course is an analysis of major economic concepts. Topics include the elements of national income; the economic roles of government and labor; classical economics; monetary institutions and policies; the Keynesian model and modern fiscal policy; the macroeconomic aspects of world trade.

Total Semester Hours: 15

## Winter Session

## Spring Semester

## ACCT 101 - Accounting Princ. I Financial

## Credits: 3

This course is a study of accounting principles and procedures. The accounting cycle is covered for a service industry. Additional topics include accounting for merchandising operations; cash and short-term investments; inventory; the acquisition, allocation, and disposal of tangible and intangible assets; and current liabilities.

- CERT 000 - Certificate Electives Credits: 9


## MATH 106 - Mathematical Concepts

## Credits: 3

This course surveys several basic concepts of mathematics designed to give non-scientific/non-technical majors an understanding of the breadth of mathematics in areas other than computational application. Topics include: problem solving, the real number system, linear and quadratic equations, exponents and logarithms, graphs and functions, and graph theory.

Prerequisite: Proficiency on the College Placement Examination or Grade of C or Better in MATH 017/MATH 023
OR

## MATH 110 - Pre-Calculus I

## Credits: 3

This course is designed to strengthen algebraic skills and give students the math confidence to proceed with calculus and other higher forms of mathematics. Topics include the study of functions, graphing techniques, polynomial, rational, exponential and logarithmic functions and systems of equations and inequalities.

Prerequisite: MATH 040 (Grade of C or betterI) or appropriate pre-calculus placement score

Total Semester Hours: 15

## Total Program Hours: 30

*Recommended for students planning to enter the degree program.

## Certificate Electives Recommended

## COMS 115 - Intro. to Computer Science II

## Credits: 3

This course is the continuation of COMS 114. Topics include intermediate to advanced programming techniques with logical data structures and the design and analysis of such structures. The course also covers techniques for program development, algorithm analysis, efficiency, along with abstraction, an introduction to data structures, searching, sorting, recursion and string manipulation. Lab Fee Required.

Prerequisite: COMS 114 or Equivalent

## COMS 120 - Computer Software Applications

## Credits: 3

This course is a comprehensive hands-on study of Office Automation which provides the student with extended knowledge of Windows, word processing, electronic spreadsheets, and data base management. Lab Fee Required.

Prerequisite: COMS 110 or Higher

## COMS 210 - Systems Analysis \& Design

## Credits: 3

This course examines techniques of computer systems analysis and design with an emphasis on structuring a computer system based on the needs of the user. Final projects will provide students with practical use of contemporary system analysis and design tools. Lab Fee Required.

Prerequisite: COMS 113 or COMS 114 or COMS 120 or COMS 142

## COMS 218 - Database Management Systems

Credits: 3
This course presents the concepts of database systems and data models. Topics include introductory to advanced design concepts, implementation, SQL, integrity, management and performance, web technologies, administration and security. Lab Fee Required.

Prerequisite: COMS 113 or COMS 114 or COMS 120 or COMS 142

## Credits: 3

This course is an introduction to the concepts and facilities of operating systems and control language software. Topics include multiprogramming, timesharing, virtual storage and the management of programs and data within the system. Different types of operating systems will be discussed. Lab Fee Required.

Prerequisite: COMS 114 or COMS 142

## COMS 230-Networks and Telecommunications

## Credits: 3

This course is an introduction to data communications. Topics include various transmission systems, hardware, software and local area networks. Laboratory assignments will include the installation and maintenance of a local area network -Novell NetWare. . Lab Fee Required.

Prerequisite: COMS 113 or COMS 114 or COMS 120 or COMS 142

## COMS 239 - Fund. of Computer Architecture

## Credits: 3

This course is an introduction to computer organization and architecture. Topics covered are the overview of the early Von Neumann model through modern architectural models. Topics also presented include data representation, digital logic, circuit diagrams, assembly language organization, processors, memory addressing, memory storage, input/output processing, and interfaces. Lab Fee Required.

Corequisite: COMS 114 or COMS 142

## COMS 240 - Computer Information Systems Internship

Credits: 3
This is a college-supervised program in a data processing environment. The course is designed to expose students to the methods and procedures utilized by data processing professionals.

Prerequisite: COMS 120, COMS 206, COMS 214; Permission of the Program Coordinator

## Developmental Courses

Sussex has embraced a practice of directed self-choice whereby students are encouraged, through guided conversations with an advisor, to best determine their readiness for this course. Students should be aware that Developmental Studies exist and are available to help strengthen skills and encourage success. Pursuing testing and/or developmental courses is entirely up to the student. Further, testing, though providing a valuable reference point for reflection, does not create for the student an obligation to follow Accuplacer recommendations.

The exception to this is where students seek enrollment in higher-level math courses. Students wishing to enroll in the following math courses are required to take and adhere to placement guidance from, the Advanced Algebra and Functions test, as part of Accuplacer, through the college's testing center, for admission into any of the following courses: MATH 110, MATH 112, and MATH 113. Please note, courses in other disciplines may also require advanced mathematics placement. Students should check with their advisor.

## Computer Science Option, A.S. - Science/Mathematics

# Upon completion of this program, graduates will be able to: 

- Demonstrate the ability to solve problems, conduct research, and think critically.
- Exhibit an understanding of computer architecture.
- Utilize the proper data structures and algorithms with sound programming techniques.
- Demonstrate an understanding of the mathematical concepts utilized in algorithms.
- Develop effective communication skills within an organization.
- Demonstrate the ability to work both individually and as a team member.
- Exhibit professionalism and ethical behavior.
- Adapt to advancements in the area of information technology.


## First Year

Fall Semester

## COLL 101 - Foundations for Success

## Credits: 3

This is a student-centered course covering numerous strategies to encourage students to become active and empowered learners. A primary goal of this course is to help students make the most out of their college experience. Students will obtain information about college life and culture and develop strategies and techniques to enhance success in their academic, personal and professional lives. The course is infused with opportunities to understand, practice and implement critical thinking. Students will also gain practical information to help prepare to transfer to a four-year university or enter the workforce directly. All topics will be presented in both theory and practice. This course is required of all degree-seeking candidates and must be taken within the initial 16 credits after entry.

## ENGL 101 - English Composition I

## Credits: 3

This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects which include personal, rhetorical, and expository models. Research skills are introduced.

## COMS 114 - Intro. to Computer Science I

## Credits: 3

This course introduces the student to the fundamentals of computer science using an emphasis on programming methodology and problem solving. Topics include introductory concepts of computer systems, algorithm design, programming languages, software engineering, and data abstraction with related applications. A high level programming language is completely discussed and is used as a means to demonstrate concepts. Lab Fee Required.

Winter Session

Spring Semester

## ENGL 102 - English Composition II

## Credits: 3

This course introduces students to short fiction, poetry, drama, and the novel. Written assignments are based on the readings. Writing skills learned in Composition I are further developed. Students will write a research paper which demonstrates understanding of literary criticism.

Prerequisite: ENGL 101 (Grade of C or better)

## MATH 113 - Calculus I

Credits: 4
This course includes a review of algebraic and transcendental functions and their graphs; study of the concepts of limits and continuity, the derivative and its applications; indeterminate forms; introduction to integration and its applications.

Prerequisite: MATH 110 and MATH 112 (Grades of C or better) or appropriate pre-calculus placement score

## COMS 115 - Intro. to Computer Science II

## Credits: 3

This course is the continuation of COMS 114. Topics include intermediate to advanced programming techniques with logical data structures and the design and analysis of such structures. The course also covers techniques for program development, algorithm analysis, efficiency, along with abstraction, an introduction to data structures, searching, sorting, recursion and string manipulation. Lab Fee Required.

Prerequisite: COMS 114 or Equivalent

## COMS 239 - Fund. of Computer Architecture

## Credits: 3

This course is an introduction to computer organization and architecture. Topics covered are the overview of the early Von Neumann model through modern architectural models. Topics also presented include data representation, digital logic, circuit diagrams, assembly language organization, processors, memory addressing, memory storage, input/output processing, and interfaces. Lab Fee Required.

Corequisite: COMS 114 or COMS 142

- GSOC 000 - Social Science Gen Ed Requirement Credits: 3

Total Semester Hours: 16

## Second Year

## Fall Semester

## MATH 114 - Calculus II

## Credits: 4

This course is the second semester of a three semester sequence of introductory calculus. Topics include integration techniques, applications of integration, delete in.... forms infinite series, parametric equations, and polar coordinates.

Prerequisite: MATH 113 (Grade of C or better)

- LSCI 000 - Science Gen Ed Requirement Credits: 4


## COMS 221-Operating Systems

## Credits: 3

This course is an introduction to the concepts and facilities of operating systems and control language software. Topics include multiprogramming, timesharing, virtual storage and the management of programs and data within the system. Different types of operating systems will be discussed. Lab Fee Required.

Prerequisite: COMS 114 or COMS 142

## COMS 218 - Database Management Systems

## Credits: 3

This course presents the concepts of database systems and data models. Topics include introductory to advanced design concepts, implementation, SQL, integrity, management and performance, web technologies, administration and security. Lab Fee Required.

Prerequisite: COMS 113 or COMS 114 or COMS 120 or COMS 142

Total Semester Hours: 14

Winter Session

Spring Semester

## Credits: 4

This course provides an introduction to discrete mathematics and its applications. Topics include elementary set theory, logic, combinatorics, relations, graphics and trees, functions and number theory.

Prerequisite: MATH 113 (Grade of C or better)
OR

## MATH 213 - Calculus III

## Credits: 4

This course is a continuation of Calculus II. Topics include analytic geometry in three dimensions, functions of several variables, partial derivatives, multiple integrals, vectors, and introduction to vector calculus.

Prerequisite: MATH 114 (Grade of C or better)

- LSCI 000 - Science Gen Ed Requirement Credits: 4


## COLL 208 - Capstone for Computer Science \& Information Systems

## Credits: 1

This course is intended for all Computer Science and Information Systems degree seeking students who have completed at least 45 credits. The course is designed to assist students in the transition from the community college to a four-year educational institution or to placement in the work force. Students will explore future academic and career-related paths. Students will also engage in analysis, writings, and problem solving work that shall require them to think critically and reflect on the knowledge gained during their community college experience.

Prerequisite: Must have completed 45 credits

## COMS 210 - Systems Analysis \& Design

## Credits: 3

This course examines techniques of computer systems analysis and design with an emphasis on structuring a computer system based on the needs of the user. Final projects will provide students with practical use of contemporary system analysis and design tools. Lab Fee Required.

Prerequisite: COMS 113 or COMS 114 or COMS 120 or COMS 142

## COMS 223 - Data Structures

## Credits: 3

This course focuses on intermediate to advanced programming topics dealing with logical structures of data, together with the design and analysis of related algorithms. Topics include arrays, lists, linked lists, trees, stacks, graphs, and memory management. Algorithms for searching, sorting and information retrieval are also explored. Students demonstrate proficiency by completing laboratory assignments. Lab Fee Required.

Prerequisite: COMS 115 or COMS 143 Recommended

Total Semester Hours: 15

## Total Program Hours: 60

## Humanities General Education Courses (Recommended)

Recommended courses listed below but student can also choose from the list of approved General Education courses in the College catalog.

## HIST 101 - Hist of Western Civilization I

## Credits: 3

This course emphasizes the political, social, economic, technological, and cultural forces that influenced the historical development of Western Civilization to 1648. Major topics include: Ancient Civilizations, Greece and Rome, Middle Ages, Renaissance, and Reformation.

## Social Science General Education Courses (Recommended)

Recommended courses listed below but student can also choose from the list of approved General Education courses in the College catalog.

## ECON 101 - Macroeconomics

## Credits: 3

This course is an analysis of major economic concepts. Topics include the elements of national income; the economic roles of government and labor; classical economics; monetary institutions and policies; the Keynesian model and modern fiscal policy; the macroeconomic aspects of world trade.

## ECON 102 - Microeconomics

## Credits: 3

This course is an exploration of economic factors that affect the firm and individual consumers. Topics include the laws of supply and demand, elasticity, consumer demand and utility theory, production, pricing, competitive behavior, monopoly and imperfect competition, labor economics, international trade.

## Science General Education Courses (Recommended)

## PHYS 110 - Physics I

Credits: 4
This course is designed to introduce students to problem-solving techniques in physics. Topics include forces, energy, mechanics, momentum, heat, and kinetic theory. Includes applications to the life sciences and everyday life. Lab Fee Required.

Corequisite: PHYS 110L
Prerequisite: MATH 112 (Grade of C or better)

## PHYS 112 - Physics II

## Credits: 4

This course is a continuation of Physics I. Emphasis is placed on showing the connections found in electromagnetism, optics, and modern physics. Includes applications to the life sciences and everyday life. Lab Fee Required.

Corequisite: PHYS 112L
Prerequisite: PHYS 110 (Grade of C or better)

## PHYS 120 - Physics I with Calculus

## Credits: 4

This course will introduce the student to problem solving and laboratory techniques in calculus based physics. Topics include vectors, forces, mechanics, kinematics, fluids, thermodynamics, and waves. Lab Fee Required.

Corequisite: PHYS 120L
Prerequisite: MATH 113, MATH 114 (Grade of C or better) (MATH 114 may be taken concurrently)

## PHYS 121 - Physics II with Calculus

## Credits: 4

This course is a continuation of Physics I with Calculus. Topics include electromagnetism, circuits, electromagnetic waves, optics, and relativity.
Lab Fee Required.
Corequisite: MATH 213 (Grade of C), PHYS 121L
Prerequisite: PHYS 120 (Grade of C)

## Developmental Courses

Sussex has embraced a practice of directed self-choice whereby students are encouraged, through guided conversations with an advisor, to best determine their readiness for this course. Students should be aware that Developmental Studies exist and are available to help strengthen skills and encourage success. Pursuing testing and/or developmental courses is entirely up to the student. Further, testing, though providing a valuable reference point for reflection, does not create for the student an obligation to follow Accuplacer recommendations.

The exception to this is where students seek enrollment in higher-level math courses. Students wishing to enroll in the following math courses are required to take and adhere to placement guidance from, the Advanced Algebra and Functions test, as part of Accuplacer, through the college's testing center, for admission into any of the following courses: MATH 110, MATH 112, and MATH 113. Please note, courses in other disciplines may also require advanced mathematics placement. Students should check with their advisor.

## Computer-Aided Design/Drawing Software, C.O.A.

Designed for individuals seeking hands-on experience with the digital tools used by mechanical engineers, drafters, and design-related professionals. 2D and 3D platforms used to automate design and expand visual concepts are covered as is collaborative work on CAD projects and software used to produce computer-aided drawings. Students will be prepared for entry-level positions as CAD operators, designers or 3D artists.

## First Year

## Fall Semester

## COMS 225 - Computer Aided Design

## Credits: 3

This course is an introduction to the principles of Computer-Aided Design (CAD) and the operation of CAD Systems. Students will use data entry devices to prepare working diagrams and schematic designs on industrial level workstations with Auto CAD. Lab Fee Required.

Prerequisite: Prior exposure to microcomputers and/or drafting

Total Semester Hours 3

## Winter Session

## Spring Semester

## COMS 226-Computer Aided Design II

## Credits: 3

This course is a follow-up for COMS 225 Computer Aided Design (CAD). It includes intermediate to advanced topics utilizing AutoCAD. Students will extend their knowledge of 2D and 3D CAD design, drafting, modeling, architectural drawing, and engineering. Projects are integrated into the class lectures. Lab Fee Required.

## GRAD 158-3D Modeling

## Credits: 3

This course is designed to introduce the student to the basic concepts of modeling, texturing, and lighting and their application to 3D projects. Students will learn how artists build and sculpt 3D models, give them detailed textures, and light them in dozens of different ways using computer software. Topics include user interface, polygonal modeling, NURBS modeling, 3D cameras, lighting execution, textures and mapping. Lab Fee Required.

## Computerized Accounting, Certificate

This program provides students with knowledge and practical experience in accounting principles and the management of these principles through software package options. Students will learn financial and managerial accounting methods through the automated General Ledger function.

## Upon completion of this program, graduates will be able to:

- Apply for entry-level employment in bookkeeping and accounting clerk positions.
- Analyze, journalize, and post transactions both manually and using computerized accounting software.
- Maintain a computerized accounting system.
- Create spreadsheets using electronic spreadsheet programs to be used in the planning and developing of budgets, cash flows, financial statements, and other business records.
- Maintain payroll records and comply with federal and state reporting requirements.
- Prepare the following financial statements: Income
- Statement, State of Retained Earnings, Balance Sheet, and Statement of Cash Flow.


## First Year

Summer Session

## ACCT 101 - Accounting Princ. I Financial

## Credits: 3

This course is a study of accounting principles and procedures. The accounting cycle is covered for a service industry. Additional topics include accounting for merchandising operations; cash and short-term investments; inventory; the acquisition, allocation, and disposal of tangible and intangible assets; and current liabilities.

Total Semester Hours: 3

Fall Semester

## ENGL 101 - English Composition I

## Credits: 3

This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects which include personal, rhetorical, and expository models. Research skills are introduced.

## COMS 110 - Computer Concepts \& Applications

## Credits: 3

This course is designed to provide the student with a level of knowledge necessary to function in today's technological society. Topics include computer and network terminology, hardware, software, and processing concepts. A large portion of the class time is dedicated to exercises performed using integrated software packages. Lab Fee Required.

Corequisite: COMS 110S

## ACCT 102 - Accounting Princ. II Managerial

## Credits: 3

This course addresses managerial accounting concepts which are necessary for decision-making, performance evaluation, planning, and control. Emphasis is placed on using accounting data as a tool to enhance the information's usefulness to the firm's management. The course deals with corporate equity, the management cycle, product costing methods and standards, responsibility accounting and segment analysis, budgeting, costbehaviors, activity-based systems, statement analysis, and preparation of the statement of cash flow. Quantitative methods necessary for managerial accounting will be emphasized.

Prerequisite: ACCT 101 (Grade of C or better)

## ACCT 107-Computerized Accounting

## Credits: 3

This course is designed to provide students with a working knowledge of accounting software packages used in industry. The software packages will be representative of the various types on the market. Students will use the following accounting modules: general ledger, accounts receivable, accounts payable, fixed assets, payroll, and cash receipts/payments. Lab Fee Required.

Prerequisite: ACCT 101 (Grade of C or better)

## ACCT 205 - Payroll Accounting

## Credits: 3

This course is designed to prepare students to enter into the payroll accounting profession. Students learn the various federal and state requirements that govern payroll record keeping and reporting. The student will study ways to implement the requirements in both a manual and an automated payroll environment.

Prerequisite: ACCT 101 (Grade of C or better)

Total Semester Hours: 15

## Winter Session

- MATH 900 - Math Gen Ed Requirement Credits: 3
- GSOC 000 - Social Science Gen Ed Requirement Credits: 3


## BUSA 101 - Intro. to Business

Credits: 3
This course is designed to provide the student with an overview of all critical business functions. Topics include forms of business ownership, legal aspects of business, human resource management, finance, marketing, accounting, management information systems, international business and contemporary business issues. Students taking this course are prepared for more advanced courses in business.

## BUSA 190 - Business Applications using Electronic Spreadsheets

## Credits: 3

This course presents a practical approach for implementing spreadsheet software in the planning and developing of budgets, cash flows, financial statements, and other business records. Emphasis is placed on the financial functions available in the programs and the development of macros. Basic data base management is also incorporated. Lab Fee Required.

Prerequisite: ACCT 101

Total Semester Hours: 12

Total Program Hours: 30

Social Science General Education Courses:

Choose from the list of approved General Education courses in the College catalog.

## Math General Education Courses (Recommended)

## MATH 106 - Mathematical Concepts

## Credits: 3

This course surveys several basic concepts of mathematics designed to give non-scientific/non-technical majors an understanding of the breadth of mathematics in areas other than computational application. Topics include: problem solving, the real number system, linear and quadratic equations, exponents and logarithms, graphs and functions, and graph theory.

Prerequisite: Proficiency on the College Placement Examination or Grade of C or Better in MATH 017/MATH 023

Credits: 3
This course is designed to strengthen algebraic skills and give students the math confidence to proceed with calculus and other higher forms of mathematics. Topics include the study of functions, graphing techniques, polynomial, rational, exponential and logarithmic functions and systems of equations and inequalities.

Prerequisite: MATH 040 (Grade of C or betterI) or appropriate pre-calculus placement score

## Developmental Courses

Sussex has embraced a practice of directed self-choice whereby students are encouraged, through guided conversations with an advisor, to best determine their readiness for this course. Students should be aware that Developmental Studies exist and are available to help strengthen skills and encourage success. Pursuing testing and/or developmental courses is entirely up to the student. Further, testing, though providing a valuable reference point for reflection, does not create for the student an obligation to follow Accuplacer recommendations.

The exception to this is where students seek enrollment in higher-level math courses. Students wishing to enroll in the following math courses are required to take and adhere to placement guidance from, the Advanced Algebra and Functions test, as part of Accuplacer, through the college's testing center, for admission into any of the following courses: MATH 110, MATH 112, and MATH 113. Please note, courses in other disciplines may also require advanced mathematics placement. Students should check with their advisor.

## Cosmetology Option, A.A.S. - Technical Studies

The Cosmetology program prepares students to become the creative, well-trained professionals demanded by today's beauty industry. This exciting program offers training in all aspects of professional cosmetology, from skin, nails, hair design, and sculpting to advanced coloring. Complete barbering skills with up-to-date cuts, including fades and straight blade shape-ups, are part of the curriculum. Students will explore salon operations, marketing and retail, hygiene and communication skills in this lecture and "hands-on" training program. After the first two semesters, students can qualify for a New Jersey State Student Permit, which will allow students to start as an entry-level stylist. Committed students can qualify to take the New Jersey Board licensing examinations in Cosmetology upon completion of the program. Our cutting-edge curriculum and learning community will keep students engaged while building the technical skills and expertise needed to be successful.

## Upon completion of this program, graduates will be able to:

- Perform hair care services for all types of hair including hair analysis, cutting, styling, coloring and lightening, permanent waving, and chemical relaxing.
- Perform barbering services with up-to-date cuts, including fades and straight blade shape-ups.
- Perform nail services including manicuring and pedicuring.
- Perform basic skincare services including skin analysis, facials, makeup application, and superfluous hair removal.
- Exhibit knowledge of decontamination control, public hygiene, and special sanitation procedures used for the protection of the client and the operator.
- Demonstrate customer service skills, self-growth, and personal development.
- Perform salon business such as front desk operations, dispensary inventory and loss prevention, resume building and interviewing skills, self-marketing and basic knowledge of starting a salon business.
- Demonstrate critical thinking and communication skills.
- Possess the necessary skills to pass the New Jersey State licensure written and practical exams required for a professional license to work in the Cosmetology industry.


## First Year

Fall Semester

## ENGL 101 - English Composition I

Credits: 3
This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects which include personal, rhetorical, and expository models. Research skills are introduced.

## COSM 101 - Principles \& Procedures I

## Credits: 7

This course is an introduction and overview to cosmetology principles, procedures, and hands on skills will be covered. Topics include hair styling implements, equipment, bacteriology, scalp abnormities and diseases, corrective treatments, sanitation, sterilization, wigs and hair pieces, draping, basic sectioning, shampoos, rinses, finger waves, pin curls, braids, rollers, combing, brushing, blow drying, school safety, cosmetology safety, math skills, histology of hair, and the composition, function, requirements, and procedures of the State Board of Cosmetology and Hairstyling Exam. Emphasis on safety and sanitation measures will be implemented in all instruction. Students may be required to complete additional studio/lab time to meet the number of class hours required by the state. Lab Fee Required.

## COSM 105 - Principles \& Procedures II

## Credits: 7

This course is an introduction to basic services of cosmetology and a comprehensive overview of the history of coloring will be explored. Topics include the principles and procedures, using creative expression and artistry, for hair cutting, coloring, lightening, scalp and hair analysis, and permanent waving. Emphasis on safety and sanitation measures will be implemented in all instruction. Students may be required to complete additional studio/lab time to meet the number of class hours required by the state. Lab Fee Required.

Prerequisite: COSM 101

Total Semester Hours: 17

Winter Session

## Spring Semester

## MATH 105 - Technical Mathematics

Credits: 3
This course is intended for students who have introductory algebra proficiency, and who need to apply mathematical concepts in a technical program. The purpose of the course is to prepare AAS students for the mathematical aspects of their work in the technical trades.

Prerequisite: Proficiency on the College Placement Examination or grade of C or better in MATH 017/MATH 023.

## Credits: 7

This course is instruction in understanding the structure, diseases and disorders of skin, face, head, neck, bones, nerves, hands and nails will be explored. Topics include histology of skin, history of barber shaving, skin care, facial massage, trimming of facial hair (including beard and mustache, eyebrow, ear and nose hair trim), straight razor shave procedure, paraffin wax treatment, basic cosmetics, manicures, pedicures, artificial nails, nail diseases/disorders, nail repair, and any corrective treatments. Emphasis on safety and sanitation measures will be implemented in all instruction. Students may be required to complete additional studio/lab time to meet the number of class hours required by the state. Lab Fee Required.

Prerequisite: COSM 101

## COSM 110 - Science and Ethics for Cosmetology

## Credits: 7

This course is instruction in understanding the science as it relates to cosmetology, and a study into ethical practices for the licensed professional will be incorporated. Topics include physiology, osteology, myology, neurology, and chemistry as they are related to the cell/tissue structure, circulatory, endocrine, excretory, digestive, respiratory, reproductive and body systems affected by cosmetology. Additionally business practices, laws regulations, and ethics practices will be explored. Emphasis on safety and sanitation measures will be implemented in all instruction. Students may be required to complete additional studio/lab time to meet the number of class hours required by the state. Lab Fee Required.

Prerequisite: COSM 105 and COSM 108

Total Semester Hours: 17

Summer Session

Second Year

## Fall Semester

## ENGL 125 - Tech. Writing \& Communication I

## Credits: 3

This course focuses on expository writing for business, industrial, and scientific fields, emphasizing the principles for organizing, writing, and revising clear, readable documents and reports. Students will practice written, oral, reading, and reasoning skills. Research skills will be advanced.

## COSM 115 - Practical Application I

## Credits: 4

In this course students will independently and safely practice cosmetology methods, while also continuing to accrue the necessary hours to sit for the NJ State Board Examination. Topics include the art of soft selling products and services, and providing services for clients in a salon atmosphere. Emphasis on safety and sanitation measures will be implemented in all instruction. Students may be required to complete additional studio/lab time to meet the number of class hours required by the state. Lab Fee Required.

- GTEC 000 - Technology Gen Ed Requirement Credits: 3
- TSC 000 - Technical Studies Requirement Credits: 3

Total Semester Hours: 13

## Winter Session

## Spring Semester

## COSM 201 - Practical Application II

## Credits: 4

In this course students will independently and safely practice cosmetology methods, while also continuing to accrue the necessary hours to sit for the NJ State Board Examination. Emphasis on safety and sanitation measures will be implemented in all instruction. Students may be required to complete additional studio/lab time to meet the number of class hours required by the state. Additionally students will prepare for the New Jersey State Board Exam. Lab Fee Required.

Prerequisite: COSM 110 and COSM 115

- GHMN 000 - Humanities Credits: 3

OR

- GSOC 000 - Social Science Gen Ed Requirement Credits: 3
- GNED 000 - General Education Requirement Credits: 6

Total Semester Hours: 13

Summer Session

Total Program Hours: 60

## Humanities/Social Science General Education Requirements

Choose from the list of approved courses in the College catalog

## BUSA 120 - Small Business Management

Credits: 3
This course is designed to introduce the student to the principles and practices of successful small business operations. Topics include new product planning, product management, sales forecasting, consumer behavior, promotion and pricing, finance, staffing, international markets and contemporary business issues. Students acquire an overview of essential small business management skills.

## Technology General Education Courses (Recommended)

Recommended courses listed below but student can also choose from the list of approved General Education courses in the College catalog.

## COMS 110 - Computer Concepts \& Applications

## Credits: 3

This course is designed to provide the student with a level of knowledge necessary to function in today's technological society. Topics include computer and network terminology, hardware, software, and processing concepts. A large portion of the class time is dedicated to exercises performed using integrated software packages. Lab Fee Required.

Corequisite: COMS 110S

## Developmental Courses

Sussex has embraced a practice of directed self-choice whereby students are encouraged, through guided conversations with an advisor, to best determine their readiness for this course. Students should be aware that Developmental Studies exist and are available to help strengthen skills and encourage success. Pursuing testing and/or developmental courses is entirely up to the student. Further, testing, though providing a valuable reference point for reflection, does not create for the student an obligation to follow Accuplacer recommendations.

The exception to this is where students seek enrollment in higher-level math courses. Students wishing to enroll in the following math courses are required to take and adhere to placement guidance from, the Advanced Algebra and Functions test, as part of Accuplacer, through the college's testing center, for admission into any of the following courses: MATH 110, MATH 112, and MATH 113. Please note, courses in other disciplines may also require advanced mathematics placement. Students should check with their advisor.

## Criminal Justice, A.S.

This program is designed primarily for students who plan to attend four-year baccalaureate programs, but approximately one-half of the graduates of this program have successfully found full-time employment in criminal justice-related field upon completion of the two-year degree. Graduates of two and four-year degree programs are employed in a variety of professional positions by federal, state, county, and municipal agencies as well as private security and loss prevention.

## Upon completion of this program, graduates will be able to:

- Students will learn the major concepts, case law, theoretical perspectives, empirical findings and basic structures involved with law enforcement, the criminal court system, and corrections, including the causes of crime and delinquency.
- Students will understand and be able to use basic research methods in criminal justice and criminology including design, data analysis, and interpretation.
- Students will obtain realistic ideas and field experiences related to their pursuit of careers and advanced study in the field of criminal justice.
- Students will demonstrate research and information competency with traditional computer-based library systems, governmental resources, and media outlets to facilitate the study of criminal justice and criminology.
- Students will use and demonstrate critical thinking, skeptical inquiry, and the scientific approach to problem-solving.
- Students will learn to recognize, understand, and respect the complexity of sociocultural and international diversity to better prepare them for diverse people and ideas within criminal justice.
- Students will demonstrate effective oral and written communication skills within a liberal arts foundation to better prepare them for any career in criminal justice.


## First Year

## Fall Semester

## COLL 101 - Foundations for Success

## Credits: 3

This is a student-centered course covering numerous strategies to encourage students to become active and empowered learners. A primary goal of this course is to help students make the most out of their college experience. Students will obtain information about college life and culture and develop strategies and techniques to enhance success in their academic, personal and professional lives. The course is infused with opportunities to understand, practice and implement critical thinking. Students will also gain practical information to help prepare to transfer to a four-year university or enter the workforce directly. All topics will be presented in both theory and practice. This course is required of all degree-seeking candidates and must be taken within the initial 16 credits after entry.

## ENGL 101 - English Composition I

## Credits: 3

This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects which include personal, rhetorical, and expository models. Research skills are introduced.

## MATH 104 - Contemporary Mathematics

Credits: 3
This course surveys several basic concepts of mathematics designed to give non-scientific/non-technical majors an understanding of the breadth of mathematics in areas other than computational application. Topics include: logic, financial management, geometry, measurement, probability and statistics.

Prerequisite: MATH 017/MATH 023 (Grade of C or better) or appropriate algebra placement score

Credits: 3
This course is designed to provide the student with a level of knowledge necessary to function in today's technological society. Topics include computer and network terminology, hardware, software, and processing concepts. A large portion of the class time is dedicated to exercises performed using integrated software packages. Lab Fee Required.

Corequisite: COMS 110S

## CRJS 100 - Intro. to the Crim. Justice Sys.

## Credits: 3

This course is an overview of the criminal justice system in the United States. Topics include a study of the criminal justice system, the police, courts, and corrections. This course is a prerequisite for all other criminal justice courses except CRJS 105 and CRJS 110.

Total Semester Hours: 15

Winter Session

## Spring Semester

## ENGL 102 - English Composition II

## Credits: 3

This course introduces students to short fiction, poetry, drama, and the novel. Written assignments are based on the readings. Writing skills learned in Composition I are further developed. Students will write a research paper which demonstrates understanding of literary criticism.

Prerequisite: ENGL 101 (Grade of C or better)

- LSCI 000 - Science Gen Ed Requirement Credits: 3


## PSYC 101 - Introduction to Psychology

## Credits: 3

This course is an introduction to the science of human behavior and mental processes. Emphasis is placed on the relationship between the nervous system and behavior, learning, perception, development, motivation, personality, attitude formation and prejudice, psychopathology and psychotherapy.

Prerequisite: Proficient in all Developmental English Courses

## CRJS 105 - Criminology

## Credits: 3

This course studies crime as a social phenomenon. Topics include crime statistics, theories of the causes of crime, criminal typologies, the limits of the law and societal responses to crimes and criminals. Students are encouraged to take Introduction to Sociology (SOCA101) before enrolling

## CRJS 110 - Criminal Law

## Credits: 3

This course is a study of the principles of criminal law in the United States. Topics will include the adversary system, principles of justification and excuse, arrest, search, and seizure. The New Jersey Code of Criminal Justice and the procedural guarantees of the U.S. and NJ Constitutions will be examined.

Total Semester Hours: 15

Summer Session

Second Year

Fall Semester

## HIST 105 - U.S. History I

## Credits: 3

This course is an examination of United States history from the age of discovery through the Civil War. Particular emphasis will be placed on the social, economic, and political forces that were responsible for the development of the new nation.

## SOCA 101 - Intro. to Sociology

## Credits: 3

This course is an introduction to the analysis and description of structures and dynamics of human society. Emphasis is placed on the application of scientific methods of observation and analysis of social groups, intergroup relations, social change, social stratification, and social institutions.

## CRJS 223 - Constitutional Law

## Credits: 3

This course will examine the U.S. Constitution as the framework for government. Leading decisions of the U.S. Supreme Court will be analyzed in the areas of Civil Rights and Civil Liberties with emphasis on the Bill of Rights, and the 13th, 14th, and 15th amendments.

## CRJS 140 - Health \& Fitness for the Public Safety Professional

Credits: 3
This course will explore basic concepts of health and physical fitness for the public safety professional. It will provide the student with the means for self-evaluation through various testing situations. It will also assist students in the development and maintenance of a healthy lifestyle as needed for a career in the public safety field: Police officers, Firefighters, Corrections, Court personnel working for Federal, State or local agencies. Topics investigated are lifestyle issues in wellness including cardiovascular function, weight management and nutrition, strength, flexibility, stress management and principles/programs of exercising.

- GLCA 001 - Global and Cultural Awareness Gen Ed Requirement Credits: 3

Total Semester Hours: 15

## Winter Session

## Spring Semester

## HIST 106 - U.S. History II

## Credits: 3

This course is an examination of United States history from Reconstruction through the present. Particular emphasis will be placed on major themes in United States' politics, society, economics, and diplomacy.

## SOCA 150 - Contemporary Social Issues

## Credits: 3

This course will focus on a limited number of controversial and/or problematic social issues. Readings and discussions will center on the major sociological perspective on these bases, including functionalist, conflict and interactionist viewpoints.

Prerequisite: SOCA 101

## CRJS 180 - Corrections

## Credits: 3

This course is a survey of the theories and applications of correctional practices in both community and institutional models. The physical, educational, and social aspects of incarceration are studied with respect to their impact on the rehabilitative prospects of the inmate.

Prerequisite: CRJS 100

- CRJS 000 - Program Electives Credits: 3
- CRJS 000 - Program Electives Credits: 3


## Science General Education Courses

Recommended courses listed below but student can also choose from the list of approved General Education courses in the College catalog.

## BIOS 122 - Intro. to Environmental Science

## Credits: 4

This course is designed to explore the factors influencing the environment and to increase awareness of environmental problems. Topics include air, land, and water resources, ecology, waste management, and the human effects on the environment. Lab exercises and field trips will supplement the theory presented. Lab Fee Required.

Corequisite: BIOS 122L

## CHEM 107 - Forensic Science

## Credits: 4

This course introduces the student to the basic principles of forensic science and the application of those principles in the collection, examination, evaluation, and interpretation of crime scene evidence. The course provides the student with the opportunity to explore the intersection of several scientific areas (e.g., biological, physical, chemical, medical, and behavioral science) as they apply to the investigation and resolution of crimes.

Corequisite: CHEM 107L
Prerequisite: MATH 010, MATH 015, MATH 017, or MATH 023 and MATH 040

## Electives

Choose any CRJS course designation except CRJS 120, CRJS 121, CRJS 122 \& CRJS 123.

## Global \& Cultural Awareness General Education Courses

Recommended courses listed below but student can also choose from the list of approved General Education courses in the College catalog.

Credits: 3
This course introduces students to major theoretical perspectives on the experience and social construction of cultural difference. Drawing on theories from social, clinical, developmental and cognitive psychology, the course provides students with a foundation for understanding the origins and maintenance of various cultures within the United States, while also including global cultural comparisons.

Prerequisite: PSYC 101

## SOCA 215 - Perspectives On Race, Gender, Class and Culture

Credits: 3
This course explores the effects of social structure and of dominant and sub-cultural norms and values on individuals, families and groups. Racism, sexism, homophobia, ageism, class bias and rigid gender roles are examined in depth with focus on the effects of advanced industrial capitalism on these phenomena.

Prerequisite: SOCA 101

## Developmental Courses

Sussex has embraced a practice of directed self-choice whereby students are encouraged, through guided conversations with an advisor, to best determine their readiness for this course. Students should be aware that Developmental Studies exist and are available to help strengthen skills and encourage success. Pursuing testing and/or developmental courses is entirely up to the student. Further, testing, though providing a valuable reference point for reflection, does not create for the student an obligation to follow Accuplacer recommendations.

The exception to this is where students seek enrollment in higher-level math courses. Students wishing to enroll in the following math courses are required to take and adhere to placement guidance from, the Advanced Algebra and Functions test, as part of Accuplacer, through the college's testing center, for admission into any of the following courses: MATH 110, MATH 112, and MATH 113. Please note, courses in other disciplines may also require advanced mathematics placement. Students should check with their advisor.

## Culinary Arts Option, A.A.S. - Technical Studies

The Culinary Arts Option is designed for students who are interested in becoming a professional chef or obtaining skills for a career in the culinary industry. Student success is a priority in this student-focused program offering a comprehensive curriculum and actual practice in all aspects of the culinary arts. Emphasis will be on the technical and management skills needed to work in restaurants and food service operations. Students will have the opportunity to apply and practice skills acquired in a real-world environment. This program provides a solid foundation for a great and exciting culinary career.

## Upon completion of this program, graduates will be able to:

- Demonstrate proficiency in basic industry terminology.
- Practice standards in behavior, grooming, dress, and safety that reflect the mature work attitude expected of an industry professional.
- Maintain high standards of sanitation and food safety as established by the ServSafe ${ }^{\circledR}$ program.
- Develop skills in knife, tool and equipment handling and care, apply principles of food preparation to produce a variety of food products.
- Demonstrate the overall concept of purchasing and receiving practices in quality food service operations.
- Demonstrate the ability to convert, weigh and measure recipes.
- Describe the characteristics, functions, and food sources of the major nutrients and maximize nutrient retention in menu planning, food preparation, and storage.
- Develop skills in the fabrication, portioning, and yield costing of protein products.
- Demonstrate proficiency in techniques for preparation and presentation of baking and pastry.
- Demonstrate quality customer service including supervisory management, dining room service, guest service, working with others, and multi-tasking.
- Apply the principles of menu planning, development, and execution.
- Communicate clearly and professionally, both verbally and in writing.
- Demonstrate creativity and problem-solving skills, based on operational theory and procedures.
- Demonstrate an understanding of organizational structures within hospitality and food service establishments.


## First Year

## Fall Semester

- HOST 101 - Introduction to Hotel, Restaurant and Institutional Management Credits: 3


## CULA 103 - Food Service Sanitation

Credits: 1
This course provides the student with an in-depth study of food microbiology and a review of significant food-borne illnesses. Emphasis will be placed on food safety and adherence to local, state and federal regulations that address food service sanitation. The course is intended to prepare students for the National Restaurant Association Educational Foundation Certification exam and the New Jersey State Department of Health Food Service Managers Sanitation course exam

## CULA 105 - Basic Culinary Skills

## Credits: 3

This course introduces the student to the fundamentals that are required to be a professional culinarian. Topics such as knife skills, stocks, sauces, soups as well as recipe conversion, costing and product identification are all practiced in a lab setting. These are the basic building blocks that are required for future culinary success. Lab Fee Required.

Prerequisite: CULA 103 Food Service Sanitation All Culinary classes must be completed with C or better to progress.

## CULA 107 - Food Principles

Credits: 3
This course provides the student with an in-depth study of food microbiology and a review of significant food-borne illnesses. In a lab setting, emphasis will be placed on food safety and adherence to local, state and federal regulations that address food service sanitation. The course is intended to prepare students for the National Restaurant Association Educational Foundation Certification exam and the New Jersey State Department of Health Food Service Managers Sanitation course exam. Lab Fee Required.

Prerequisite: CULA 103 Food Service Sanitation, CULA 105 Basic Culinary Skills All Culinary classes must be completed with C or better to progress.

## CULA 110 - Meat Fabrication for Culinarian

## Credits: 3

This course introduces the student to a structured environment with a hands-on practical meat cutting experience. In a lab setting, students fabricate cuts for the production restaurant and also deal with whole carcasses and primal cuts. Students are also introduced to meat-grading procedures and techniques and to the identification of meat quality and familiarization with yield testing. Students are also introduced to a systems approach to the planning and preparation of sausages and other cold food preparation techniques as an alternative to other conventional types of

Prerequisite: CULA 103 Food Service Sanitation, CULA 105 Basic Culinary Skills, All Culinary class must be completed with C or better to progress

## CULA 118 - Garde Manger

## Credits: 3

This course introduces the student to Garde Manger (cold foods) it takes a systems approach to the planning and preparation of cold foods as another conventional types of food preparation. Cold kitchen principles are thoroughly covered in the sanitation, menu planning, purchasing, preparation, presentation, and storage of cold foods. Students will learn how to tailor the guidelines of cold food preparation to fit the specific needs of any operation. Lab Fee Required.

Prerequisite: CULA 103 Food Service Sanitation, CULA 105 Basic Culinary Skills, CULA 107 Food Principles, CULA 110 Meat Fabrication for Culinarian All Culinary class must be completed with C or better to progress.

Total Semester Hours: 16

## Winter Session

## Spring Semester

## CULA 122 - Basic Baking

## Credits: 3

This course introduces the student to baking as a systems approach to the introduction, planning and preparation of baked goods. In a lab setting, beginning baking principles are introduced in the planning, purchasing, preparation, presentation, and proper storage of basic baked goods. Students learn how to tailor the guidelines of learned baking techniques to fit the specific needs of any operation. Lab Fee Required.

Prerequisite: CULA 103 Food Service Sanitation, CULA 105 Basic Culinary Skills, CULA 107 Food Principles, CULA 110 Meat Fabrication for Culinarian, CULA 118 Garde Manger All Culinary class must be completed with C or better to progress.

## CULA 135 - Advanced Baking \& Pastry

## Credits: 3

This course introduces the student to an extensive, hands-on approach to the planning and preparation of advanced baked goods. Advanced baking principles are applied in the planning, purchasing, preparation, presentation, and proper storage of baked goods. Students tailor the guidelines of baking techniques to fit the specific needs of any operation. Lab Fee Required.

Prerequisite: CULA 103 Food Service Sanitation, CULA 105 Basic Culinary Skills, CULA 107 Food Principles, CULA 110 Meat Fabrication for Culinarian, CULA 118 Garde Manger, CULA 122 Basic Baking, CULA 130 Charcuterie All Culinary class must be completed with C or better to progress.

## CULA 140 - Breakfast \& Lunch Cookery

Credits: 3
This course introduces the student to a systems approach to sanitation, planning, preparation, and resource management. In a lab setting, cooking principles are thoroughly covered with respect to nutrition and preparing, purchasing, receiving, storing, and serving food. Students adapt the topics covered to fit the specific needs of any operation. Lab Fee Required.

Prerequisite: CULA 103 Food Service Sanitation, CULA 105 Basic Culinary Skills, CULA 107 Food Principles, CULA 110 Meat Fabrication for Culinarian, CULA 118 Garde Manger, CULA 122 Basic Baking, CULA 130 Charcuterie, CULA 135 Advanced Baking and Pastry All Culinary class must be completed with C or better to progress.

## ENGL 101 - English Composition I

## Credits: 3

This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects which include personal, rhetorical, and expository models. Research skills are introduced.

## HOST 280 - Hospitality \& Culinary Arts Internship

## Credits: 2

This course is designed to give the culinary arts or hospitality student professional work experience in a job related to the specific program. The student will receive hands-on work experience in a job related to the program, complete course assignments, and develop a portfolio.

Prerequisite: Permission of Coordinator or Chair

Total Semester Hours: 14

Summer Session

Second Year

Fall Semester

## ENGL 125 - Tech. Writing \& Communication I

## Credits: 3

This course focuses on expository writing for business, industrial, and scientific fields, emphasizing the principles for organizing, writing, and revising clear, readable documents and reports. Students will practice written, oral, reading, and reasoning skills. Research skills will be advanced.

## MATH 105-Technical Mathematics

Credits: 3
This course is intended for students who have introductory algebra proficiency, and who need to apply mathematical concepts in a technical program. The purpose of the course is to prepare AAS students for the mathematical aspects of their work in the technical trades.

Prerequisite: Proficiency on the College Placement Examination or grade of C or better in MATH 017/MATH 023.

- GHMN 000 - Humanities Credits: 3

OR

- GSOC 000 - Social Science Gen Ed Requirement Credits: 3


## CULA 202 - Italian Cuisine

Credits: 3
This course introduces the student to classical Italian cuisine. Students explore the many different regions of Italy and prepare dishes from each region. Students also learn the interworking of the restaurant environment which enhances their career success in the culinary arts. Lab Fee Required.

Prerequisite: CULA 103 Food Service Sanitation, CULA 105 Basic Culinary Skills, CULA 107 Food Principles, CULA 110 Meat Fabrication for Culinarian, CULA 118 Garde Manger, CULA 122 Basic Baking, CULA 130 Charcuterie, CULA 135 Advanced Baking and Pastry, CULA 140 Breakfast and Lunch Cookery All Culinary class must be completed with C or better to progress.

## CULA 210 - International Cuisine

## Credits: 3

This course introduces the student to international cuisine and it takes a hands on approach to the planning, development and creation of food styles from around the world. Cooking principles are thoroughly covered including sanitation, ethnic ingredients, menu planning, cooking techniques and plate presentation. Cuisines that will be covered are Indian, Asian, Mexican, Italian, Mediterranean and Spanish. Lab Fee Required.

Prerequisite: CULA 103 Food Service Sanitation, CULA 105 Basic Culinary Skills, CULA 107 Food Principles, CULA 110 Meat Fabrication for Culinarian, CULA 118 Garde Manger, CULA 122 Basic Baking, CULA 130 Charcuterie, CULA 135 Advanced Baking and Pastry, CULA 140 Breakfast and Lunch Cookery, CULA 202 Italian Cuisine

Total Semester Hours: 15

## Winter Session

Spring Semester

- GTEC 000 - Technology Gen Ed Requirement Credits: 3
- GNED 000 - General Ed Education Elective Credits: 3
- GHMN 000 - Humanities Credits: 3

OR

- GSOC 000 - Social Science Gen Ed Requirement Credits: 3


## CULA 235 - Classical French Cuisine

Credits: 3
This course introduces the student to Classical French Cuisine in a hands-on environment where students will explore the evolution of modern day cuisine. This course covers the various regions of France emphasizing indigenous ingredients and preparation methods. Lab Fee Required.

Prerequisite: CULA 103 Food Service Sanitation, CULA 105 Basic Culinary Skills, CULA 107 Food Principles, CULA 110 Meat Fabrication for Culinarian, CULA 118 Garde Manger, CULA 122 Basic Baking, CULA 130 Charcuterie, CULA 135 Advanced Baking and Pastry, CULA 140 Breakfast and Lunch Cookery, CULA 202 Italian Cuisine, CULA 210 International Cuisine All Culinary class must be completed with C or better to progress.

## CULA 255 - North American Cuisine

## Credits: 3

This course introduces the student to North American cuisine and takes a hands on approach to the planning, development and the creation of popular food styles from North America. Cooking principles and practices are thoroughly covered including sanitation, preparation, ingredient identification, menu planning, cooking techniques and plate presentation. Lab Fee Required.

Prerequisite: CULA 103 Food Service Sanitation, CULA 105 Basic Culinary Skills, CULA 107 Food Principles, CULA 110 Meat Fabrication for Culinarian, CULA 118 Garde Manger, CULA 122 Basic Baking, CULA 130 Charcuterie, CULA 135 Advanced Baking and Pastry, CULA 140 Breakfast and Lunch Cookery, CULA 202 Italian Cuisine, CULA 210 International Cuisine, CULA 235 Classical French Cuisine All Culinary class must be completed with C or better to progress.

Summer Session

## Total Program Hours: 60

## Humanities or Social Science General Education Courses (Recommended)

Recommended courses listed below but student can also choose from the list of approved General Education courses in the College catalog.

## SOCA 101 - Intro. to Sociology

## Credits: 3

This course is an introduction to the analysis and description of structures and dynamics of human society. Emphasis is placed on the application of scientific methods of observation and analysis of social groups, intergroup relations, social change, social stratification, and social institutions.

PSYC 101 - Introduction to Psychology

Credits: 3
This course is an introduction to the science of human behavior and mental processes. Emphasis is placed on the relationship between the nervous system and behavior, learning, perception, development, motivation, personality, attitude formation and prejudice, psychopathology and psychotherapy.

Prerequisite: Proficient in all Developmental English Courses

## HUMN 101 - Survey of World Culture I

## Credits: 3

This survey course explores the evolution of western and non-western key ideas in art, music, and literature from prehistoric times to the 14th century. Emphasis is placed on the comparison of social, economic, religious, and political forces in the arts in a variety of cultures and diverse people.

## Technology General Education Courses (Recommended)

Recommended courses listed below but student can also choose from the list of approved General Education courses in the College catalog.

## COMS 110-Computer Concepts \& Applications

## Credits: 3

This course is designed to provide the student with a level of knowledge necessary to function in today's technological society. Topics include computer and network terminology, hardware, software, and processing concepts. A large portion of the class time is dedicated to exercises performed using integrated software packages. Lab Fee Required.

Corequisite: COMS 110 S

## General Education Elective Courses

Courses listed below but student can also choose from the list of approved General Education courses in the College catalog.

## BUSA 120 - Small Business Management

## Credits: 3

This course is designed to introduce the student to the principles and practices of successful small business operations. Topics include new product planning, product management, sales forecasting, consumer behavior, promotion and pricing, finance, staffing, international markets and contemporary business issues. Students acquire an overview of essential small business management skills.

- HOST 108 - Hotel and Restaurant Operations Credits: 3 (SP)
- HOST 136 - Hospitality Marketing Credits: 3 (FA)
- HOST 201 - Food and Beverage Management Credits: 3 (SP)


## Developmental Courses

Sussex has embraced a practice of directed self-choice whereby students are encouraged, through guided conversations with an advisor, to best determine their readiness for this course. Students should be aware that Developmental Studies exist and are available to help strengthen skills and encourage success. Pursuing testing and/or developmental courses is entirely up to the student. Further, testing, though providing a valuable reference point for reflection, does not create for the student an obligation to follow Accuplacer recommendations.

The exception to this is where students seek enrollment in higher-level math courses. Students wishing to enroll in the following math courses are required to take and adhere to placement guidance from, the Advanced Algebra and Functions test, as part of Accuplacer, through the college's testing center, for admission into any of the following courses: MATH 110, MATH 112, and MATH 113. Please note, courses in other disciplines may also require advanced mathematics placement. Students should check with their advisor.

## Culinary Arts, Certificate

The Culinary Arts Certificate program is an intensive one-year certificate program that prepares students for food service positions in the hospitality field.

A mix of class and lab study, students leave the program with a solid understanding of food preparation and service, cultural and culinary trends, menu preparation, equipment usage, safety and sanitation procedures, and customer service and leadership skills.

Students in the program will learn the use and care of commercial kitchen equipment, high standards of sanitation and food safety, proficiency in techniques of baking and pastry, and skills in knife, tool, and equipment handling. They must apply the principles of food preparation to produce a variety of food products.

## Upon completion of this program, graduates will be able to:

- Demonstrate proficiency in basic industry terminology.
- Practice standards in behavior, grooming, dress, and safety that reflect the mature work attitude expected of an industry professional.
- Maintain high standards of sanitation and food safety as established by the ServSafe ${ }^{\circledR}$ program.
- Develop skills in knife, tool, and equipment handling and care, apply principles of food preparation to produce a variety of food products.
- Demonstrate the overall concept of purchasing and receiving practices in quality foodservice operations.
- Demonstrate the ability to convert, weigh and measure recipes.
- Describe the characteristics, functions, and food sources of the major nutrients and maximize nutrient retention in menu planning, food preparation, and storage.
- Develop skills in the fabrication, portioning, and yield costing of protein products.
- Demonstrate proficiency in techniques for preparation and presentation of baking and pastry.
- Demonstrate quality customer service, including supervisory management, dining room service, guest service, working with others, and multi-tasking.
- Apply the principles of menu planning, development, and execution.
- Communicate clearly and professionally, both verbally and in writing.
- Demonstrate creativity and problem-solving skills based on operational theory and procedures.
- Demonstrate an understanding of organizational structures within hospitality and food service establishments.


## First Year

Fall Semester

## ENGL 101 - English Composition I

## Credits: 3

This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects which include personal, rhetorical, and expository models. Research skills are introduced.

## CULA 103 - Food Service Sanitation

## Credits: 1

This course provides the student with an in-depth study of food microbiology and a review of significant food-borne illnesses. Emphasis will be placed on food safety and adherence to local, state and federal regulations that address food service sanitation. The course is intended to prepare students for the National Restaurant Association Educational Foundation Certification exam and the New Jersey State Department of Health Food Service Managers Sanitation course exam

## CULA 105 - Basic Culinary Skills

## Credits: 3

This course introduces the student to the fundamentals that are required to be a professional culinarian. Topics such as knife skills, stocks, sauces, soups as well as recipe conversion, costing and product identification are all practiced in a lab setting. These are the basic building blocks that are required for future culinary success. Lab Fee Required.

Prerequisite: CULA 103 Food Service Sanitation All Culinary classes must be completed with C or better to progress.

## CULA 110 - Meat Fabrication for Culinarian

## Credits: 3

This course introduces the student to a structured environment with a hands-on practical meat cutting experience. In a lab setting, students fabricate cuts for the production restaurant and also deal with whole carcasses and primal cuts. Students are also introduced to meat-grading procedures and techniques and to the identification of meat quality and familiarization with yield testing. Students are also introduced to a systems approach to the planning and preparation of sausages and other cold food preparation techniques as an alternative to other conventional types of food preparation.

Prerequisite: CULA 103 Food Service Sanitation, CULA 105 Basic Culinary Skills, All Culinary class must be completed with C or better to progress

## CULA 107-Food Principles

## Credits: 3

This course provides the student with an in-depth study of food microbiology and a review of significant food-borne illnesses. In a lab setting, emphasis will be placed on food safety and adherence to local, state and federal regulations that address food service sanitation. The course is intended to prepare students for the National Restaurant Association Educational Foundation Certification exam and the New Jersey State Department of Health Food Service Managers Sanitation course exam. Lab Fee Required.

Prerequisite: CULA 103 Food Service Sanitation, CULA 105 Basic Culinary Skills All Culinary classes must be completed with C or better to progress.

## CULA 118 - Garde Manger

Credits: 3
This course introduces the student to Garde Manger (cold foods) it takes a systems approach to the planning and preparation of cold foods as another conventional types of food preparation. Cold kitchen principles are thoroughly covered in the sanitation, menu planning, purchasing, preparation, presentation, and storage of cold foods. Students will learn how to tailor the guidelines of cold food preparation to fit the specific needs of any operation. Lab Fee Required.

Prerequisite: CULA 103 Food Service Sanitation, CULA 105 Basic Culinary Skills, CULA 107 Food Principles, CULA 110 Meat Fabrication for Culinarian All Culinary class must be completed with C or better to progress.

Total Semester Hours: 16

Winter Session

Spring Semester

- GNED 000 - General Education Elective Credits: 3


## CULA 122 - Basic Baking

## Credits: 3

This course introduces the student to baking as a systems approach to the introduction, planning and preparation of baked goods. In a lab setting, beginning baking principles are introduced in the planning, purchasing, preparation, presentation, and proper storage of basic baked goods. Students learn how to tailor the guidelines of learned baking techniques to fit the specific needs of any operation. Lab Fee Required.

Prerequisite: CULA 103 Food Service Sanitation, CULA 105 Basic Culinary Skills, CULA 107 Food Principles, CULA 110 Meat Fabrication for Culinarian, CULA 118 Garde Manger All Culinary class must be completed with C or better to progress.

## CULA 135 - Advanced Baking \& Pastry

## Credits: 3

This course introduces the student to an extensive, hands-on approach to the planning and preparation of advanced baked goods. Advanced baking principles are applied in the planning, purchasing, preparation, presentation, and proper storage of baked goods. Students tailor the guidelines of baking techniques to fit the specific needs of any operation. Lab Fee Required.

Prerequisite: CULA 103 Food Service Sanitation, CULA 105 Basic Culinary Skills, CULA 107 Food Principles, CULA 110 Meat Fabrication for Culinarian, CULA 118 Garde Manger, CULA 122 Basic Baking, CULA 130 Charcuterie All Culinary class must be completed with C or better to progress.

## CULA 140 - Breakfast \& Lunch Cookery

## Credits: 3

This course introduces the student to a systems approach to sanitation, planning, preparation, and resource management. In a lab setting, cooking principles are thoroughly covered with respect to nutrition and preparing, purchasing, receiving, storing, and serving food. Students adapt the topics covered to fit the specific needs of any operation. Lab Fee Required.

Prerequisite: CULA 103 Food Service Sanitation, CULA 105 Basic Culinary Skills, CULA 107 Food Principles, CULA 110 Meat Fabrication for Culinarian, CULA 118 Garde Manger, CULA 122 Basic Baking, CULA 130 Charcuterie, CULA 135 Advanced Baking and Pastry All

## HOST 280 - Hospitality \& Culinary Arts Internship

## Credits: 2

This course is designed to give the culinary arts or hospitality student professional work experience in a job related to the specific program. The student will receive hands-on work experience in a job related to the program, complete course assignments, and develop a portfolio.

Prerequisite: Permission of Coordinator or Chair

Total Semester Hours: 14

## Summer Session

Total Program Hours: 30
(FA) Fall \& (SP) Spring - Only offered

## General Education Elective

Choose from the list of approved General Education courses listed in the College catalog.

## Developmental Courses

Sussex has embraced a practice of directed self-choice whereby students are encouraged, through guided conversations with an advisor, to best determine their readiness for this course. Students should be aware that Developmental Studies exist and are available to help strengthen skills and encourage success. Pursuing testing and/or developmental courses is entirely up to the student. Further, testing, though providing a valuable reference point for reflection, does not create for the student an obligation to follow Accuplacer recommendations.

The exception to this is where students seek enrollment in higher-level math courses. Students wishing to enroll in the following math courses are required to take and adhere to placement guidance from, the Advanced Algebra and Functions test, as part of Accuplacer, through the college's testing center, for admission into any of the following courses: MATH 110, MATH 112, and MATH 113. Please note, courses in other disciplines may also require advanced mathematics placement. Students should check with their advisor.

## Cultural Competence, C.O.A.

Gain competence in understanding cross-cultural relationships and multicultural interactions.

## Cyber-Crime Investigation, C.O.A.

Focuses on cyber-based crimes which will prepare students to enter the field of computer crime investigations and private security.

## First Year

## Fall Semester

## CYBR 100 - Introduction to Cyber Crime

## Credits: 3

The student will focus on technology-based crimes. Explore cyber forensics including information warfare, cyber terrorism, information theft, data corruption, and disruption of service. Discussion on computing devices as instruments furthering exploitation of children, organized crime and other criminal acts. Identify vulnerabilities within national and private infrastructure, assess risks and security measures.

Prerequisite: COMS 110

## CYBR 101 - Digital Forensics I

## Credits: 3

The student will explore a professional approach to computer and cyber crime investigations. Students will learn to identify potential electronic evidence, create strategies to locate and recover evidence and perform forensic analysis in a lab setting. Students will discuss legal and ethical considerations of computer crime investigations. Lab Fee Required.

Prerequisite: COMS 110/CYBER 100

Total Semester Hours: 6

Winter Session

Spring Semester

Credits: 3
Students will explore methods of investigating and preventing cybercrimes and infringements upon information security. Students will discuss laws governing e-commerce and intellectual property protections, focusing on Landmark and other cases such as Napster. The class will also debate privacy rights and free speech on the internet.

Prerequisite: CYBR 100

## CYBR 103 - Digital Forensics II

Credits: 3
This course provides Students the opportunity to recover and analyze evidence using industry standard commercial grade Guidance Software EnCase Forensics v8 and Mobile Investigator. The students practice preserving digital evidence, recovering deleted evidence, performing USB analysis, and analyzing cellphone data in a lab setting. In addition, students also examine Digital Forensics \& eDiscovery best practices. They will explore approaches to Network Forensic investigations and insider threats while using investigation results to develop reports and courtroom testimony. Lab Fee Required.

Prerequisite: CYBR 100/CYBR 101/CYBR 102

## CYBR 110 - Practicum in Cyber Crime Investigation

## Credits: 1

This course provides experience in Cybercrime investigations of technology security. Emphasis is placed on student involvement dealing with security issues or computer crime activities. Upon completion, students should be able to successfully analyze, retrieve erased evidence and testing in mock proceedings against their criminal entrepreneurs

Prerequisite: CYBER 100/101/102/103

Total Semester Hours: 7

## Diesel Service Technology Option, A.A.S. - Technical Studies

The Diesel Service Technology program gives the students an opportunity to gain a broader knowledge and to achieve a higher skill level in Diesel Service Technology than is offered in other one-year certificate programs. There is also a general education component integrated into the program to satisfy demands for appropriate workforce skills. Upon completing the A.A.S. degree program, students have the necessary skills to become employed as entry-level Diesel Service Technicians.

## Upon completion of this program, graduates will be able to:

- Employ safety skills in an industrial maintenance facility setting.
- Demonstrate professionalism with attitude, conduct, and ethical work practices.
- Evaluate, diagnose, and repair various Diesel systems.
- Identify specifications related to the inspection, repair, and adjustment of Diesel systems.
- Use various test equipment to diagnose and repair defects.
- Apply basic electrical theory using wiring diagrams and schematics to diagnose and repair Diesel electrical circuits.
- Explain the operation of, and perform service on, automatic and manual transmissions, axles, and differentials.
- Analyze defects of Diesel air conditioning and climate control systems and identify necessary preventative maintenance or corrective repairs.
- Discuss the theory of alignment, braking, suspension and steering systems, problem diagnosis and correction of braking, suspension, steering, and alignment problems


## First Year

## Fall Semester

## ENGL 101 - English Composition I

## Credits: 3

This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects which include personal, rhetorical, and expository models. Research skills are introduced.

## MATH 105 - Technical Mathematics

## Credits: 3

This course is intended for students who have introductory algebra proficiency, and who need to apply mathematical concepts in a technical program. The purpose of the course is to prepare AAS students for the mathematical aspects of their work in the technical trades.

Prerequisite: Proficiency on the College Placement Examination or grade of C or better in MATH 017/MATH 023.

## DESL 102 - Diesel Engines

## Credits: 3

This course introduces students, in a lecture and lab setting, to the basic principles of diesel engines and systems. The course covers component nomenclature, function, and analysis, as is the proper usage of hand tools, measuring instruments, and equipment. Lab fee required.

## DESL 106 - Electrical Systems

## Credits: 3

This course introduces students, in a lecture and lab setting, to the basic principles of electrical systems of diesel powered equipment. Students explore the operation of starters, alternators, and batteries. Lab fee required.

## AOTE 101 - Automotive Fundamentals

## Credits: 3

This course is designed as an entry-level survey of automotive systems and their repair. It is a prerequisite for all other automotive technology courses. With approval of the program coordinator, appropriate ASE certification may be substituted for this course. Lab Fee Required.

Total Semester Hours: 15

Winter Session

## Spring Semester

## ENGL 125 - Tech. Writing \& Communication I

## Credits: 3

This course focuses on expository writing for business, industrial, and scientific fields, emphasizing the principles for organizing, writing, and revising clear, readable documents and reports. Students will practice written, oral, reading, and reasoning skills. Research skills will be advanced.

## COMS 110-Computer Concepts \& Applications

## Credits: 3

This course is designed to provide the student with a level of knowledge necessary to function in today's technological society. Topics include computer and network terminology, hardware, software, and processing concepts. A large portion of the class time is dedicated to exercises performed using integrated software packages. Lab Fee Required.

Corequisite: COMS 110S

## DESL 103 - Diesel Drivetrain

## Credits: 3

This course provides students, in a lecture and lab setting, with in-depth coverage of diesel transmissions and drivetrain components. Students troubleshoot and repair transmission and clutch failures. Students inspect and service drive axle and related components. Lab fee required.

## WELD 101 - Welding Safety

## Credits: 1

This course will familiarize students with the knowledge on welding safety procedures, normal operating procedures; while also covering safe operation and hazards associated with welding.

- GNED 000 - General Education Elective Credits: 3

Second Year

## Fall Semester

## DESL 104 - Brake Systems

## Credits: 3

This course introduces students, in a lecture and lab setting, to the basic principles of diesel brake systems and operation. Students explore advanced concepts and schematics including anti-lock, air, pneumatic, hydraulic brake systems, and related components. Lab fee required.

## DESL 107 - Heating \& Air Conditioning Systems

## Credits: 3

This course introduces students, in a lecture and lab setting, to the basic principles of electrical systems of diesel powered equipment. Students explore the operation of starters, alternators, and batteries. Lab fee required.

## WELD 115 - Shielded Metal Arc Welding I

## Credits: 3

This course covers equipment and proper setup of said equipment; while introducing students to electrodes, and electrode selection used in shielded metal arc welding (SMAW). Instruction in this course follows the American Welding Society (AWS) standards of acceptability and teaches student to develop hands on skills necessary to generate quality single and multiple pass welds in all positions while utilizing commonly used filler materials including low hydrogen, non-low hydrogen, and iron powder electrodes. Lab Fee Required.

Prerequisite: Proficiency on the English and Basic Math portion of the Placement Test

## AOTE 203 - Engine Construction, Operation \& Service

## Credits: 3

This course will cover proper diagnosis, disassembly, inspection and rebuilding techniques. Use of diagnostic, measuring and machine shop equipment will be included as the students disassemble and rebuild a complete engine. This course helps prepare students for ASE certification. Lab Fee Required.

## Prerequisite: AOTE 101

- GHMN 000 - Humanities Credits: 3


## OR

- GSOC 000 - Social Science Gen Ed Requirement Credits: 3

Winter Session

Spring Semester

## DESL 105 - Steering and Suspension

## Credits: 3

This course introduces students, in a lecture and lab setting, to the design, function, maintenance, and repair of steering and suspension systems. Students explore component repair, alignment procedures, and tire and wheel service. Lab fee required.

- TSC 000 - Technical Studies Core Credits: $\mathbf{3}$

OR

- DESL 000 - Program Option Elective Credits: 3
- TSC 000 - Technical Studies Core Credits: $\mathbf{3}$

OR
DESL 000 - Program Option Elective Credits: $\mathbf{3}$

## WELD 110 - Thermal Cutting and Oxyfuel Welding

## Credits: 3

This course acts as an introduction on various types of thermal cutting and oxyfuel welding and brazing procedures currently used in the industry. Training in the course follows the American Welding Society (AWS) standards of acceptance. Lab Fee Required.

Prerequisite: Proficiency on the English and Basic Math portion of the Placement Test

## AOTE 208 - Advanced Automotive Electronics

## Credits: 3

This course reviews basic fundamentals then proceeds into semi-conductors, amplifiers, integrated circuits and microprocessors as they relate to the automobile. Practical application of theory is stressed as part of diagnoses, trouble shooting, repair and use of diagnostic equipment. This course helps prepare students for ASE certification. Lab Fee Required.

Prerequisite: AOTE 101

Total Semester Hours: 15

Summer Session

## Technical Studies Core or Program Electives Courses (Recommended)

Technical Studies credits may be earned for corporate, industrial, or military training programs after review by a faculty assessor of related program. In addition to the recommended courses, individuals without sufficient technical training experience can select courses in one of the programs/options listed below to satisfy the Technical Studies and Program Elective credit requirements. All courses should be selected with assistance from a faculty advisor.

## AOTE 101 - Automotive Fundamentals

Credits: 3
This course is designed as an entry-level survey of automotive systems and their repair. It is a prerequisite for all other automotive technology courses. With approval of the program coordinator, appropriate ASE certification may be substituted for this course. Lab Fee Required.

Corequisite: AOTE 110

## AOTE 110 - Automotive Electrical Systems

## Credits: 3

This course is designed to apply knowledge of electricity and electronics specifically to automotive systems. Topics include starting, charging, fuel injections, ignition, body electrical systems, and electrical accessories. This course helps prepare students for ASE certification. Lab Fee Required.

## Corequisite/Prerequisite: AOTE 101

## AOTE 130 - Steering \& Suspension Systems

## Credits: 3

This course will explore the automotive steering and suspension systems in depth. Detailed instruction of design, operating principles and service of these systems will be covered. Tires, tire construction, steering geometry and alignment angles are studied. Proper techniques and procedures for complete front-end service, wheel alignment, wheel balance and steering mechanisms is covered. This course helps prepare students for ASE certification. Lab Fee Required.

Prerequisite: AOTE 101 and AOTE 110

## AOTE 204 - Manual Trans. \& Drivelines

## Credits: 3

This course will cover the principles of manual transmissions, their operation and service. Topics will include drivelines, differentials, clutches, U-joints, RWD, FWD, and 4-wheel drive. This course helps prepare students for ASE certification. Lab Fee Required.

Prerequisite: AOTE 101

## Credits: 3

This course reviews basic fundamentals then proceeds into semi-conductors, amplifiers, integrated circuits and microprocessors as they relate to the automobile. Practical application of theory is stressed as part of diagnoses, trouble shooting, repair and use of diagnostic equipment. This course helps prepare students for ASE certification. Lab Fee Required.

## Prerequisite: AOTE 101

- DESL 262 - Service Center Internship Credits: 3


## WELD 105 - Print Reading \& Welding Symbols

## Credits: 3

This course covers weld print reading commonly utilized in the welding industry. Print reading to be covered includes at least: the American Welding Society (AWS) welding symbols, sketching, view representation, orthographic projection, measurement, structural steel materials, weld joint configuration and detailing, basic layout, and pipe system design. Lab Fee Required.

Prerequisite: Proficiency on the English and Basic Math portion of the Placement Test

## WELD 110 - Thermal Cutting and Oxyfuel Welding

## Credits: 3

This course acts as an introduction on various types of thermal cutting and oxyfuel welding and brazing procedures currently used in the industry. Training in the course follows the American Welding Society (AWS) standards of acceptance. Lab Fee Required.

Prerequisite: Proficiency on the English and Basic Math portion of the Placement Test

## WELD 115 - Shielded Metal Arc Welding I

Credits: 3
This course covers equipment and proper setup of said equipment; while introducing students to electrodes, and electrode selection used in shielded metal arc welding (SMAW). Instruction in this course follows the American Welding Society (AWS) standards of acceptability and teaches student to develop hands on skills necessary to generate quality single and multiple pass welds in all positions while utilizing commonly used filler materials including low hydrogen, non-low hydrogen, and iron powder electrodes. Lab Fee Required.

Prerequisite: Proficiency on the English and Basic Math portion of the Placement Test

Technology General Education Courses (Recommended)

Recommended courses listed below but student can also choose from the list of approved General Education courses in the College catalog.

## COMS 110-Computer Concepts \& Applications

## Credits: 3

This course is designed to provide the student with a level of knowledge necessary to function in today's technological society. Topics include

## Select Courses from One of the Following Programs(P)/Options(O)

(Courses must be approved by appropriate faculty advisor):
Automotive Service Technology (P)
Business Management ( P )
Computer Information Systems (P)
Engineering Science (O)
Machine Tool Technology (O)
Welding Technology (O)

## Humanities/Social Science Gen Ed Requirement

Choose from the list of approved courses listed in the College catalog.

## Developmental Courses

Sussex has embraced a practice of directed self-choice whereby students are encouraged, through guided conversations with an advisor, to best determine their readiness for this course. Students should be aware that Developmental Studies exist and are available to help strengthen skills and encourage success. Pursuing testing and/or developmental courses is entirely up to the student. Further, testing, though providing a valuable reference point for reflection, does not create for the student an obligation to follow Accuplacer recommendations.

The exception to this is where students seek enrollment in higher-level math courses. Students wishing to enroll in the following math courses are required to take and adhere to placement guidance from, the Advanced Algebra and Functions test, as part of Accuplacer, through the college's testing center, for admission into any of the following courses: MATH 110, MATH 112, and MATH 113. Please note, courses in other disciplines may also require advanced mathematics placement. Students should check with their advisor.

## Digital Art and Illustration, C.O.A.

This certificate offers hands-on learning in the field of graphic and digital design to enhance design skills while providing intensive training. Acquire the knowledge and experience to produce aesthetically pleasing design projects. Students will be prepared for positions in design departments, graphic design firms, advertising, print, and multimedia design companies.

## First Year

Fall Semester

Credits: 3
This is a studio course where students will observe and create in the physical world away from the computer. This course suggests that real-world observation is invaluable in the planning of traditional illustration, digital illustration, 2D graphics, and 3D generated images. Areas of instruction will include graphic design drawing elements (such as line, value, texture, color, and composition), perspective, architecture, and environments.
The course will also emphasize basic drawing techniques, anatomy for the artist, life drawing, lighting, texturing, and storyboarding. Students will learn how to efficiently work with pencil, charcoal, ink, markers, and mixed media. Lab Fee Required.

## GRAD 153-Character Design

## Credits: 3

This course is designed to introduce the student to the essential craft of developing characters for stories, games, and other forms of video entertainment. Before any of these entertainment forms can be pursued, an artist must develop successful characters. Students will learn that the thousands of hours of work and countless frames of video involved in these endeavors all depend on the success of the artist's vision, and they will have the opportunity to study different forms of character development ranging from the elegant lines of Japanese Anime to the poignant expressions of King Kong. Pencil, paper, clay, and polymer will all be used along with sketched storyboards to help character designer's work with authors and directors to identify and realize projects. Lab Fee Required.

## GRAD 105 - Vector Graphics \& Page Design

## Credits: 3

This course emphasizes techniques and applications used to produce published documents for both Internet and print media. Students will learn to design documents, publications, and related projects using industry standard software on both MAC and PC platforms. An emphasis is placed on basic computer graphic skills through practical experience with two-dimensional paint and draw programs, as well as layout programs for print and web. Projects covered include advertising design, page layout, computer illustrations, digital imaging, and the scanning and manipulation of images. Lab Fee Required.

Prerequisite: Any COMS course

## GRAD 139 - Children's Book Illustration

## Credits: 3

This class allows students to develop a children's book from an initial concept to a "dummy book" ready to submit to publishers. Students will have the opportunity to explore a variety of mediums and diverse illustration techniques using video enrichment and lectures about illustrators, writers and the publishing industry. Developing students' drawing skills will be emphasized in all class work, from preliminary sketches to final works. Students will develop creative thinking skills as they learn how to transform ideas into images that tell a story. Exploration of the different children's book genres will be covered.

Total Semester Hours: 12

Winter Session

# GRAD 128 - Digital Imagery \& Editing 

## Credits: 3

This course provides students with the intensive exploration of advanced digital imaging as it applies to photography creating PDF documents, optimizing web graphics and complex layered images. Students will perfect their ability to creatively use digital imaging software to create sophisticated graphics for print and the web. Further study and practical application will be applied to creating documents for both the Internet and print mediums. An emphasis is placed on developing quality portfolio pieces. Lab Fee Required.

Prerequisite: GRAD 105

## GRAD 138 - Comic Book Illustration

Credits: 3
This course will provide a comprehensive introduction to the language and form of narrative illustration. The emphasis is on teaching the narrative language, use of tools, page and panel design, anatomy, drafting, perspective, storytelling and arrangement of images, while surveying various styles and genres related to the topic. Attention to developing essential drawing skills needed to create narrative illustrations on any level and for many types of applications will be explored. Completed projects would be suitable for inclusion in student portfolios.

## GRAD 230 - Directed Themes in Illustration

## Credits: 3

This course has students specialize in a single area of illustration of r the entire term by choosing illustration projects in children's book, editorial, comic book, fashion, commercial or advertising, scientific, or caricature drawings to explore in a related series of instructor-directed themes. At the completion of this course, the student will have created a series of related portfolio projects that demonstrate advanced problem solving ability of a personal style, as well as continued improvement in developing skills in illustration methods and materials. Lab Fee Required.

Prerequisite: ARTA 150 or GRAD 153 and GRAD 107 or Permission of the Program Coordinator

Total Semester Hours: 9

## Digital Forensics Option, A.A.S. - Computer Information Systems

This program is designed as a terminal degree and prepares students for immediate entry into a career. This program provides students with fundamental business knowledge and prepares them for careers in forensic science to work for computer companies, consulting firms, businesses, financial companies, government, retail and not-for-profit organizations.

## Upon completion of this program, graduates will be able to:

- Obtain entry-level and supervisory careers in the cyber industry, networking and security, systems development and management, government, retail or not-for-profit organizations.
- Analyze contemporary business problems and propose effective solutions using case studies and SWOT analysis (strengths, weaknesses, opportunities, and threats).
- Identify ethical and unethical business behaviors and explain the impact of each type of behavior on an organization's stakeholders (i.e., customers, competitors, investors, creditors, government regulators, employees, etc.).
- Design and deliver effective oral presentations as commonly used in contemporary business environments.


## First Year

Fall Semester

## COLL 101 - Foundations for Success

## Credits: 3

This is a student-centered course covering numerous strategies to encourage students to become active and empowered learners. A primary goal of this course is to help students make the most out of their college experience. Students will obtain information about college life and culture and develop strategies and techniques to enhance success in their academic, personal and professional lives. The course is infused with opportunities to understand, practice and implement critical thinking. Students will also gain practical information to help prepare to transfer to a four-year university or enter the workforce directly. All topics will be presented in both theory and practice. This course is required of all degree-seeking candidates and must be taken within the initial 16 credits after entry.

## ENGL 101 - English Composition I

## Credits: 3

This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects which include personal, rhetorical, and expository models. Research skills are introduced.

## COMS 113 - Intro. to Information Systems

## Credits: 3

This course is concerned with how organizations utilize information technology. The course deals with the operational activities involved in gathering, processing, storing, distributing and the use of information and its associated changing technologies. The case studies present students with managerial decision-making activities. Software platforms are used for the analysis. Lab Fee Required.

## BUSA 101 - Intro. to Business

## Credits: 3

This course is designed to provide the student with an overview of all critical business functions. Topics include forms of business ownership, legal aspects of business, human resource management, finance, marketing, accounting, management information systems, international business and contemporary business issues. Students taking this course are prepared for more advanced courses in business.

## CYBR 100 - Introduction to Cyber Crime

Credits: 3
The student will focus on technology-based crimes. Explore cyber forensics including information warfare, cyber terrorism, information theft, data corruption, and disruption of service. Discussion on computing devices as instruments furthering exploitation of children, organized crime and other criminal acts. Identify vulnerabilities within national and private infrastructure, assess risks and security measures.

Prerequisite: COMS 110

Total Semester Hours: 15

## Winter Session

## Spring Semester

## ENGL 102 - English Composition II

## Credits: 3

This course introduces students to short fiction, poetry, drama, and the novel. Written assignments are based on the readings. Writing skills learned in Composition I are further developed. Students will write a research paper which demonstrates understanding of literary criticism.

Prerequisite: ENGL 101 (Grade of C or better)

## MATH 108 - Statistics

## Credits: 3

This course includes the following topics: organization of data, measures of central tendency and dispersion, probability, the normal and binomial distributions, confidence intervals, hypothesis testing, analysis of variance, and correlation.

Prerequisite: MATH 017 (Grade of C or betterI) or MATH 023 (Grade of C or betterI) or appropriate algebra placement score

- GHMN 000 - Humanities Gen Ed Requirement Credits: 3


## COMS 114 - Intro. to Computer Science I

## Credits: 3

This course introduces the student to the fundamentals of computer science using an emphasis on programming methodology and problem solving. Topics include introductory concepts of computer systems, algorithm design, programming languages, software engineering, and data abstraction with related applications. A high level programming language is completely discussed and is used as a means to demonstrate concepts. Lab Fee Required.

## CYBR 101 - Digital Forensics I

## Credits: 3

The student will explore a professional approach to computer and cyber crime investigations. Students will learn to identify potential electronic evidence, create strategies to locate and recover evidence and perform forensic analysis in a lab setting. Students will discuss legal and ethical

## Second Year

## Fall Semester

## ECON 101 - Macroeconomics

## Credits: 3

This course is an analysis of major economic concepts. Topics include the elements of national income; the economic roles of government and labor; classical economics; monetary institutions and policies; the Keynesian model and modern fiscal policy; the macroeconomic aspects of world trade.

## COMS 115 - Intro. to Computer Science II

## Credits: 3

This course is the continuation of COMS 114. Topics include intermediate to advanced programming techniques with logical data structures and the design and analysis of such structures. The course also covers techniques for program development, algorithm analysis, efficiency, along with abstraction, an introduction to data structures, searching, sorting, recursion and string manipulation. Lab Fee Required.

Prerequisite: COMS 114 or Equivalent

## COMS 218 - Database Management Systems

## Credits: 3

This course presents the concepts of database systems and data models. Topics include introductory to advanced design concepts, implementation, SQL, integrity, management and performance, web technologies, administration and security. Lab Fee Required.

Prerequisite: COMS 113 or COMS 114 or COMS 120 or COMS 142

## COMS 221 - Operating Systems

## Credits: 3

This course is an introduction to the concepts and facilities of operating systems and control language software. Topics include multiprogramming, timesharing, virtual storage and the management of programs and data within the system. Different types of operating systems will

## CYBR 103 - Digital Forensics II

## Credits: 3

This course provides Students the opportunity to recover and analyze evidence using industry standard commercial grade Guidance Software EnCase Forensics v8 and Mobile Investigator. The students practice preserving digital evidence, recovering deleted evidence, performing USB analysis, and analyzing cellphone data in a lab setting. In addition, students also examine Digital Forensics \& eDiscovery best practices. They will explore approaches to Network Forensic investigations and insider threats while using investigation results to develop reports and courtroom testimony. Lab Fee Required.

Prerequisite: CYBR 100/CYBR 101/CYBR 102

Total Semester Hours: 15

Winter Session

Spring Semester

## ECON 102 - Microeconomics

## Credits: 3

This course is an exploration of economic factors that affect the firm and individual consumers. Topics include the laws of supply and demand, elasticity, consumer demand and utility theory, production, pricing, competitive behavior, monopoly and imperfect competition, labor economics, international trade.

## COMS 210 - Systems Analysis \& Design

Credits: 3
This course examines techniques of computer systems analysis and design with an emphasis on structuring a computer system based on the needs of the user. Final projects will provide students with practical use of contemporary system analysis and design tools. Lab Fee Required.

Prerequisite: COMS 113 or COMS 114 or COMS 120 or COMS 142

## COMS 230-Networks and Telecommunications

## Credits: 3

This course is an introduction to data communications. Topics include various transmission systems, hardware, software and local area networks. Laboratory assignments will include the installation and maintenance of a local area network -Novell NetWare. . Lab Fee Required.

## CYBR 102 - Cyber Law

Credits: 3
Students will explore methods of investigating and preventing cybercrimes and infringements upon information security. Students will discuss laws governing e-commerce and intellectual property protections, focusing on Landmark and other cases such as Napster. The class will also debate privacy rights and free speech on the internet.

Prerequisite: CYBR 100

## CRJS 210 - Criminal Investigation

Credits: 3
This course is an introduction to the field of crime investigation and the detective function. Attention is focused on the history of crime detection, the evolution of scientific investigation, and the methodologies of detection, apprehension and conviction of criminal offenders.

Prerequisite: CRJS 100

Total Semester Hours: 15

Summer Session

## Total Program Hours: 60

Humanities General Education Courses (Recommended)

Recommended courses listed below but student can also choose from the list of approved General Education courses in the College catalog.

## HIST 101 - Hist of Western Civilization I

## Credits: 3

This course emphasizes the political, social, economic, technological, and cultural forces that influenced the historical development of Western Civilization to 1648. Major topics include: Ancient Civilizations, Greece and Rome, Middle Ages, Renaissance, and Reformation.

## Developmental Courses

Sussex has embraced a practice of directed self-choice whereby students are encouraged, through guided conversations with an advisor, to best determine their readiness for this course. Students should be aware that Developmental Studies exist and are available to help strengthen skills and encourage success. Pursuing testing and/or developmental courses is entirely up to the student. Further, testing, though providing a valuable reference point for reflection, does not create for the student an obligation to follow Accuplacer recommendations. required to take and adhere to placement guidance from, the Advanced Algebra and Functions test, as part of Accuplacer, through the college's testing center, for admission into any of the following courses: MATH 110, MATH 112, and MATH 113. Please note, courses in other disciplines may also require advanced mathematics placement. Students should check with their advisor.

## Digital Journalism, Certificate

The Certificate in Digital Journalism prepares students to find employment in the media industry, or can benefit practicing journalists considering professional development. Students will focus on the use of the Internet and digital technology while exploring journalism fundamentals of reporting, writing, editing, and gain proficiency in Web content production, blogging, video production and editing, social media, and other developing trends.

## The objectives of this program are to:

- Demonstrate skills necessary for work in public relations, media and communications organizations.
- Apply knowledge of ethical, legal and content issues to real-life situations concerning online journalism.
- Complete practical experiences as journalists, editors, photographers, video journalists, designers, and media professionals.


## First Year

## Fall Semester

## ENGL 101 - English Composition I

## Credits: 3

This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects which include personal, rhetorical, and expository models. Research skills are introduced.

## COMS 155 - Web Site Development I

## Credits: 3

This course is an introduction to Web Site Development. Students will receive intensive hands-on experience in coding web pages, including linking, layout and design, forms, graphics, security concerns, and maintaining a Web Site. Lab Fee Required.

Prerequisite: COMS 110 or any course above COMS 110

## GRAD 119 - Website Management for Digital Marketing

Credits: 3
This course is designed to introduce students to WordPress Content Management System for either personal or business website use. The course covers the basics on how to use the WordPress platform including installation, content management, and configuration. Prior web publishing experience is not required. Familiarity with web browsers and email is highly recommended. Lab Fee Required.

## GRAD 128 - Digital Imagery \& Editing

Credits: 3
This course provides students with the intensive exploration of advanced digital imaging as it applies to photography creating PDF documents, optimizing web graphics and complex layered images. Students will perfect their ability to creatively use digital imaging software to create sophisticated graphics for print and the web. Further study and practical application will be applied to creating documents for both the Internet and print mediums. An emphasis is placed on developing quality portfolio pieces. Lab Fee Required.

Prerequisite: GRAD 105

## COMM 203 - Writing for the Media

## Credits: 3

This course introduces techniques for writing commercials, interviews, news and dramatic material to be broadcast. Theory and formatting of this specialized type of writing are practiced and analyzed.

Total Semester Hours: 15

## Winter Session

## Spring Semester

## ENGL 215 - Journalism I

## Credits: 3

This course is an introduction to print journalism. Skills to be developed include news reporting, interviewing, copy editing, fact checking, proofreading, as well as writing editorials and feature stories.

Prerequisite: ENGL 101 (Grade of C or better) or Permission of Instructor.

## GRAD 109 - Intro. to Digital Marketing

## Credits: 3

This course focuses on techniques for writing, editing and researching content for social media platforms, and students will publish their work on their own Websites and Blogs. An emphasis is placed on the skills needed for quality storytelling via social media communication. Students will explore blogging, podcasting and social software technology. Students will implement social media research campaigns, develop original web content, and discuss interactive writing, interactive publishing, and the role of the interactive writer. Copyright law, libel law, information ethics and culture will be explored.

Credits: 3
This course is an introduction to the fundamentals of type. Topics covered will include letterforms, text layout and problem solving for print and digital media. The technology and history of typography will be covered as well as page layout and software programs utilizing type. Students will also learn about the nature of color on paper and on the computer, in the printing press and beyond. Color theory, history and preparation information about color for print and web will be covered. Lab Fee Required.

Prerequisite: GRAD 101 and GRAD 105

- PHOT 220 - Photojournalism Credits: 3


## SOCA 101 - Intro. to Sociology

## Credits: 3

This course is an introduction to the analysis and description of structures and dynamics of human society. Emphasis is placed on the application of scientific methods of observation and analysis of social groups, intergroup relations, social change, social stratification, and social institutions.

Total Semester Hours: 15

Summer Session

## Total Program Hours: 30

## Developmental Courses

Sussex has embraced a practice of directed self-choice whereby students are encouraged, through guided conversations with an advisor, to best determine their readiness for this course. Students should be aware that Developmental Studies exist and are available to help strengthen skills and encourage success. Pursuing testing and/or developmental courses is entirely up to the student. Further, testing, though providing a valuable reference point for reflection, does not create for the student an obligation to follow Accuplacer recommendations.

The exception to this is where students seek enrollment in higher-level math courses. Students wishing to enroll in the following math courses are required to take and adhere to placement guidance from, the Advanced Algebra and Functions test, as part of Accuplacer, through the college's testing center, for admission into any of the following courses: MATH 110, MATH 112, and MATH 113. Please note, courses in other disciplines may also require advanced mathematics placement. Students should check with their advisor.

## Digital Marketing Option, A.A.S. - Graphic Design

Graphic designers combine artistic ability with technical knowledge to create designs used in print and electronic media that inform, motivate, educate or sell. The objective of this focused multimedia program is designed to provide traditional techniques and the dynamic structure of current computer-based technology. The program will build the groundwork for a career and provide real-time in a simulated work environment while preparing a competitive portfolio. Students will develop the initiative and critical thinking skills needed to compete in the global marketplace. Approximately one-half of all program graduates go on to complete a baccalaureate degree in graphic design, film, video, illustration, or game art.

## The objectives of this program are to:

- Analyze the history of visual culture and design theory, and apply historical relevance in the context of modern industry issues and trends.
- Execute technical, aesthetic, and conceptual decisions based on understanding the functions of graphic design, illustration, web design, and animation.
- Implement current and emerging technologies using both PC and Macintosh platforms as production tools.
- Utilize problem-solving techniques and critical thinking skills across a wide range of media to capture the attention of intended audiences.
- Collaborate with diverse teams of creative contributors, production personnel and clients while working with creative constraints and deadlines.
- Apply knowledge of intellectual property issues.
- Produce a professional portfolio in both traditional and digital formats.
- Qualify for various entry-level industry positions, including desktop publishing, graphic designers, production artists, web designers, digital image processors, digital illustrators, and assistant art directors.


## First Year

## Fall Semester

## COLL 101 - Foundations for Success

## Credits: 3

This is a student-centered course covering numerous strategies to encourage students to become active and empowered learners. A primary goal of this course is to help students make the most out of their college experience. Students will obtain information about college life and culture and develop strategies and techniques to enhance success in their academic, personal and professional lives. The course is infused with opportunities to understand, practice and implement critical thinking. Students will also gain practical information to help prepare to transfer to a four-year university or enter the workforce directly. All topics will be presented in both theory and practice. This course is required of all degree-seeking candidates and must be taken within the initial 16 credits after entry.

## ENGL 101 - English Composition I

## Credits: 3

This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects which include personal, rhetorical, and expository models. Research skills are introduced.

## GRAD 101 - Design I

## Credits: 3

This course is an exploration of the fundamental principles of design through a series of weekly lectures, discussions, and short readings reinforced by studio assignments and critiques. This class focuses on developing the ability to skillfully use and combine core design elements and utilize design principles while mastering the craft of materials to convey meaning. Assignments are organized and designed to engage students with optimal learning opportunities in developing critical thinking skills and professional vocabulary allowing for further study. Although this course is not a software-oriented course student will be introduced to the computer utilizing Adobe Illustrator and Photoshop to gain very basic skills.

Credits: 3
This course emphasizes techniques and applications used to produce published documents for both Internet and print media. Students will learn to design documents, publications, and related projects using industry standard software on both MAC and PC platforms. An emphasis is placed on basic computer graphic skills through practical experience with two-dimensional paint and draw programs, as well as layout programs for print and web. Projects covered include advertising design, page layout, computer illustrations, digital imaging, and the scanning and manipulation of images. Lab Fee Required.

Prerequisite: Any COMS course

## GRAD 109 - Intro. to Digital Marketing

## Credits: 3

This course focuses on techniques for writing, editing and researching content for social media platforms, and students will publish their work on their own Websites and Blogs. An emphasis is placed on the skills needed for quality storytelling via social media communication. Students will explore blogging, podcasting and social software technology. Students will implement social media research campaigns, develop original web content, and discuss interactive writing, interactive publishing, and the role of the interactive writer. Copyright law, libel law, information ethics and culture will be explored.

Total Semester Hours: 15

Winter Session

## Spring Semester

## ENGL 201 - Effective Speaking

Credits: 3
This is a course in public speaking which stresses speech organization, effective delivery and critical listening skills. A strong emphasis is placed on student performance to help the student gain speech practice and develop self-confidence in a variety of speaking situations.

Prerequisite: ENGL 015 and ENGL 031

## BUSA 101 - Intro. to Business

## Credits: 3

This course is designed to provide the student with an overview of all critical business functions. Topics include forms of business ownership, legal aspects of business, human resource management, finance, marketing, accounting, management information systems, international business and contemporary business issues. Students taking this course are prepared for more advanced courses in business.

- MAST 000 - Math/Science/Technology Gen Ed Requirement Credits: 3

Credits: 3
This course is an introduction to Web Site Development. Students will receive intensive hands-on experience in coding web pages, including linking, layout and design, forms, graphics, security concerns, and maintaining a Web Site. Lab Fee Required.

Prerequisite: COMS 110 or any course above COMS 110

## GRAD 128 - Digital Imagery \& Editing

## Credits: 3

This course provides students with the intensive exploration of advanced digital imaging as it applies to photography creating PDF documents, optimizing web graphics and complex layered images. Students will perfect their ability to creatively use digital imaging software to create sophisticated graphics for print and the web. Further study and practical application will be applied to creating documents for both the Internet and print mediums. An emphasis is placed on developing quality portfolio pieces. Lab Fee Required.

Prerequisite: GRAD 105

Total Semester Hours: 15

Summer Session

Second Year

Fall Semester

## ARTA 103 - Art History I

## Credits: 3

This course surveys visual artistic expression from the Neolithic period to the fourteenth century, including ancient, medieval and non-European art forms. The development of artistic concepts in the ancient world, gender, and non-western art are central topics in this general survey course.

Prerequisite: ENGL 021, ENGL 032 or Placement into ENGL 101

## BUSA 220-Principles of Marketing

## Credits: 3

This course is an introduction to the basic principles and practices in industrial, consumer, and international marketing. Topics include product development, pricing, distribution, and promotion. The course prepares students for advanced study in specialized areas of marketing, retailing, and sales.

Prerequisite: BUSA 101

## Credits: 3

This course is an introduction to typography and layout as applied to visual communication. Students will explore the history of typography, type recognition, typographic terms, fundamentals of type, and the appropriate use of typography in a variety of design applications. Emphasis is placed on the basic design principles of typographic compositions and typesetting. A range of theoretical and applied projects will be used to investigate typography as a fundamental communication tool. Students use both traditional and digital media employing page layout and software programs that utilize type. Lab Fee Required.

Prerequisite: GRAD 101, GRAD 105

## GRAD 119 - Website Management for Digital Marketing

## Credits: 3

This course is designed to introduce students to WordPress Content Management System for either personal or business website use. The course covers the basics on how to use the WordPress platform including installation, content management, and configuration. Prior web publishing experience is not required. Familiarity with web browsers and email is highly recommended. Lab Fee Required.

## GRAD 219 - Digital Marketing II

## Credits: 3

This course is designed to focus on how businesses are using Social Media as advertising tools as well as how to create and organize a welldesigned social media campaign. The use of social media platforms, such as, Facebook, YouTube, Twitter, etc., will be examined in depth. Students explore the importance of growing a social media audience and keeping their organization or clients relevant by tackling socially relevant projects, as well as the advantages of sharing social content, and ethical concerns. Social Media Marketing, Blogging, Search Engine Optimization, Email Marketing and PPC (Pay-per-click) Advertising are reviewed to create Viral Advertising campaigns. Lab Fee Required.

Total Semester Hours: 15

## Winter Session

## Spring Semester

## ARTA 104 - Art History II

## Credits: 3

This course surveys the history of art from the fourteenth through the twenty first centuries. The development of artistic concepts in the contemporary world, art and gender, and non-western art and architecture are central topics in this general survey course. Emphasis is place on viewing art forms in context of culture and gender and understanding the philosophical foundations and critical theories that support and influence them

Prerequisite: ENGL 021, ENGL 032 or Placement into ENGL 101

- GHMN 000 - Humanities Gen Ed Requirement Credits: 3
- GSOC 000 - Social Science Gen Ed Requirement Credits: 3


## GRAD 235 - Video and Motion Graphics

Credits: 3
This course introduces students to software products (editing suites and special effects) that are now widely used in the gaming and entertainment industries for editing and graphic manipulation. Students will learn to use specialized compositing tools to edit scenes, insert graphic effects, place sound effects and blend music to create a final professional product. Software packages used in this class include Adobe's After Effects® and Premiere ${ }^{\circledR}$.

## GRAD 280 - Graphic Design Internship

Credits: 2
This course is designed for Graphic Design majors who have demonstrated advanced skill levels and for those who have potential to perform professionally in a work environment. Internships include practical work experience in an on or off campus business or project (i.e. advertising agencies, graphic design businesses or corporate art departments). An emphasis on personal presentation and success in the workplace is covered

Corequisite: GRAD 135
Prerequisite: GRAD 122, GRAD 144

## GRAD 281 - Portfolio Prep. \& Presentation

## Credits: 1

In this course, students will develop a portfolio of professional quality which is representative of technical and creative skills and career objectives. Excellent portfolio organization and resume presentation, will be stressed. Cover letters, interviewing styles and image presentation will be discussed. Students will write their goals, both short and long range, create a resume and develop a digital and printed portfolio for critique, suitable for presentation to a school, client or job interview.

Corequisite: GRAD 135
Prerequisite: GRAD 122, GRAD 144

Total Semester Hours: 15

Summer Session

Total Program Hours: 60

Math, Science, Technology, Humanities \& Social Science General Education Courses

Choose from the list of approved courses in the College catalog.

Students may need to first take some developmental courses that are designed to prepare students for the college-level coursework in their academic plan. This may add to the students' completion time. The number of credits students take each semester will determine when the student will complete his/her program of study.

## Elder Law Specialist, Certificate

The Elder Law Specialist Certificate encompasses all aspects of life planning for the elder population including illness, incapacity and death of the elderly. Elder Law Specialists may work independently on issues that do not require attorney supervision. This work may include: life enhancement assistance, analysis of housing choices, organizational assistance, preparation of valuation materials for real and personal property appraisals and funeral planning.

## Upon completion of this program, graduates will be able to:

- The specific job tasks of an Elder Law Specialist depend on whether the Elder Law
- Specialist is working under the supervision of an attorney. Depending on the law office, the following tasks might be performed under the direct supervision of an attorney.


## These law firm tasks include:

- Interview prospective clients
- Help plan strategy for legal services
- Visit elderly to review asset documents
- Review elder's current estate plan
- Consult and correspond with elder's creditors and debtors to obtain pertinent information
- Prepare valuation of assets and schedule appraisals of real and personal property
- Review bank statements, estate planning documents to determine status of estate
- Assist attorney in determining whether a guardianship and/or conservatorship is necessary
- Maintain case documents and progress chart and update clients on status
- Draft wills, trusts, powers of attorney, living wills, medical consents, deeds, other legal documents as needed
- Assist attorney with medical, Medicare, Medicaid, Social Security, insurance and banking issues
- Assist attorney in all aspects of the litigation process


# The following tasks may be done by an Elder Law Specialist without direct supervision of an attorney: 

- Assist elder client and his/her family with analysis of housing choices
- Assist elder client and his/her family with life enhancement assistance
- Assist elder client and his/her family with organizational assistance
- Assist elder client and his/her family with preparation of valuation of assets and schedule appraisals of real and personal property
- Assist elder client and his/her family with funeral planning


## First Year

## Fall Semester

Credits: 3
This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects which include personal, rhetorical, and expository models. Research skills are introduced.

## LEGA 100 - Intro. to the American Legal Sys

## Credits: 3

POLS 111 This course is an introduction to the fundamental principles of the American Legal System. Topics include the structure of the state and federal court systems, legal terminology, and constitutional law decisions affecting every citizen and how to work within the system. Students will visit the Superior Court.

## LEGA 110 - Estates and Trusts

## Credits: 3

This course is a study of basic estate planning and administration of decedents' estates. Topics include intestacy, wills, probate, federal and state taxes, accounting, and distribution of assets. Students learn to draft wills and prepare inheritance tax forms.

Prerequisite: LEGA 100

## LEGA 105 - Legal Research \& Writing I

## Credits: 3

This course is an introduction to the legal research process and legal writing. Topics include use of a law library, research techniques, computerassisted legal research, writing office memoranda and case briefs.

Prerequisite: ENGL 101

## PSYC 101 - Introduction to Psychology

## Credits: 3

This course is an introduction to the science of human behavior and mental processes. Emphasis is placed on the relationship between the nervous system and behavior, learning, perception, development, motivation, personality, attitude formation and prejudice, psychopathology and psychotherapy.

Prerequisite: Proficient in all Developmental English Courses

Total Semester Hours: 15

Winter Session

Spring Semester

Credits: 3
This course is designed to provide the student with a level of knowledge necessary to function in today's technological society. Topics include computer and network terminology, hardware, software, and processing concepts. A large portion of the class time is dedicated to exercises performed using integrated software packages. Lab Fee Required.

Corequisite: COMS 110S

## LEGA 120 - Family Law

## Credits: 3

This course is an introduction to New Jersey family law. Topics include divorce, annulment, property distribution, child custody, alimony, and support and visitation of children. New Jersey forms and procedures are reviewed. Students examine case studies and prepare matrimonial pleadings, agreements, and pre-trial memoranda.

Prerequisite: LEGA 100

## LEGA 230 - Elder Law

## Credits: 3

This course is the study of elder law. Topics include: Elder law practice; health problems of the elderly; life planning, including drafting a last will and testament and advance directives for healthcare; guardianship and conservatorship, estate planning, including the use of a variety of trusts; cohabitation, marriage and divorce from the elder law perspective; financial planning, including Social Security, Medicare and Medicaid, taxes, long-term care, viatical settlements and reverse mortgages; housing options, including nursing homes; age discrimination; elder abuse, including financial fraud; grandparents' rights; euthanasia and physician-assisted suicide; and legal aspects of funeral planning. Elder Law introduces the student to the roles attorneys, paralegals and geriatric professionals have within an elder law practice. Students will read case law from a varied selection of states. Student may prepare a variety of legal documents important in a typical elder law practice.

Corequisite: LEGA 100/POLS 111

## PSYC 215 - Psychology of Adult Dev. \& Aging

## Credits: 3

This course involves an investigation of the theory and research involved in the study of the psychology of aging. Particular attention is focused on role and identity changes, personality changes, intelligence, sexuality, the psychosocial aspects of retirement, and death and dying.

Prerequisite: PSYC 101

Total Semester Hours: 12

Summer Session

## LEGA 115 - Real Estate Transactions

Credits: 3
This course is a study of New Jersey real estate legal practice and procedures. Topics include conveyancing, forms, and the theory and practice of real estate transactions. Sample cases are used to illustrate the legal assistant's role in real property conveyance. Landlord-tenant laws and eviction procedures are also discussed

Prerequisite: LEGA 100

Total Semester Hours: 3

Total Program Hours: 30

## Developmental Courses

Sussex has embraced a practice of directed self-choice whereby students are encouraged, through guided conversations with an advisor, to best determine their readiness for this course. Students should be aware that Developmental Studies exist and are available to help strengthen skills and encourage success. Pursuing testing and/or developmental courses is entirely up to the student. Further, testing, though providing a valuable reference point for reflection, does not create for the student an obligation to follow Accuplacer recommendations.

The exception to this is where students seek enrollment in higher-level math courses. Students wishing to enroll in the following math courses are required to take and adhere to placement guidance from, the Advanced Algebra and Functions test, as part of Accuplacer, through the college's testing center, for admission into any of the following courses: MATH 110, MATH 112, and MATH 113. Please note, courses in other disciplines may also require advanced mathematics placement. Students should check with their advisor.

## Electronic Music and Recording Option, A.A.S. - Technical Studies

The Electronic Music degree combines areas of music and electronics in the musical and creative use of electronic production, sound design tools and technologies in this innovative program. Emphasis is on developing hands-on skills in modern electronic music technology, as well as how to use electronic instruments to manipulate sound and create music. Students will explore history, musicianship, theory, composition, and performance to develop an individual creative identity.

## Upon completion of this program, graduates will be able to:

- Demonstrate knowledge of the history, cultural diversity, and heritage of music.
- Acquire an appreciation of music and identify a personal aesthetic.
- Recognize music as art and a universal language with organization and structure
- Identify and articulate the components of music composition.
- Perform music from a variety of genres showing the abilities of a professional.

First Year

Fall Semester

## Credits: 3

This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects which include personal, rhetorical, and expository models. Research skills are introduced.

- GNED 000 - General Education Requirement Credits: 3
- MUSC 002 - Applied Music I Credits: $\mathbf{1}^{*}$
- TSC 000 - Technical Studies Core Credits: $\mathbf{3}$

OR

- ELMR 000 - Program Elective Requirement Credits: 3
- TSC 000 - Technical Studies Core Credits: 1

OR

- ELMR 000 - Program Elective Requirement Credits: 1
- TSC 000 - Technical Studies Core Credits: 1

OR

- ELMR 000 - Program Elective Requirement Credits: 1
- TSC 000 - Technical Studies Core Credits: 1

OR

- ELMR 000 - Program Elective Requirement Credits: 1
- GNED 000 - General Education Requirement Credits: 3

Total Semester Hours: 16

## Winter Session

## Spring Semester

## ENGL 125 - Tech. Writing \& Communication I

## Credits: 3

This course focuses on expository writing for business, industrial, and scientific fields, emphasizing the principles for organizing, writing, and revising clear, readable documents and reports. Students will practice written, oral, reading, and reasoning skills. Research skills will be advanced.

## MATH 105 - Technical Mathematics

## Credits: 3

This course is intended for students who have introductory algebra proficiency, and who need to apply mathematical concepts in a technical program. The purpose of the course is to prepare AAS students for the mathematical aspects of their work in the technical trades.

Prerequisite: Proficiency on the College Placement Examination or grade of C or better in MATH 017/MATH 023.

- TSC 000 - Technical Studies Core Credits: 1

OR

- ELMR 000 - Program Elective Requirement Credits: 1
- TSC 000 - Technical Studies Core Credits: 1

OR

- ELMR 000 - Program Elective Requirement Credits: 1
- TSC 000 - Technical Studies Core Credits: 3

OR

- ELMR 000 - Program Elective Requirement Credits: 3


## MUSC 115 - Electronic Music I

## Credits: 3

This course is an introduction to electronically generated sound and the hands-on practice of electronic music composition utilizing a Digital Audio Workstation, DAW, and sequencing software Musical Instrument Digital Interface, MIDI. Students will focus on building an appreciation of electronic music styles and techniques through an exploration of electronic music history. Emphasis is on the physical properties of sound, synthesizers, music recording and music arrangement. Lab Fee Required.

Corequisite: MUSC 110

- MUSC 002 - Applied Music II Credits: 1 *

Total Semester Hours: 15

Summer Session

Second Year

## Fall Semester

- GTEC 000 - Technology Gen Ed Requirement Credits: 3
- MUSC 002 - Applied Music III Credits: 1 *


## MUSC 140 - Electronic Music II

## Credits: 3

This course is a continuation of Electronic Music I with increased application of sound systems and MIDI systems. Emphasis is to establish the concepts and command of sound production essentials. Students produce recorded final projects. Lab Fee Required.

Corequisite: MUSC 111
Prerequisite: MUSC 110, MUSC 115

- TSC 000 - Technical Studies Core Credits: 1

OR

- ELMR 000 - Program Elective Requirement Credits: 1
- TSC 000 - Technical Studies Core Credits: $\mathbf{3}$

OR

- ELMR 000 - Program Elective Requirement Credits: 3
- TSC 000 - Technical Studies Core Credits: $\mathbf{3}$

OR

- ELMR 000 - Program Elective Requirement Credits: 3

Total Semester Hours: 14

Winter Session

Spring Semester

## MUSC 155 - Live Sound Production

## Credits: 3

This course is designed to allow students an opportunity train in live sound support for public address set up and operations, live sound mixing for musical performances such as concerts, theatrical performances and special presentations requiring public address systems. Emphasis is on the theory and physical workings of a mixing console. Lab Fee Required.

## MUSC 245 - Electronic Music III

## Credits: 3

This course is designed to allow students an opportunity to pursue a topic advanced in nature and solves difficult technical and artistic issues.
Emphasis is on establishing and enhancing technical ability and knowledge of concepts to meet the requirements and demands of a professional within the field of electronic music. Lab Fee Required.

Corequisite: MUSC 214
Prerequisite: MUSC 140

- GHMN 000 - Humanities Credits: 3

OR

- GSOC 000 - Social Science Gen Ed Requirement Credits: 3
- TSC 000 - Technical Studies Core Credits: 3
- ELMR 000 - Program Elective Requirement Credits: 3
- TSC 000 - Technical Studies Core Credits: 3

OR

- ELMR 000 - Program Elective Requirement Credits: 3

Total Semester Hours: 15

Summer Session

## Total Program Hours: 60

## *Applied Music I, II \& III - Course number varies based on student's primary instrument or voice. See College catalog for choices.

## Technical Studies Core or Program Electives Courses (Recommended)

** Technical Studies credits may be earned for corporate, industrial, or military training programs after review by a faculty assessor of related program. In addition to the recommended courses, individuals without sufficient technical training experience can select courses in one of the programs/options listed below to satisfy the Technical Studies and Program Elective credit requirements. All courses should be selected with assistance from a faculty advisor.

## GRAD 128 - Digital Imagery \& Editing

## Credits: 3

This course provides students with the intensive exploration of advanced digital imaging as it applies to photography creating PDF documents, optimizing web graphics and complex layered images. Students will perfect their ability to creatively use digital imaging software to create sophisticated graphics for print and the web. Further study and practical application will be applied to creating documents for both the Internet and print mediums. An emphasis is placed on developing quality portfolio pieces. Lab Fee Required.

Prerequisite: GRAD 105

## MUSC 130 - Piano I

## Credits: 1

This course is first in a sequence facilitating the develop keyboard skills and is required of all music students whose primary instrument is not piano. Students are required to complete additional simultaneously scheduled studio/lab time to meet the goals of the class. Lab Fee Required.

Corequisite: MUSC 110, MUSC 134
Prerequisite: Music Majors or Permission of the Chair
OR

## Credits: 1

This course is the first in a sequence facilitating the development of vocal ability and emphasizes technical exercises, repertoire study, and performances before faculty and peers. Lab Fee Required.

## MUSC 105 - Chorus I

## Credits: 1

This course provides training in style and interpretation of music from all periods of history. It allows students the opportunity to perform in public. (Students may participate on a non-credit basis).

## MUSC 106 - Chorus II

## Credits: 1

Continuation of MUSC 105.

## MUSC 109 - History of Rock and Roll

## Credits: 3

This course examines the history of rock and roll as it unfolded in the United States, from the days before rock (pre-1955) to the end of the 1960s. Students will explore the music of many artists, with an emphasis on both cultural context and on the music itself. Explore how developments in the music business and in technology helped shape the ways in which styles developed.

## MUSC 110 - Introductory Music Theory

## Credits: 3

This course is a beginning level study of music theory, including: notation (reading and dictation), ear training, keyboard skills and basic harmony. Active class participation is required, and students must have regular access to a piano or keyboard.

## MUSC 111 - Music Theory II

## Credits: 3

This course is a continued study of music theory, including: notation (reading and dictation), ear training, keyboard skills and basic harmony. Active class participation is required, and students must have regular access to a piano or keyboard. Lab Fee Required.

Corequisite: MUSC 122, MUSC 131
Prerequisite: MUSC 110

## MUSC 131 - Piano II

## Credits: 1

This course is second in a sequence facilitating the develop keyboard skills and is required of all music students whose primary instrument is not piano. Students are required to complete additional simultaneously scheduled studio/lab time to meet the goals of the class. Lab Fee Required.

Corequisite: MUSC 111, MUSC 135
Prerequisite: MUSC 130, Music Majors
OR

## MUSC 122 - Voice II

## Credits: 1

This course is the second in a sequence facilitating the development of vocal ability and emphasizes technical exercises, repertoire study, and performances before faculty and peers. Lab Fee Required.

Corequisite: MUSC 111, MUSC 135
Prerequisite: MUSC 121

## MUSC 230 - Piano III

## Credits: 1

This course is third in a sequence facilitating the develop keyboard skills and is required of all music students whose primary instrument is not piano. Students are required to complete additional simultaneously scheduled studio/lab time to meet the goals of the class. Lab Fee Required.

Corequisite: MUSC 136, MUSC 214
Prerequisite: MUSC 131, Music Major
OR

## MUSC 225 - Voice III

## Credits: 1

This course is the third in a sequence facilitating the development of vocal ability and emphasizes technical exercises, repertoire study, and performances before faculty and peers. Lab Fee Required.

Corequisite: MUSC 136, MUSC 214
Prerequisite: MUSC 122

## MUSC 160 - Intro. to Aural Comprehension

## Credits: 1

This course is designed to develop musical ear training skills by engaging in singing, writing, progress demonstrations and utilizing computerbased work stations. Emphasis is on scales, rhythms, intervals and harmonic progressions. Lab Fee Required.

Corequisite: MUSC 110, MUSC 121 or MUSC 130, MUSC 134
Prerequisite: Music Major or Permission of the Department Chair

## MUSC 214 - Music Theory III

Credits: 3
This course is a continued study of music theory, including: notation (reading and dictation), ear training, keyboard skills and basic harmony. Active class participation is required, and students must have regular access to a piano or keyboard. Lab Fee Required.

Corequisite: MUSC 225, MUSC 230
Prerequisite: MUSC 111

## GRAD 235 - Video and Motion Graphics

Credits: 3
This course introduces students to software products (editing suites and special effects) that are now widely used in the gaming and entertainment industries for editing and graphic manipulation. Students will learn to use specialized compositing tools to edit scenes, insert graphic effects, place sound effects and blend music to create a final professional product. Software packages used in this class include Adobe's After Effects $\mathbb{B}$ and Premiere®.

## Technology General Education Courses (Recommended)

Recommended courses listed below but student can also choose from the list of approved General Education courses in the College catalog.

## COMS 110-Computer Concepts \& Applications

Credits: 3
This course is designed to provide the student with a level of knowledge necessary to function in today's technological society. Topics include computer and network terminology, hardware, software, and processing concepts. A large portion of the class time is dedicated to exercises performed using integrated software packages. Lab Fee Required.

Corequisite: COMS 110S

## General Education Courses (Recommended)

Recommended courses listed below but student can also choose from the list of approved General Education courses in the College catalog

## MUSC 101 - Music Appreciation

Credits: 3
This course is a study and appreciation of music through directed listening of recordings, films, demonstrations, live performances and readings. The class will focus on the elements of music by exploring examples from a range of musical styles, including classical music, ethnomusical traditions, jazz, and rock. Active class participation and attendance of live performance(s) are required.

# Select Courses from One of the Following Programs(P)/Options(O) 

** (Courses must be approved by appropriate faculty advisor):
Business Management ( P )
Computer Information Systems (P)
Graphic Design (P)
New Media Communications (P)

## Developmental Courses


#### Abstract

Sussex has embraced a practice of directed self-choice whereby students are encouraged, through guided conversations with an advisor, to best determine their readiness for this course. Students should be aware that Developmental Studies exist and are available to help strengthen skills and encourage success. Pursuing testing and/or developmental courses is entirely up to the student. Further, testing, though providing a valuable reference point for reflection, does not create for the student an obligation to follow Accuplacer recommendations.

The exception to this is where students seek enrollment in higher-level math courses. Students wishing to enroll in the following math courses are required to take and adhere to placement guidance from, the Advanced Algebra and Functions test, as part of Accuplacer, through the college's testing center, for admission into any of the following courses: MATH 110, MATH 112, and MATH 113. Please note, courses in other disciplines may also require advanced mathematics placement. Students should check with their advisor.


## Elementary/Secondary Education Option, A.A. - Liberal Arts

The elementary/secondary option is designed for students interested in pursuing a bachelor's degree with teacher certification. The program is based on New Jersey teacher certification regulations and emulates the freshman and sophomore curriculum in four-year institutions, enabling student transfer to four-year institutions.

## Upon completion of this program, graduates will be able to:

- Demonstrate an understanding of child growth and development and relate it to learning opportunities in all domains of development.
- Display an awareness and appreciation for diversity and multi-culturalism and the interrelationship between families, school, and society.
- Reflect on the multifaceted roles of a teacher and the principles and practices involved in teaching.


## First Year

Fall Semester

## Credits: 3

This is a student-centered course covering numerous strategies to encourage students to become active and empowered learners. A primary goal of this course is to help students make the most out of their college experience. Students will obtain information about college life and culture and develop strategies and techniques to enhance success in their academic, personal and professional lives. The course is infused with opportunities to understand, practice and implement critical thinking. Students will also gain practical information to help prepare to transfer to a four-year university or enter the workforce directly. All topics will be presented in both theory and practice. This course is required of all degree-seeking candidates and must be taken within the initial 16 credits after entry.

## ENGL 101 - English Composition I

## Credits: 3

This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects which include personal, rhetorical, and expository models. Research skills are introduced.

## MATH 104 - Contemporary Mathematics

## Credits: 3

This course surveys several basic concepts of mathematics designed to give non-scientific/non-technical majors an understanding of the breadth of mathematics in areas other than computational application. Topics include: logic, financial management, geometry, measurement, probability and statistics.

Prerequisite: MATH 017/MATH 023 (Grade of C or better) or appropriate algebra placement score

- GSOC 000 - Social Science Gen Ed Requirement Credits: 3
- GTEC 000 - Technology Gen Ed Requirement Credits: 3

Total Semester Hours: 15

Winter Session

Spring Semester

## ENGL 102 - English Composition II

## Credits: 3

This course introduces students to short fiction, poetry, drama, and the novel. Written assignments are based on the readings. Writing skills learned in Composition I are further developed. Students will write a research paper which demonstrates understanding of literary criticism.

Prerequisite: ENGL 101 (Grade of C or better)

- GHMN 000 - Humanities Gen Ed Requirement Credits: 3
- LSCI 000 - Science Gen Ed Requirement Credits: 4
- GSOC 000 - Social Science Gen Ed Requirement Credits: 3


## Fall Semester

## ENGL 201 - Effective Speaking

Credits: 3
This is a course in public speaking which stresses speech organization, effective delivery and critical listening skills. A strong emphasis is placed on student performance to help the student gain speech practice and develop self-confidence in a variety of speaking situations.

Prerequisite: ENGL 015 and ENGL 031

- EDUC 000 - Program Requirement Credits: 3
- HIST 001 - History Gen Ed Requirement Credits: 3
- LSCI 000 - Science Gen Ed Requirement Credits: 4


## SOCA 215 - Perspectives On Race, Gender, Class and Culture

Credits: 3
This course explores the effects of social structure and of dominant and sub-cultural norms and values on individuals, families and groups. Racism, sexism, homophobia, ageism, class bias and rigid gender roles are examined in depth with focus on the effects of advanced industrial capitalism on these phenomena.

Prerequisite: SOCA 101

Total Semester Hours: 16

## Winter Session

## Spring Semester

## Credits: 1

This course is for degree seeking students in the Liberal Arts Education Option, who have completed 45 credit hours. The course is designed to assist students in the transition from the community college experience to a four year educational institution or to placement in the work force within the education field. Emphasis is placed on the development of a professional portfolio that documents coursework and experiences relevant to the New Jersey Professional Standards for Teachers (N.J.A.C.6A:9-3.3) or Interstate New Teacher Assessment and Support Consortium (INTASC) Standards.

Corequisite: EDUC 202 or EDUC 286
Prerequisite: EDUC 202 or EDUC 286, 45 credits completed

- HIST 001 - History Gen Ed Requirement Credits: 3
- PHIL 000 - Philosophy Gen Ed Requirement Credits: 3
- GHMN 000 - Humanities Gen Ed Requirement Credits: 3


## EDUC 286 - Principles \& Practices of Teaching as a Profession

## Credits: 3

This course introduces the basic elements of teaching, such as classroom management, literacy, diversity of learners, lesson planning, multicultural education, and teaching methodologies. Students observe in a public school setting, interview a teacher. Effective speaking and writing skills are an integral part of the assessment of students in this course. Students utilize professional teaching standards to assess their teaching styles and abilities as future teachers. Familiarity with the New Jersey Core Curriculum Content Standards is also a component of this course.

Prerequisite: 32 Credits with a GPA of 2.75

Total Semester Hours: 13

Summer Session

## Total Program Hours: 60

## Philosophy General Education Courses (Recommended)

Recommended courses listed below but student can also choose from the list of approved Philosophy General Education courses in the College catalog.

## PHIL 110 - Philosophy \& the Meaning of Life

## Credits: 3

This course is an introduction to philosophical analysis through an examination of the recurring issue of philosophy and the meaning of life. Topics of discussion will include: nature and methodology of philosophy, reality, existence of God, human freedom, and the value of existence.

# Humanities \& Technology General Education Courses 

Choose from the list of approved courses in the College catalog.

## Science General Education Courses (Recommended)

Choose from the list of approved Science General Education courses in the College catalog.

## BIOS 101 - General Biology

Credits: 4
This course introduces the student to the principles of modem biology. Emphasis is on the chemistry, structure, heredity, reproduction, development, ecology, and evolution of living things. For non-science majors. Lab Fee Required.

Corequisite: BIOS 101L

## BIOS 122 - Intro. to Environmental Science

## Credits: 4

This course is designed to explore the factors influencing the environment and to increase awareness of environmental problems. Topics include air, land, and water resources, ecology, waste management, and the human effects on the environment. Lab exercises and field trips will supplement the theory presented. Lab Fee Required.

Corequisite: BIOS 122L

## History General Education Courses

Choose from the list of approved History General Education courses in the College catalog. Must choose a level I \& II sequence.

## Social Science General Education Courses (Recommended)

Recommended courses listed below but student can also choose from the list of approved Social Science General Education courses in the College catalog.

## PSYC 101 - Introduction to Psychology

## Credits: 3

This course is an introduction to the science of human behavior and mental processes. Emphasis is placed on the relationship between the nervous system and behavior, learning, perception, development, motivation, personality, attitude formation and prejudice, psychopathology and psychotherapy.

## SOCA 101 - Intro. to Sociology

## Credits: 3

This course is an introduction to the analysis and description of structures and dynamics of human society. Emphasis is placed on the application of scientific methods of observation and analysis of social groups, intergroup relations, social change, social stratification, and social institutions.

## Program Required Courses

## (choose two)

## CDEV 101 - Intro. to Early Childhood Educ.

## Credits: 3

This course presents an overview of early childhood education. Observing and assessing children in a pre-school setting will be part of the course. Any student thinking of parenthood or a career working with young children would benefit from this course.

## EDUC 202 - Historical and Philosophical Patterns in Education

Credits: 3
This course examines the societal philosophies which have influenced the historical development of educational theory and practice.

## PSYC 280 - Educational Psychology

Credits: 3
This course explores the application of psychological principles to the educational environment. Theories of learning, memory, cognition, and behavior management are used to help the student who is a prospective teacher find an optimal instructional approach.

Prerequisite: PSYC 101

## Developmental Courses

Sussex has embraced a practice of directed self-choice whereby students are encouraged, through guided conversations with an advisor, to best determine their readiness for this course. Students should be aware that Developmental Studies exist and are available to help strengthen skills and encourage success. Pursuing testing and/or developmental courses is entirely up to the student. Further, testing, though providing a valuable reference point for reflection, does not create for the student an obligation to follow Accuplacer recommendations.

The exception to this is where students seek enrollment in higher-level math courses. Students wishing to enroll in the following math courses are required to take and adhere to placement guidance from, the Advanced Algebra and Functions test, as part of Accuplacer, through the college's

# Engineering Science Option, A.S. - Science/Mathematics 

This program encompasses a variety of closely related areas of the sciences, mathematics, and engineering. It is intended to provide a means whereby students, while acquiring knowledge of engineering methods, can pursue their interests in areas of natural science. The options offered within the curriculum prepare students for advanced study in engineering.

# Upon completion of this program, graduates will be able to: 

- Design and conduct experiments, as well as to analyze and interpret data
- Identify, formulate, and solve engineering problems
- Demonstrate an understanding of professional and ethical responsibility
- Understand the impact of engineering solutions in a global, economic, environmental, and societal context
- Use the techniques, skills, and modern engineering tools necessary for engineering practice


## First Year

## Fall Semester

## COLL 101 - Foundations for Success

## Credits: 3

This is a student-centered course covering numerous strategies to encourage students to become active and empowered learners. A primary goal of this course is to help students make the most out of their college experience. Students will obtain information about college life and culture and develop strategies and techniques to enhance success in their academic, personal and professional lives. The course is infused with opportunities to understand, practice and implement critical thinking. Students will also gain practical information to help prepare to transfer to a four-year university or enter the workforce directly. All topics will be presented in both theory and practice. This course is required of all degree-seeking candidates and must be taken within the initial 16 credits after entry.

## ENGL 101 - English Composition I

Credits: 3
This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects which include personal, rhetorical, and expository models. Research skills are introduced.

## MATH 113 - Calculus I

## Credits: 4

This course includes a review of algebraic and transcendental functions and their graphs; study of the concepts of limits and continuity, the derivative and its applications; indeterminate forms; introduction to integration and its applications.

## CHEM 110 - College Chemistry I

## Credits: 4

This course covers general chemical principles and their applications in research and industry. Topics include matter and measurement; math in chemistry; atoms; molecules, and ions; elemental periodicity; stoichiometry; formulas and , equations; the mole; intramolecular and intermolecular bonds; reaction types including redox and acid/base; properties and reactions of solutions, gases, and the solid state; industrial processes. The lab component covers materials separation, analytical methods and instruments, qualitative and quantitative analysis; and lab report writing skills. This course is scheduled during the day in the fall semester, and during the evening in the spring semester. Lab Fee Required.

Corequisite: MATH 110, CHEM 110L

## COMS 114 - Intro. to Computer Science I

## Credits: 3

This course introduces the student to the fundamentals of computer science using an emphasis on programming methodology and problem solving. Topics include introductory concepts of computer systems, algorithm design, programming languages, software engineering, and data abstraction with related applications. A high level programming language is completely discussed and is used as a means to demonstrate concepts. Lab Fee Required.

Total Semester Hours: 17

## Winter Session

## Spring Semester

## ENGL 102 - English Composition II

## Credits: 3

This course introduces students to short fiction, poetry, drama, and the novel. Written assignments are based on the readings. Writing skills learned in Composition I are further developed. Students will write a research paper which demonstrates understanding of literary criticism.

Prerequisite: ENGL 101 (Grade of C or better)

## MATH 114 - Calculus II

## Credits: 4

This course is the second semester of a three semester sequence of introductory calculus. Topics include integration techniques, applications of integration, delete in.... forms infinite series, parametric equations, and polar coordinates.

Prerequisite: MATH 113 (Grade of C or better)

Credits: 4
This course is a continuation of CHEM 110, College Chemistry I. Topics include chemical kinetics; chemical equilibrium; chemical thermodynamics, electrochemistry, nuclear chemistry, main-group element chemistry, metals and metallurgy, transition metals and coordination chemistry, environmental chemistry; introduction to organic and biological chemistry. The lab component covers kinetics, electrochemistry, and coordination compounds. The course is scheduled during the day in the spring semester, and during the evening in the fall semester. Lab Fee Required.

Corequisite: CHEM 112L
Prerequisite: CHEM 110 (Grade of C or better)

## ECON 101 - Macroeconomics

## Credits: 3

This course is an analysis of major economic concepts. Topics include the elements of national income; the economic roles of government and labor; classical economics; monetary institutions and policies; the Keynesian model and modern fiscal policy; the macroeconomic aspects of world trade.

Total Semester Hours: 14

Summer Session

## Second Year

## Fall Semester

## MATH 213 - Calculus III

## Credits: 4

This course is a continuation of Calculus II. Topics include analytic geometry in three dimensions, functions of several variables, partial derivatives, multiple integrals, vectors, and introduction to vector calculus.

Prerequisite: MATH 114 (Grade of C or better)

## PHYS 120 - Physics I with Calculus

## Credits: 4

This course will introduce the student to problem solving and laboratory techniques in calculus based physics. Topics include vectors, forces, mechanics, kinematics, fluids, thermodynamics, and waves. Lab Fee Required.

Prerequisite: MATH 113, MATH 114 (Grade of C or better) (MATH 114 may be taken concurrently)

- GSOC 000 - Social Science Gen Ed Requirement Credits: 3
- ENGS 000 - Option Elective Credits: 3

Total Semester Hours: 14

Winter Session

Spring Semester

## PHYS 121 - Physics II with Calculus

## Credits: 4

This course is a continuation of Physics I with Calculus. Topics include electromagnetism, circuits, electromagnetic waves, optics, and relativity. Lab Fee Required.

Corequisite: MATH 213 (Grade of C), PHYS 121L
Prerequisite: PHYS 120 (Grade of C)

- GHMN 000 - Humanities Gen Ed Requirement Credits: 3
- ENGS 000 - Option Elective Credits: 4
- ENGS 000 - Option Elective Credits: 4

Total Semester Hours: 15

Summer Session

Total Program Hours: 60

Humanities General Education Courses (Recommended)

## HUMN 101 - Survey of World Culture I

## Credits: 3

This survey course explores the evolution of western and non-western key ideas in art, music, and literature from prehistoric times to the 14th century. Emphasis is placed on the comparison of social, economic, religious, and political forces in the arts in a variety of cultures and diverse people.

## Credits: 3

This survey course explores the evolution of western and non-western key ideas in art, music, and literature from the 15 th to 21 st century societies. Emphasis is placed on the comparison of social, economic, religious, and political forces in the arts in a variety of cultures and diverse people.

## PHIL 205 - Contemporary Ethical Issues

## Credits: 3

This course is an introduction to the study of moral theories and their justification, including an examination of contemporary moral concerns as test cases.

## Social Science General Education Courses (Recommended)

Recommended courses listed below but student can also choose from the list of approved General Education courses in the College catalog.

## ANTH 101 - Introduction to Anthropology

## Credits: 3

This course is an integrated overview of the four fields of anthropology. Physical anthropology, cultural anthropology, linguistics, and archeology are explored as subfields and together as an integrated whole. Emphasis is placed on the study of the social and biological origins of human culture, religious diversity, linguistic diversity, and patterns of social inequalities.

## ECON 102 - Microeconomics

## Credits: 3

This course is an exploration of economic factors that affect the firm and individual consumers. Topics include the laws of supply and demand, elasticity, consumer demand and utility theory, production, pricing, competitive behavior, monopoly and imperfect competition, labor economics, international trade.

## GEOG 105 - Cultural Geography

## Credits: 3

This course will function as a map to the cultural landscape of our world. It combines aspects of economic and cultural geography. It will examine the interrelations between humans and their natural environments as well as examine the difference between one place and another in terms of the customs, mores and institutions that create and maintain human societies.

Credits: 3
This course provides a general introduction to the discipline of political science. The course focuses on the major sub-disciplines of political science including practical theory, international relations, comparative politics, and identity politics. The course is designed to encourage active student participation in the political process.

## SOCA 101 - Intro. to Sociology

## Credits: 3

This course is an introduction to the analysis and description of structures and dynamics of human society. Emphasis is placed on the application of scientific methods of observation and analysis of social groups, intergroup relations, social change, social stratification, and social institutions.

## Option Electives

## COMS 115 - Intro. to Computer Science II

## Credits: 3

This course is the continuation of COMS 114. Topics include intermediate to advanced programming techniques with logical data structures and the design and analysis of such structures. The course also covers techniques for program development, algorithm analysis, efficiency, along with abstraction, an introduction to data structures, searching, sorting, recursion and string manipulation. Lab Fee Required.

Prerequisite: COMS 114 or Equivalent

## COMS 143 - Advanced Programming in C++

Credits: 3
This course is a continuation of COMS 142 , presenting some of the more advanced features of programming in $\mathrm{C}++$. The topics covered will include multidimensional arrays, strings, file input/output, data structures and object oriented techniques. Lab Fee Required.

Prerequisite: COMS 142 or Equivalent

## COMS 225 - Computer Aided Design

## Credits: 3

This course is an introduction to the principles of Computer-Aided Design (CAD) and the operation of CAD Systems. Students will use data entry devices to prepare working diagrams and schematic designs on industrial level workstations with Auto CAD. Lab Fee Required.

Prerequisite: Prior exposure to microcomputers and/or drafting

## COMS 226 - Computer Aided Design II

## Credits: 3

This course is a follow-up for COMS 225 Computer Aided Design (CAD). It includes intermediate to advanced topics utilizing AutoCAD.

Students will extend their knowledge of 2D and 3D CAD design, drafting, modeling, architectural drawing, and engineering. Projects are integrated into the class lectures. Lab Fee Required.

## COMS 239 - Fund. of Computer Architecture

## Credits: 3

This course is an introduction to computer organization and architecture. Topics covered are the overview of the early Von Neumann model through modern architectural models. Topics also presented include data representation, digital logic, circuit diagrams, assembly language organization, processors, memory addressing, memory storage, input/output processing, and interfaces. Lab Fee Required.

Corequisite: COMS 114 or COMS 142

## ELET 105 - Electronic Circuits I

## Credits: 4

This introductory course in circuit analysis defines fundamental electrical quantities and examines their relationship to various circuit components. Circuits comprised of resistance, capacitance, and inductance which are energized by both DC and AC sources are considered. In the laboratory the students perform experiments that confirm/demonstrate their grasp of the theory.

Corequisite: ELET 105L
Prerequisite: MATH 112

## ENGR 125 - Numerical Methods for Engineers

## Credits: 3

Numerical methods provide a way for the engineer to translate the language of mathematics and physics into information that may be used to make engineering decisions. Often, this translation is implemented so that calculations maybe done by computers. The types of problems encountered as an engineer may involve a wide variety of mathematical phenomena, and hence it is beneficial to have an equally wide range of numerical methods with which to approach some of these problems. This course will provide an introduction to several of those methods

## ENGR 220 - Engineering Statics

Credits: 3
A study of the motion of bodies without reference to the forces; which cause the motion and the action of forces acting on the bodies and their resulting motions. Rectilinear and curvilinear motion in two and three dimensions using rectangular, normal/tangential and polar coordinate systems are investigated in kinematics. Kinetics includes discussions on work, potential and kinetic energy. Impulse and momentum are analyzed from Newton's second law along with the concepts of conservation of energy and momentum.

## ENGR 222 - Engineering Dynamics

Credits: 3
A study of the motion of bodies without reference to the forces; which cause the motion and the action of forces acting on the bodies and their resulting motions. Rectilinear and curvilinear motion in two and three dimensions using rectangular, normal/tangential and polar coordinate systems are investigated in kinematics. Kinetics includes discussions on work, potential and kinetic energy. Impulse and momentum are analyzed

## MATH 215 - Linear Algebra

## Credits: 4

This course provides an introduction to Linear Algebra and its applications. Topics include systems of linear equations and matrices, determinants, vectors and vector spaces, linear transformations, eigenvalues and eigenvectors.

Corequisite: MATH 114

## MATH 220 - Ordinary Differ. Equa. w/ Applic

## Credits: 4

This course covers first and second order ordinary differential equations; systems of ordinary differential equations; applications of ordinary differential equations; and numeric and computational modeling techniques. The numeric modeling will be done by computer programming.

Prerequisite: MATH 114 (Grade of C or better)

## PHYS 205 - Modern Physics

## Credits: $\mathbf{4}$

This course covers the modem era of Physical Science from Relativity, quantum properties, Schrodinger's equation, and their applications. It begins where PHYS 121 ends (with Optical Systems) and finishes the student's introduction to basic Physics concepts.

Corequisite: MATH 213, MATH 215, PHYS 205L
Prerequisite: PHYS 121

## PHYS 210-Mechanics

## Credits: 4

ENGR210 This course studies the equilibrium of particles and rigid bodies subject to concentrated and distributed Newtonian forces. These studies are also applied to particles; rectilinear motion; simple, damped, and driven oscillations; gravitation and central forces; Lagrange's equations and the Hamiltonian.

Corequisite: MATH 220
Prerequisite: PHYS 120 (Grade of C or better)

## Developmental Courses

Sussex has embraced a practice of directed self-choice whereby students are encouraged, through guided conversations with an advisor, to best determine their readiness for this course. Students should be aware that Developmental Studies exist and are available to help strengthen skills and encourage success. Pursuing testing and/or developmental courses is entirely up to the student. Further, testing, though providing a valuable reference point for reflection, does not create for the student an obligation to follow Accuplacer recommendations.

The exception to this is where students seek enrollment in higher-level math courses. Students wishing to enroll in the following math courses are required to take and adhere to placement guidance from, the Advanced Algebra and Functions test, as part of Accuplacer, through the college's

# English Option, A.A. - Liberal Arts 

This program prepares students for transfer to a four-year college with a major in writing and/or literature. Students will develop excellent reading, writing, analysis, and research skills. Therefore, an English major can serve as a basis for careers in education, business, law, and publishing.

Students majoring in English are given the opportunity to publish their work in College publications such as Idiom \& Image.

# Upon completion of this program, graduates will be able to: 

- Communicate clearly, formally, and informally, in both oral and written form.
- Demonstrate facility in critical thinking, problem-solving, and textual analysis.
- Compose literary research papers using scholarly, peer-reviewed critical sources.
- Demonstrate an understanding of the diverse historical and social factors that shape authors and texts.
- Display an appreciation for the place of literary texts within their individual lives and in the world as a global society.


## First Year

## Fall Semester

## COLL 101 - Foundations for Success

## Credits: 3

This is a student-centered course covering numerous strategies to encourage students to become active and empowered learners. A primary goal of this course is to help students make the most out of their college experience. Students will obtain information about college life and culture and develop strategies and techniques to enhance success in their academic, personal and professional lives. The course is infused with opportunities to understand, practice and implement critical thinking. Students will also gain practical information to help prepare to transfer to a four-year university or enter the workforce directly. All topics will be presented in both theory and practice. This course is required of all degree-seeking candidates and must be taken within the initial 16 credits after entry.

## ENGL 101 - English Composition I

## Credits: 3

This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects which include personal, rhetorical, and expository models. Research skills are introduced.

- MATH 900 - Math Gen Ed Requirement Credits: 3
- GHMN 000 - Humanities Gen Ed Requirement Credits: 3
- GSOC 000 - Social Science Gen Ed Requirement Credits: 3


## ENGL 102 - English Composition II

## Credits: 3

This course introduces students to short fiction, poetry, drama, and the novel. Written assignments are based on the readings. Writing skills learned in Composition I are further developed. Students will write a research paper which demonstrates understanding of literary criticism.

Prerequisite: ENGL 101 (Grade of C or better)

## ENGL 201 - Effective Speaking

Credits: 3
This is a course in public speaking which stresses speech organization, effective delivery and critical listening skills. A strong emphasis is placed on student performance to help the student gain speech practice and develop self-confidence in a variety of speaking situations.

Prerequisite: ENGL 015 and ENGL 031

- LSCI 000 - Science Gen Ed Requirement Credits: 3
- GTEC 000 - Technology Gen Ed Requirement Credits: 3
- GHMN 000 - Humanities Gen Ed Requirement Credits: 3

Total Semester Hours: 15

Summer Session

## Second Year

## Fall Semester

## ENGL 213 - Literary Masterpieces of the Western World I

## Credits: 3

This course examines some of the great works of the western world from the age of Homer to the late Middle Ages. Works studied include the Greek masterpieces, Roman literature, the Bible, Old English works, Chaucer, and Dante.

Prerequisite: ENGL 102

- ENGL 001 - Literature Sequence Requirement Credits: 3
- GMSC 000 - Math or Science Gen Ed Requirement Credits: 3
- PHIL 000 - Philosophy Gen Ed Requirement Credits: 3
- HIST 001 - History Gen Ed Requirement Credits: 3


## Total Semester Hours: 15

## Winter Session

## Spring Semester

## ENGL 207 - Literature by Women

Credits: 3
In this course, students will develop a portfolio of professional quality that is representative of technical and creative skills and career objectives. Excellent portfolio organization and resume presentation will be stressed. Cover letters, interviewing styles, and image presentation will be discussed. Students will write their goals, both short and long range, create a resume and develop a digital and presented portfolio for critique suitable for presentation to a school, client, or job interview.

Prerequisite: ENGL 102 (Grade of C or better)

- ENGL 001 - Literature Sequence Requirement Credits: 3
- HIST 001 - History Gen Ed Requirement Credits: 3
- GSOC 000 - Social Science Gen Ed Requirement Credits: 3
- ENGL 000 - Program Elective Credits: 3

Total Semester Hours: 15

Summer Session

Total Program Hours: 60

## Humanities General Education Courses (Recommended)

Recommended courses listed below but student can also choose from the list of approved Humanities General Education courses in the College catalog.

## ARTA 103 - Art History I

## Credits: 3

This course surveys visual artistic expression from the Neolithic period to the fourteenth century, including ancient, medieval and non-European art forms. The development of artistic concepts in the ancient world, gender, and non-western art are central topics in this general survey course.

Prerequisite: ENGL 021, ENGL 032 or Placement into ENGL 101

## ARTA 104 - Art History II

## Credits: 3

This course surveys the history of art from the fourteenth through the twenty first centuries. The development of artistic concepts in the contemporary world, art and gender, and non-western art and architecture are central topics in this general survey course. Emphasis is place on viewing art forms in context of culture and gender and understanding the philosophical foundations and critical theories that support and influence them

Prerequisite: ENGL 021, ENGL 032 or Placement into ENGL 101

## ARTA 106 - Art Appreciation

## Credits: 3

This course builds an informed foundation for students wishing to understand and enjoy art. Art theory, practice, and history are introduced, through which students expand their awareness of visual arts and are encouraged to realize their own innate creative potential. All mediums are studied: painting, sculpture, photography, multimedia, film, design, and printmaking, including a comprehensive global/gender inclusive art history survey.

Prerequisite: ENGL 011

## ARTA 107 - History of Contemporary Art

## Credits: 3

This course surveys the history of Contemporary Art, beginning with its roots in the Modernism of Europe at the beginning of the twentieth century and developing comparisons and historical connections to Contemporary Art in today's world art market. Emphasis is placed on viewing art forms in context of their history and intention and understanding the philosophical foundations and critical theories that support and influence them.

## HUMN 101 - Survey of World Culture I

## Credits: 3

This survey course explores the evolution of western and non-western key ideas in art, music, and literature from prehistoric times to the 14th century. Emphasis is placed on the comparison of social, economic, religious, and political forces in the arts in a variety of cultures and diverse people.

## HUMN 102 - Survey of World Culture II

## Credits: 3

This survey course explores the evolution of western and non-western key ideas in art, music, and literature from the 15 th to 21 st century societies. Emphasis is placed on the comparison of social, economic, religious, and political forces in the arts in a variety of cultures and diverse
people.

## MUSC 101 - Music Appreciation

## Credits: 3

This course is a study and appreciation of music through directed listening of recordings, films, demonstrations, live performances and readings. The class will focus on the elements of music by exploring examples from a range of musical styles, including classical music, ethnomusical traditions, jazz, and rock. Active class participation and attendance of live performance(s) are required.

## THEA 208 - Theater History I

## Credits: 3

This course is a survey of dramatic literature and theatrical history from ancient times through the Renaissance. Students will be introduced to all areas of the theater including: acting, directing, design, and theater architecture.

OR

## ENGL 208 - Theater History I

## Credits: 3

PERA208 This course is a survey of dramatic literature and theatrical history from ancient times through the Renaissance. Students will be introduced to all areas of the theater including: acting, directing, design, and theater architecture.

## Prerequisite: ENGL 101

- THEA 209 - Theater History II Credits: 3

OR

## ENGL 209 - Theater History II

## Credits: 3

PERA209 This course is a survey of dramatic literature and theatrical history from the Renaissance through modern times. Students will be introduced to all areas of the theater including: acting, directing, design, and theater architecture.

Prerequisite: ENGL 101

## PHOT 120 - History of Photography

## Credits: 3

This course is an historical survey of fine art photography from the camera obscura to 21 st century digital techniques. The course will emphasize the aesthetics, applications, and social impact of photography on our culture; this course will include the relationship of photography to other visual art forms.

## AMSL 101 - American Sign Language I

Credits: 3
This course is designed to develop basic communicative skills in American Sign Language. This course will emphasize grammatical structures, sign vocabulary, fingerspelling, numbers, expressive and receptive skills, facial grammar and non-manual communication, and the anatomy and physiology of the human hearing system and hearing loss. Additionally, this course provides an introduction to the culture of the Deaf community.

Corequisite: ENGL 021 and ENGL 032

## AMSL 102 - American Sign Language II

Credits: 3
This course strengthens students' expressive and receptive skills in American Sign Language, broadens their understanding of the Deaf community, culture and language, and provides an additional vocabulary base of several hundred signs from American Sign Language. This course instructs the student in the use of classifiers as well as providing them with an introduction to the idiomatic vocabulary of American Sign Language.

Prerequisite: AMSL 101

## GRMN 101 - Elementary German I

Credits: 3
This is an introductory course in German emphasizing fundamentals of speaking, reading, writing, and listening. The course focuses on building basic vocabulary and introducing students to the German culture. It is designed for students with no German experience.

## GRMN 102 - Elementary German II

## Credits: 3

This course is a continuation of GRMN 101 with an emphasis on the fundamentals of speaking, writing and listening. The course focuses on building basic vocabulary and continuing the study of German culture.

Prerequisite: GRMN 101 (Grade of C or better) or two years of high school German (Grade of C or better)

## SPAN 101 - Elementary Spanish I

## Credits: 3

This is an introductory course in Spanish emphasizing the fundamentals of speaking, reading, writing, and listening. The course focuses on building basic vocabulary and introducing students to the Hispanic culture. It is designed for students with no Spanish experience.

## SPAN 102 - Elementary Spanish II

## Credits: 3

This course is a continuation of SPAN 101 with an emphasis on the fundamentals of reading, speaking, writing, and listening. The course focuses
on building basic vocabulary and continuing the study of Hispanic culture.
Prerequisite: SPAN 101 (Grade of C or better) or two years of high school Spanish (Grade of C or better)

## Math/Science General Education Courses (Recommended)

Recommended courses listed below, student can also choose from the list of approved Math and Science General Education courses in the College catalog.

## MATH 104 - Contemporary Mathematics

## Credits: 3

This course surveys several basic concepts of mathematics designed to give non-scientific/non-technical majors an understanding of the breadth of mathematics in areas other than computational application. Topics include: logic, financial management, geometry, measurement, probability and statistics.

Prerequisite: MATH 017/MATH 023 (Grade of C or better) or appropriate algebra placement score

## MATH 106 - Mathematical Concepts

## Credits: 3

This course surveys several basic concepts of mathematics designed to give non-scientific/non-technical majors an understanding of the breadth of mathematics in areas other than computational application. Topics include: problem solving, the real number system, linear and quadratic equations, exponents and logarithms, graphs and functions, and graph theory.

Prerequisite: Proficiency on the College Placement Examination or Grade of C or Better in MATH 017/MATH 023

## MATH 108 - Statistics

## Credits: 3

This course includes the following topics: organization of data, measures of central tendency and dispersion, probability, the normal and binomial distributions, confidence intervals, hypothesis testing, analysis of variance, and correlation.

Prerequisite: MATH 017 (Grade of C or betterI) or MATH 023 (Grade of C or betterI) or appropriate algebra placement score

## BIOS 101 - General Biology

## Credits: 4

This course introduces the student to the principles of modem biology. Emphasis is on the chemistry, structure, heredity, reproduction, development, ecology, and evolution of living things. For non-science majors. Lab Fee Required.

Corequisite: BIOS 101L

## Credits: 4

This course is an introduction to human anatomy and physiology for the non-biology major. It is designed to develop an appreciation for the structure and functions of the human body; to point out the relationship of body systems to health and disease; and to emphasize human biology as it relates to everyday living experiences. Lab Fee Required.

Corequisite: BIOS 102L

## BIOS 108 - Introduction to Environmental Sustainability

## Credits: 4

This course is designed to explore the factors influencing the environment and to increase awareness of environmental problems and solutions. The student will learn scientific methods and scientific knowledge of issues of a sustainable future. Topics include population, energy, natural resources, food, water, biodiversity, waste management, global climate change, and the social, legal, ethical and cultural impacts of human interaction with the environment. Many issues will be examined from varying points of view, requiring comparisons of different attitudes and considerations. Ethical implications of action, policy, and situations will be examined. Lab exercises and service learning will supplement the theory presented. Volunteer work or the equivalent will be required. Purchase of lab equipment required.

Corequisite: BIOS 108L

## BIOS 122 - Intro. to Environmental Science

## Credits: 4

This course is designed to explore the factors influencing the environment and to increase awareness of environmental problems. Topics include air, land, and water resources, ecology, waste management, and the human effects on the environment. Lab exercises and field trips will supplement the theory presented. Lab Fee Required.

Corequisite: BIOS 122L

## PHYS 107 - Introductory Meteorology

## Credits: 4

This introductory course consists of five areas of concentration-atmospheric components; weather systems; upper air dynamics; satellite and radar interpretation of severe and weather elements; a review of historical weather events and their social and geographical effects; systems examined include hurricanes; severe thunderstorms and the mesosyclone; forms of precipitation; hourly observations; cloud identification; interpretation NCEP/NOAH data for forecast modeling data.

Corequisite: PHYS 107L

## Social Science General Education Courses (Recommended)

Recommended courses listed below but student can also choose from the list of approved Philosophy General Education courses in the College catalog.

## ANTH 101 - Introduction to Anthropology

Credits: 3

This course is an integrated overview of the four fields of anthropology. Physical anthropology, cultural anthropology, linguistics, and archeology are explored as subfields and together as an integrated whole. Emphasis is placed on the study of the social and biological origins of human culture, religious diversity, linguistic diversity, and patterns of social inequalities.

## POLS 101 - Intro. to Political Science

## Credits: 3

This course provides a general introduction to the discipline of political science. The course focuses on the major sub-disciplines of political science including practical theory, international relations, comparative politics, and identity politics. The course is designed to encourage active student participation in the political process.

## PSYC 101 - Introduction to Psychology

## Credits: 3

This course is an introduction to the science of human behavior and mental processes. Emphasis is placed on the relationship between the nervous system and behavior, learning, perception, development, motivation, personality, attitude formation and prejudice, psychopathology and psychotherapy.

Prerequisite: Proficient in all Developmental English Courses

## SOCA 101 - Intro. to Sociology

## Credits: 3

This course is an introduction to the analysis and description of structures and dynamics of human society. Emphasis is placed on the application of scientific methods of observation and analysis of social groups, intergroup relations, social change, social stratification, and social institutions.

## Literature Sequence Courses

## (Choose one sequence)

## ENGL 203 - American Literature I

## Credits: 3

This course is a study of American thought and writing from colonial times through the post-Civil War period. Attention will be given to American social, religious, economic and political thinking as reflected in the works of American authors.

Prerequisite: ENGL 102

## AND

## ENGL 204 - American Literature II

Credits: 3
This course focuses on major works in American Literature from the Civil War to the present. Attention will be given to the social, economic, and historical context of the works, as well as to the content, style, and themes of the individual authors.

Prerequisite: ENGL 102

## ENGL 230 - British Literature I

## Credits: 3

This course is a general survey and analysis of selected representative British authors and works, with a focus on general historical patterns in the different periods of British literature. This course starts with the Middle Ages and progresses through the eighteenth century.

Prerequisite: ENGL 102 (Grade of C or better)
AND

## ENGL 231 - British Literature II

## Credits: 3

This course begins with a study of the Romantic Period and continues through contemporary British writers. The class will feature readings in the genres of non-fiction, fiction, drama, and poetry to provide a broad perspective of the innovations in the literature of these periods.

Prerequisite: ENGL 102 (Grade of C or better)

## Program Electives (Recommended)

- ENGL 205 - Contemporary Literature Credits: 3
- ENGL 210 - Modern Short Novel Credits: 3


## ENGL 211 - The Short Story

## Credits: 3

This course traces the development of the short story from the early nineteenth century. It explores the conventions of the genre including character, plot, setting, point of view, style, and theme.

Prerequisite: ENGL 102

- ENGL 214 - Literary Masterpieces of the Western World II Credits: 3


## ENGL 216 - Children's Literature

## Credits: 3

This course introduces students to an appreciation of the breadth and variety of all genres of children's literature. Emphasis is placed on children's literature as an important factor in a child's understanding of the world. This course will enable students to recognize outstanding literature for children and acknowledge its place in the study of literature.

## ENGL 220 - Creative Writing

## Credits: 3

This course is a writing workshop designed to help students write serious poetry and short fiction. Class discussions center on students' writing.

## Prerequisite: ENGL 101

## ENGL 221 - Modern Poetry

## Credits: 3

This survey course will explore modem poets from the late 19th century to the modem day. Gender and generational, as well as international considerations allow for a wide range of poetic artists to be covered.

Prerequisite: ENGL 101 and ENGL 102 (Grade of C or better)

## ENGL 222 - Shakespeare

## Credits: 3

This course provides students with an introduction to the works and world of the immortal Bard. Focus is on Shakespeare's handling of the greatest human dilemmas: the problems of power, the relationship of the individual to society, and the complexities of love. Students will be required to read samplings from the sonnets as well as selected histories, comedies, and tragedies.

Prerequisite: ENGL 101 and ENGL 102 (Grade of C or better)

## Philosophy \& Technology General Education Courses

Choose from the list of approved courses in the College catalog.

## History General Education Courses

Choose from the list of approved History General Education courses in the College catalog. Must choose a level I \& II sequence.

## Developmental Courses

Sussex has embraced a practice of directed self-choice whereby students are encouraged, through guided conversations with an advisor, to best determine their readiness for this course. Students should be aware that Developmental Studies exist and are available to help strengthen skills and encourage success. Pursuing testing and/or developmental courses is entirely up to the student. Further, testing, though providing a valuable reference point for reflection, does not create for the student an obligation to follow Accuplacer recommendations.

The exception to this is where students seek enrollment in higher-level math courses. Students wishing to enroll in the following math courses are required to take and adhere to placement guidance from, the Advanced Algebra and Functions test, as part of Accuplacer, through the college's

## Environmental Studies, A.S.

Environmental Studies prepares students for transfer into a Bachelor of Science degree program in either Environmental Studies or Environmental Science.

# Upon completion of this program, graduates will be able to: 

- Deal with complex environmental problems that affect society.
- Understand the current environmental protection regulations.
- Understand how to perform environmental observations and tests, analyze air, land, water resources and waste management.
- Apply the principles of limits, recycling and reuse, sustainable yield, and resource diversity to real-life situations.
- Apply the laws of conservation of matter and energy to environmental issues.
- Understand how different cultures cope with the environmental consequences of human action.


## First Year

## Fall Semester

## COLL 101 - Foundations for Success

## Credits: 3

This is a student-centered course covering numerous strategies to encourage students to become active and empowered learners. A primary goal of this course is to help students make the most out of their college experience. Students will obtain information about college life and culture and develop strategies and techniques to enhance success in their academic, personal and professional lives. The course is infused with opportunities to understand, practice and implement critical thinking. Students will also gain practical information to help prepare to transfer to a four-year university or enter the workforce directly. All topics will be presented in both theory and practice. This course is required of all degree-seeking candidates and must be taken within the initial 16 credits after entry.

## ENGL 101 - English Composition I

## Credits: 3

This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects which include personal, rhetorical, and expository models. Research skills are introduced.

## MATH 110 - Pre-Calculus I

## Credits: 3

This course is designed to strengthen algebraic skills and give students the math confidence to proceed with calculus and other higher forms of mathematics. Topics include the study of functions, graphing techniques, polynomial, rational, exponential and logarithmic functions and systems of equations and inequalities.

## BIOS 110 - Biology I

## Credits: 4

This course is designed to familiarize the student with the general principles and unifying concepts of biological science. Topics include scientific investigations, the physical and chemical properties of living matter, cell structure and function, energy transformations, genetics, evolution and diversity. Lab Fee Required.

Corequisite: BIOS 110L
Prerequisite: MATH 040 or the approved score on the College Level Math Placement Test

## BIOS 122 - Intro. to Environmental Science

## Credits: 4

This course is designed to explore the factors influencing the environment and to increase awareness of environmental problems. Topics include air, land, and water resources, ecology, waste management, and the human effects on the environment. Lab exercises and field trips will supplement the theory presented. Lab Fee Required.

Corequisite: BIOS 122L

Total Semester Hours: 17

## Winter Session

## Spring Semester

## ENGL 102 - English Composition II

## Credits: 3

This course introduces students to short fiction, poetry, drama, and the novel. Written assignments are based on the readings. Writing skills learned in Composition I are further developed. Students will write a research paper which demonstrates understanding of literary criticism.

Prerequisite: ENGL 101 (Grade of C or better)

## MATH 108 - Statistics

## Credits: 3

This course includes the following topics: organization of data, measures of central tendency and dispersion, probability, the normal and binomial distributions, confidence intervals, hypothesis testing, analysis of variance, and correlation.

Prerequisite: MATH 017 (Grade of C or betterI) or MATH 023 (Grade of C or betterI) or appropriate algebra placement score

## BIOS 112 - Biology II

Credits: 4
This course is a continuation of Biology I and maintains its emphasis on major biological concepts and connections. Topics include plant and animal structure and function, reproduction, development, and ecology. Lab Fee Required.

Corequisite: BIOS 112L
Prerequisite: BIOS 110 (Grade of C or better)

- ENVS 000 - Option Elective Credits: 4

Total Semester Hours: 14

Summer Session

Second Year

## Fall Semester

## GEOL 101 - Physical Geology

## Credits: 4

This course is designed to introduce students to earth and its physical processes, including the origin and nature of rocks and minerals, weather and its erosional forces, mountain building, volcanism, metamorphism, origin of ore deposits, plate tectonics, and problems of water supply and pollution. Field trips will be an integral part of the course. Lab Fee Required.

Corequisite: GEOL 101L

## CHEM 110 - College Chemistry

## Credits: 4

This course covers general chemical principles and their applications in research and industry. Topics include matter and measurement; math in chemistry; atoms; molecules, and ions; elemental periodicity; stoichiometry; formulas and , equations; the mole; intramolecular and intermolecular bonds; reaction types including redox and acid/base; properties and reactions of solutions, gases, and the solid state; industrial processes. The lab component covers materials separation, analytical methods and instruments, qualitative and quantitative analysis; and lab report writing skills. This course is scheduled during the day in the fall semester, and during the evening in the spring semester. Lab Fee Required.

Corequisite: MATH 110, CHEM 110L

## COMS 110 - Computer Concepts \& Applications

Credits: 3
This course is designed to provide the student with a level of knowledge necessary to function in today's technological society. Topics include
computer and network terminology, hardware, software, and processing concepts. A large portion of the class time is dedicated to exercises performed using integrated software packages. Lab Fee Required.

Corequisite: COMS 110 S

- GSOC 000 - Social Science Gen Ed Requirement Credits: 3

Total Semester Hours: 14

## Winter Session

## Spring Semester

## BIOS 124 - Ecology

## Credits: 4

This course is designed to familiarize the student with the basic concepts of ecology and field biology. Topics include ecosystems, communities, population dynamics, and energy flow. Lab exercises and fieldwork will supplement the theory. Lab Fee Required.

Corequisite: BIOS 124L
Prerequisite: MATH 110

## CHEM 112 - College Chemistry II

## Credits: 4

This course is a continuation of CHEM 110, College Chemistry I. Topics include chemical kinetics; chemical equilibrium; chemical thermodynamics, electrochemistry, nuclear chemistry, main-group element chemistry, metals and metallurgy, transition metals and coordination chemistry, environmental chemistry; introduction to organic and biological chemistry. The lab component covers kinetics, electrochemistry, and coordination compounds. The course is scheduled during the day in the spring semester, and during the evening in the fall semester. Lab Fee Required.

Corequisite: CHEM 112L
Prerequisite: CHEM 110 (Grade of C or better)

- GHMN 000 - Humanities Gen Ed Requirement Credits: 3
- GSOC 000 - Social Science Gen Ed Requirement Credits: 3


## COLL 209 - Capstone for Environmental Studies

## Credits: 1

This capstone is for Environmental Studies students who have a total of at least 45 credits and are within one semester of graduation. It is designed to assist the students with the transition from the community college experience to a four year educational institution. Students will engage in analysis, writing and problem solving work that will require them to think critically and reflect on the knowledge gained during their time at Sussex County Community College

Prerequisite: Must have completed 45 credits

# Total Program Hours: 60 

## *Students testing higher than MATH 110 on the CLM test may take MATH 111, MATH 112, MATH 113, MATH 114 or MATH 213 to satisfy this math requirement.

## Humanities General Education Courses (Recommended)

Recommended courses listed below but student can also choose from the list of approved General Education courses in the College catalog.

## HUMN 101 - Survey of World Culture I

## Credits: 3

This survey course explores the evolution of western and non-western key ideas in art, music, and literature from prehistoric times to the 14th century. Emphasis is placed on the comparison of social, economic, religious, and political forces in the arts in a variety of cultures and diverse people.

## HUMN 102 - Survey of World Culture II

## Credits: 3

This survey course explores the evolution of western and non-western key ideas in art, music, and literature from the 15 th to 21 st century societies. Emphasis is placed on the comparison of social, economic, religious, and political forces in the arts in a variety of cultures and diverse people.

## PHIL 205 - Contemporary Ethical Issues

## Credits: 3

This course is an introduction to the study of moral theories and their justification, including an examination of contemporary moral concerns as test cases.

## AMSL 101 - American Sign Language I

## Credits: 3

This course is designed to develop basic communicative skills in American Sign Language. This course will emphasize grammatical structures,
sign vocabulary, fingerspelling, numbers, expressive and receptive skills, facial grammar and non-manual communication, and the anatomy and physiology of the human hearing system and hearing loss. Additionally, this course provides an introduction to the culture of the Deaf community.

## Social Science General Education Courses (Recommended)

Recommended courses listed below but student can also choose from the list of approved General Education courses in the College catalog.

## ANTH 101 - Introduction to Anthropology

## Credits: 3

This course is an integrated overview of the four fields of anthropology. Physical anthropology, cultural anthropology, linguistics, and archeology are explored as subfields and together as an integrated whole. Emphasis is placed on the study of the social and biological origins of human culture, religious diversity, linguistic diversity, and patterns of social inequalities.

## ECON 101 - Macroeconomics

Credits: 3
This course is an analysis of major economic concepts. Topics include the elements of national income; the economic roles of government and labor; classical economics; monetary institutions and policies; the Keynesian model and modern fiscal policy; the macroeconomic aspects of world trade.

## ECON 102 - Microeconomics

## Credits: 3

This course is an exploration of economic factors that affect the firm and individual consumers. Topics include the laws of supply and demand, elasticity, consumer demand and utility theory, production, pricing, competitive behavior, monopoly and imperfect competition, labor economics, international trade.

## GEOG 105 - Cultural Geography

## Credits: 3

This course will function as a map to the cultural landscape of our world. It combines aspects of economic and cultural geography. It will examine the interrelations between humans and their natural environments as well as examine the difference between one place and another in terms of the customs, mores and institutions that create and maintain human societies.

Credits: 3
This course provides a general introduction to the discipline of political science. The course focuses on the major sub-disciplines of political science including practical theory, international relations, comparative politics, and identity politics. The course is designed to encourage active student participation in the political process.

## SOCA 101 - Intro. to Sociology

## Credits: 3

This course is an introduction to the analysis and description of structures and dynamics of human society. Emphasis is placed on the application of scientific methods of observation and analysis of social groups, intergroup relations, social change, social stratification, and social institutions.

## Option Electives (Recommended)

Recommended courses listed below but student can also choose from the list of approved Environmental Science Elective courses in the College catalog.

## BIOS 130 - Introduction to Botany

## Credits: 4

This course is designed to study the structural and functional adaptations of algae and plants to the environment. It includes the study of the following processes: Seed germination, growth, photosynthesis, reproduction, and transport. Plant evolution and their relationship to the environment and to humans will be discussed. The laboratory component of the course includes field and laboratory studies of plant diversity, morphology and physiology. Students will design and carry out their own independent investigations. Lab Fee Required.

Corequisite: BIOS 130L
Prerequisite: BIOS 110 or Permission of Instructor

## BIOS 210 - Microbiology

## Credits: 4

This course involves a systematic study of microorganisms. Topics include the classification, structure, function, genetics, ecology, and control of microbes. Clinical aspects, infection and immunity, and industrial aspects of microbiology will also be covered. Lab Fee Required.

Corequisite: BIOS 210L
Prerequisite: One previous semester of science

## GEOL 110 - Historical Geology

## Credits: 4

This course will introduce the student to the study of planet Earth through time. The class will study the concepts of stratigraphy (the study of strata) and the fossils they contain. This course will concentrate on the geologic history of North America with special attention to the Appalachian Basin and New Jersey. This course will discuss the history of the Earth, geological processes and biological history. This course will include labs and several field trips to observe concepts taught in the lectures. Lab Fee Required.

Corequisite: GEOL 110L

## PHYS 107 - Introductory Meteorology

Credits: 4
This introductory course consists of five areas of concentration-atmospheric components; weather systems; upper air dynamics; satellite and radar interpretation of severe and weather elements; a review of historical weather events and their social and geographical effects; systems examined include hurricanes; severe thunderstorms and the mesosyclone; forms of precipitation; hourly observations; cloud identification; interpretation NCEP/NOAH data for forecast modeling data.

Corequisite: PHYS 107L

## PHYS 110 - Physics I

## Credits: 4

This course is designed to introduce students to problem-solving techniques in physics. Topics include forces, energy, mechanics, momentum, heat, and kinetic theory. Includes applications to the life sciences and everyday life. Lab Fee Required.

Corequisite: PHYS 110L
Prerequisite: MATH 112 (Grade of C or better)

## PHYS 112 - Physics II

## Credits: 4

This course is a continuation of Physics I. Emphasis is placed on showing the connections found in electromagnetism, optics, and modern physics. Includes applications to the life sciences and everyday life. Lab Fee Required.

Corequisite: PHYS 112L
Prerequisite: PHYS 110 (Grade of C or better)

## Developmental Courses

Sussex has embraced a practice of directed self-choice whereby students are encouraged, through guided conversations with an advisor, to best determine their readiness for this course. Students should be aware that Developmental Studies exist and are available to help strengthen skills and encourage success. Pursuing testing and/or developmental courses is entirely up to the student. Further, testing, though providing a valuable reference point for reflection, does not create for the student an obligation to follow Accuplacer recommendations.

The exception to this is where students seek enrollment in higher-level math courses. Students wishing to enroll in the following math courses are required to take and adhere to placement guidance from, the Advanced Algebra and Functions test, as part of Accuplacer, through the college's testing center, for admission into any of the following courses: MATH 110, MATH 112, and MATH 113. Please note, courses in other disciplines may also require advanced mathematics placement. Students should check with their advisor.

## Exercise Science, A.S.

The Associate of Science Degree in Exercise Science is designed to prepare students for transfer to a four-year college or university degree program in exercise science. This program's hands-on focused curriculum is based on the exercise science competencies of the American College of Sports Medicine and will teach students the skills and knowledge needed to perform fitness assessments, design individualized exercise programs, evaluate human movement, and make nutritional recommendations. In addition, a degree in exercise science will serve as a solid

# Upon completion of this program, graduates will be able to: 

- Examine anatomy and exercise physiology concepts as applied to human movement in different types of physical activity and sport.
- Conduct health and fitness assessments using valid and reliable test protocols.
- Design individualized exercise prescriptions with appropriate exercise progression.
- Create scientific reports using technical writing skills, graphs, charts, tables, diagrams, and peer-reviewed scientific literature.
- Demonstrate techniques reflective of professional best practices in the field of exercise science.
- Create nutrition recommendations for healthy, special, and athletic populations.


## First Year

## Fall Semester

## COLL 101 - Foundations for Success

## Credits: 3

This is a student-centered course covering numerous strategies to encourage students to become active and empowered learners. A primary goal of this course is to help students make the most out of their college experience. Students will obtain information about college life and culture and develop strategies and techniques to enhance success in their academic, personal and professional lives. The course is infused with opportunities to understand, practice and implement critical thinking. Students will also gain practical information to help prepare to transfer to a four-year university or enter the workforce directly. All topics will be presented in both theory and practice. This course is required of all degree-seeking candidates and must be taken within the initial 16 credits after entry.

## ENGL 101 - English Composition I

## Credits: 3

This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects which include personal, rhetorical, and expository models. Research skills are introduced.

## MATH 110 - Pre-Calculus I

## Credits: 3

This course is designed to strengthen algebraic skills and give students the math confidence to proceed with calculus and other higher forms of mathematics. Topics include the study of functions, graphing techniques, polynomial, rational, exponential and logarithmic functions and systems of equations and inequalities.

Prerequisite: MATH 040 (Grade of C or betterI) or appropriate pre-calculus placement score

Credits: 3
This is an introductory-level course to acquaint students with the development and structure of the field of exercise science. The current scientific development of the field is stressed, with additional emphasis on careers, certifications, professional organizations, and industry research and resource development. Requires proficiency in all developmental English and mathematical courses.

## COMS 110-Computer Concepts \& Applications

Credits: 3
This course is designed to provide the student with a level of knowledge necessary to function in today's technological society. Topics include computer and network terminology, hardware, software, and processing concepts. A large portion of the class time is dedicated to exercises performed using integrated software packages. Lab Fee Required.

Corequisite: COMS 110S

Total Semester Hours: 15

## Winter Session

## Spring Semester

## ENGL 102 - English Composition II

## Credits: 3

This course introduces students to short fiction, poetry, drama, and the novel. Written assignments are based on the readings. Writing skills learned in Composition I are further developed. Students will write a research paper which demonstrates understanding of literary criticism.

Prerequisite: ENGL 101 (Grade of C or better)

## BIOS 103 - Anatomy \& Physiology I

## Credits: 4

This course is a systematic study of the structure and functions of the human body. Topics include general terminology, cells, tissues, integumentary, muscular, and nervous systems. Lab Fee Required.

Corequisite: BIOS 103L

## BIOS 107 - Nutrition Fundamentals

## Credits: 3

This course is designed to acquaint students with nutritional research concepts, the role of nutrients in the human body, the relation of nutrition to human behavior, and the study of nutrition-related health problems. This course interweaves concepts related to the science of human metabolism and body composition.

## CHEM 100-Introductory Chemistry

## Credits: 4

This course includes the basics of inorganic, organic, and biochemistry. The emphasis is on environmental issues, and on energy production and utilization in living organisms. Lab experiments illustrate the concepts studied. Lab Fee Required.

Corequisite: CHEM 100L
Prerequisite: MATH 017 or MATH 023 or the approved score on the College Placement Test

Total Semester Hours: 14

Summer Session

Second Year

Fall Semester

## BIOS 104 - Anatomy \& Physiology II

Credits: 4
This course is a continuation of Anatomy and Physiology I. Topics include the endocrine, circulatory, immune, respiratory, digestive, urinary, and reproductive systems. Lab Fee Required.

Corequisite: BIOS 104L
Prerequisite: BIOS 103 (Grade of C or better)

## BIOS 150 - Nutrition, Fitness \& Wellness

## Credits: 3

This course covers topics in sports nutrition and basic exercise science. The primary goal of this course is to develop the student's understanding of how food fuels the body and affects optimal fitness and sports performance. Students will gain an in-depth understanding of the roles of carbohydrate, protein, and fat in the diets of active people as well as the role that nutrition plays in disease prevention. Consideration is also given to the ways in which food, fluids, and nutritional supplements support optimal health and training, performance, and recovery.

## EXSC 105 - First Aid and Emergency Care

## Credits: 3

This course in first aid is designed to acquaint students with information about prevention of accidents and injuries, and about emergency assessment, recognition and treatment of trauma, and sudden illnesses. Upon successful completion of the requirements, students will receive

## EXSC 201 - Kinesiology

## Credits: 3

This course is designed to acquaint students with the foundation of fitness screening and exercise prescription. The various parameters of fitness will be investigated including their measurements, interpretation of results, and application towards recommendations for personalized exercise programming for the general population, those with medical concerns, and the athletic population.

Corequisite: EXSC 201L
Prerequisite: EXSC 101, MATH 110 or Higher, BIOS 102 and BIOS 104

- EXSC 000 - Option Elective Credits: 3

Total Semester Hours: 16

## Winter Session

## Spring Semester

## EXSC 210 - Exercise Physiology

## Credits: 3

This course is designed to study the human responses to exercise and the adaptations that occur from various types of training programs in both lecture and laboratory setting, the student will learn the metabolic, circulatory, respiratory, neuromuscular and hormonal responses to exercise. Practical applications of this knowledge will be explored with regards to the role of exercise in maintaining and improving health, physical fitness and athletic performance in the general population, youth, athletes and seniors.

Corequisite: EXSC 210L
Prerequisite: EXSC 101, MATH 110 or Higher, BIOS 102 and BIOS 104

## EXSC 215 - Fitness Assessment \& Exercise Prescription

## Credits: 3

This course is designed to acquaint students with the foundation of fitness screening and exercise prescription. Various parameters of fitness will be investigated including exercise measurements, interpretation of results, and recommendations for personalized exercise programming for the general population, those with medical conditions, and athletes. Lab fee required.

Corequisite: EXSC 215L

## PSYC 101 - Introduction to Psychology

This course is an introduction to the science of human behavior and mental processes. Emphasis is placed on the relationship between the nervous system and behavior, learning, perception, development, motivation, personality, attitude formation and prejudice, psychopathology and psychotherapy.

Prerequisite: Proficient in all Developmental English Courses

- GSOC 000 - Social Science Gen Ed Requirement Credits: 3
- GHMN 000 - Humanities Gen Ed Requirement Credits: 3

Total Semester Hours: 15

Summer Session

## Total Program Hours: 60

*Students testing higher than MATH 110 on the CLM test may take MATH 112 MATH 113, MATH 114 or MATH 213 to satisfy this requirement.
**Students may take CHEM 110 to satisfy this requirement.

## Humanities General Education Courses (Recommended)

Recommended courses listed below but student can also choose from the list of approved General Education courses in the College catalog.

## AMSL 101 - American Sign Language I

## Credits: 3

This course is designed to develop basic communicative skills in American Sign Language. This course will emphasize grammatical structures, sign vocabulary, fingerspelling, numbers, expressive and receptive skills, facial grammar and non-manual communication, and the anatomy and physiology of the human hearing system and hearing loss. Additionally, this course provides an introduction to the culture of the Deaf community.

Corequisite: ENGL 021 and ENGL 032

## HUMN 101 - Survey of World Culture I

## Credits: 3

This survey course explores the evolution of western and non-western key ideas in art, music, and literature from prehistoric times to the 14th century. Emphasis is placed on the comparison of social, economic, religious, and political forces in the arts in a variety of cultures and diverse people.

Credits: 3
This survey course explores the evolution of western and non-western key ideas in art, music, and literature from the 15th to 21st century societies. Emphasis is placed on the comparison of social, economic, religious, and political forces in the arts in a variety of cultures and diverse people.

## PHIL 205 - Contemporary Ethical Issues

## Credits: 3

This course is an introduction to the study of moral theories and their justification, including an examination of contemporary moral concerns as test cases.

## Social Sciences General Education Courses (Recommended)

Recommended courses listed below but student can also choose from the list of approved General Education courses in the College catalog.

## ANTH 101 - Introduction to Anthropology

## Credits: 3

This course is an integrated overview of the four fields of anthropology. Physical anthropology, cultural anthropology, linguistics, and archeology are explored as subfields and together as an integrated whole. Emphasis is placed on the study of the social and biological origins of human culture, religious diversity, linguistic diversity, and patterns of social inequalities.

## ANTH 115 - Biological Anthropology

## Credits: 4

This course examines how Homo sapiens evolved. It starts with a core understanding of scientific methodology, evolutionary theory, and the genetic code. The paleontological record and methodologies for dating fossils and artifacts are studied. Anatomy, behavior, and classification of non-human primates with emphasis on the common ancestry Homo sapiens share with them are studied. Comparison and contrasting primate and hominin fossil records over the last 8 million years are also studied. Students will examine Paleolithic artifacts that highlight critical periods of human evolution. The course surveys human phenotypic diversity across clinical gradations. The interplay between anatomically modern human biology and cultural behavior is shown to be a key to understanding human evolution.

Prerequisite: Proficiency in Reading, Writing \& Math on College Placement Test or equivalency.

## ECON 102 - Microeconomics

## Credits: 3

This course is an exploration of economic factors that affect the firm and individual consumers. Topics include the laws of supply and demand, elasticity, consumer demand and utility theory, production, pricing, competitive behavior, monopoly and imperfect competition, labor economics, international trade.

Credits: 3
This course is an introduction to the analysis and description of structures and dynamics of human society. Emphasis is placed on the application of scientific methods of observation and analysis of social groups, intergroup relations, social change, social stratification, and social institutions.

## Option Electives (Recommended)

Recommended courses listed below but student can also choose from the list of approved Exercise Science Elective courses in the College catalog.

## MATH 108 - Statistics

## Credits: 3

This course includes the following topics: organization of data, measures of central tendency and dispersion, probability, the normal and binomial distributions, confidence intervals, hypothesis testing, analysis of variance, and correlation.

Prerequisite: MATH 017 (Grade of C or betterI) or MATH 023 (Grade of C or betterI) or appropriate algebra placement score

## BIOS 102 - Intro. to Human Biology

## Credits: 4

This course is an introduction to human anatomy and physiology for the non-biology major. It is designed to develop an appreciation for the structure and functions of the human body; to point out the relationship of body systems to health and disease; and to emphasize human biology as it relates to everyday living experiences. Lab Fee Required.

Corequisite: BIOS 102L

## BIOS 110 - Biology I

## Credits: 4

This course is designed to familiarize the student with the general principles and unifying concepts of biological science. Topics include scientific investigations, the physical and chemical properties of living matter, cell structure and function, energy transformations, genetics, evolution and diversity. Lab Fee Required.

Corequisite: BIOS 110L
Prerequisite: MATH 040 or the approved score on the College Level Math Placement Test

## PHYS 110 - Physics I

## Credits: 4

This course is designed to introduce students to problem-solving techniques in physics. Topics include forces, energy, mechanics, momentum, heat, and kinetic theory. Includes applications to the life sciences and everyday life. Lab Fee Required.

## CHEM 110 - College Chemistry I

## Credits: 4

This course covers general chemical principles and their applications in research and industry. Topics include matter and measurement; math in chemistry; atoms; molecules, and ions; elemental periodicity; stoichiometry; formulas and , equations; the mole; intramolecular and intermolecular bonds; reaction types including redox and acid/base; properties and reactions of solutions, gases, and the solid state; industrial processes. The lab component covers materials separation, analytical methods and instruments, qualitative and quantitative analysis; and lab report writing skills. This course is scheduled during the day in the fall semester, and during the evening in the spring semester. Lab Fee Required.

Corequisite: MATH 110, CHEM 110L

## CHEM 112-College Chemistry II

## Credits: 4

This course is a continuation of CHEM 110, College Chemistry I. Topics include chemical kinetics; chemical equilibrium; chemical thermodynamics, electrochemistry, nuclear chemistry, main-group element chemistry, metals and metallurgy, transition metals and coordination chemistry, environmental chemistry; introduction to organic and biological chemistry. The lab component covers kinetics, electrochemistry, and coordination compounds. The course is scheduled during the day in the spring semester, and during the evening in the fall semester. Lab Fee Required.

Corequisite: CHEM 112L
Prerequisite: CHEM 110 (Grade of C or better)

## Developmental Courses

Sussex has embraced a practice of directed self-choice whereby students are encouraged, through guided conversations with an advisor, to best determine their readiness for this course. Students should be aware that Developmental Studies exist and are available to help strengthen skills and encourage success. Pursuing testing and/or developmental courses is entirely up to the student. Further, testing, though providing a valuable reference point for reflection, does not create for the student an obligation to follow Accuplacer recommendations.

The exception to this is where students seek enrollment in higher-level math courses. Students wishing to enroll in the following math courses are required to take and adhere to placement guidance from, the Advanced Algebra and Functions test, as part of Accuplacer, through the college's testing center, for admission into any of the following courses: MATH 110, MATH 112, and MATH 113. Please note, courses in other disciplines may also require advanced mathematics placement. Students should check with their advisor.

## Fashion Design Option, A.F.A. - Studio Arts

The purpose of The Associate of Fine Arts Degree/Fashion Design Option at Sussex County Community College seeks to assist students in becoming professionals in the field of art and design. This program nurtures artistic freedom and creativity while developing a strong sense of artistic discipline. Students are encouraged to be inventive within the framework of a traditional approach to both two and three-dimensional art forms. Our curriculum is designed to lead a student through a series of visual challenges enabling the student to master the medium and be cognizant of traditional methods of creativity. To become tomorrow's visionary means understanding the significance of one's own time and place defined by the limitless possibilities of personal expression within the boundaries of a universal aesthetic language. Commitment to a balanced learning process prepares students for a four-year institution or a career in the creative arts. The primary objective is to provide an environment in which students can achieve a degree of professionalism as technically competent and creatively fluent.

## Upon completion of this program, graduates will be able to:

- Utilize the elements and principles of design and composition.
- Analyze the aesthetic implications of fashion design.
- Examine connections between theory and practice in the field of design.
- Construct garments from personal designs based on current design trends, art historical concepts, social, political, or cultural influences.
- Create a portfolio of artwork.


## First Year

## Fall Semester

## COLL 101 - Foundations for Success

## Credits: 3

This is a student-centered course covering numerous strategies to encourage students to become active and empowered learners. A primary goal of this course is to help students make the most out of their college experience. Students will obtain information about college life and culture and develop strategies and techniques to enhance success in their academic, personal and professional lives. The course is infused with opportunities to understand, practice and implement critical thinking. Students will also gain practical information to help prepare to transfer to a four-year university or enter the workforce directly. All topics will be presented in both theory and practice. This course is required of all degree-seeking candidates and must be taken within the initial 16 credits after entry.

## ENGL 101 - English Composition I

## Credits: 3

This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects which include personal, rhetorical, and expository models. Research skills are introduced.

## ARTA 103 - Art History I

## Credits: 3

This course surveys visual artistic expression from the Neolithic period to the fourteenth century, including ancient, medieval and non-European art forms. The development of artistic concepts in the ancient world, gender, and non-western art are central topics in this general survey course.

Prerequisite: ENGL 021, ENGL 032 or Placement into ENGL 101

## ARTA 101 - Basic Design

## Credits: 3

This course provides an introduction to the practical and theoretical applications of two-dimensional design. This is a lecture course where students explore methods for developing their intuitive responses to form and shape, line, color and value, space, and other basic elements of composition and design.

Winter Session

Spring Semester

## ENGL 201 - Effective Speaking

## Credits: 3

This is a course in public speaking which stresses speech organization, effective delivery and critical listening skills. A strong emphasis is placed on student performance to help the student gain speech practice and develop self-confidence in a variety of speaking situations.

Prerequisite: ENGL 015 and ENGL 031

## ARTA 104 - Art History II

## Credits: 3

This course surveys the history of art from the fourteenth through the twenty first centuries. The development of artistic concepts in the contemporary world, art and gender, and non-western art and architecture are central topics in this general survey course. Emphasis is place on viewing art forms in context of culture and gender and understanding the philosophical foundations and critical theories that support and influence them

Prerequisite: ENGL 021, ENGL 032 or Placement into ENGL 101

## ARTA 108 - Basic Drawing

## Credits: 3

This course introduces students to the basic foundations of drawing methods, including a broad-based survey of art history and appreciation. Students experiment with a variety of materials: pencil, charcoal, and conte-crayon practicing 1, 2 and 3 point perspective, and elemental architectural drawing techniques within an historical context. Students explore various elements of personal expression while comparing their efforts to major works of art. The course also introduces the art of still life, landscape, portrait, life drawing, gesture and contour drawing and classical drawing techniques. Studio fee required.

## ARTA 110 - Intro to Color

## Credits: 3

This course develops an understanding of the expressive and compositional qualities of color and its role in the creation of art and design through lectures and experiment. Various color theories and their applications are explored with reference to works of art. Students create compositions using color as the primary criteria for expression. Studio fee required.

## Credits: 3

This is a studio course where students will observe and create in the physical world away from the computer. This course suggests that real-world observation is invaluable in the planning of traditional illustration, digital illustration, 2D graphics, and 3D generated images. Areas of instruction will include graphic design drawing elements (such as line, value, texture, color, and composition), perspective, architecture, and environments. The course will also emphasize basic drawing techniques, anatomy for the artist, life drawing, lighting, texturing, and storyboarding. Students will learn how to efficiently work with pencil, charcoal, ink, markers, and mixed media. Lab Fee Required.

Total Semester Hours: 15

Summer Session

## Second Year

Fall Semester

## DESN 202 - Fashion Construction I

## Credits: 3

This studio course in Fashion Design introduces the student to design, construction and presentation of clothing and costuming. Through lectures and labs, students will explore techniques, fabrics, tools, and equipment to develop the skills needed by the professional couturiere. Lab fee is required.

Prerequisite: Permission of Program Coordinator

## SOCA 101 - Intro. to Sociology

## Credits: 3

This course is an introduction to the analysis and description of structures and dynamics of human society. Emphasis is placed on the application of scientific methods of observation and analysis of social groups, intergroup relations, social change, social stratification, and social institutions.

## ARTA 150 - Life Drawing I

## Credits: 3

This course establishes the basic vocabulary necessary to begin drawing the human form. It defines the concepts of the "nude" as an art form and as a point of departure for all other forms of drawing. Emphasis is placed on gesture and contour drawings, use of drawing materials, anatomy studies, and drawing the human form in traditional ways. Studio Fee Required.

Credits: 3
This course emphasizes techniques and applications used to produce published documents for both Internet and print media. Students will learn to design documents, publications, and related projects using industry standard software on both MAC and PC platforms. An emphasis is placed on basic computer graphic skills through practical experience with two-dimensional paint and draw programs, as well as layout programs for print and web. Projects covered include advertising design, page layout, computer illustrations, digital imaging, and the scanning and manipulation of images. Lab Fee Required.

Prerequisite: Any COMS course

- ARTA 002 - Studio Art Elective Credits: 3

Total Semester Hours: 15

## Winter Session

## Spring Semester

## DESN 203 - Fashion Construction II

## Credits: 3

This course develops skills relevant to the Fashion Design Industry through advanced techniques in design, construction and presentation of clothing and costuming in the studio. Students explore techniques, fabrics, tools, and equipment used by the professional couturiere. Lab fee required. Studio fee required.

Prerequisite: DESN 202

## ARTA 107 - History of Contemporary Art

## Credits: 3

This course surveys the history of Contemporary Art, beginning with its roots in the Modernism of Europe at the beginning of the twentieth century and developing comparisons and historical connections to Contemporary Art in today's world art market. Emphasis is placed on viewing art forms in context of their history and intention and understanding the philosophical foundations and critical theories that support and influence them.

## GRAD 230 - Directed Themes in Illustration

## Credits: 3

This course has students specialize in a single area of illustration of $r$ the entire term by choosing illustration projects in children's book, editorial, comic book, fashion, commercial or advertising, scientific, or caricature drawings to explore in a related series of instructor-directed themes. At the completion of this course, the student will have created a series of related portfolio projects that demonstrate advanced problem solving ability of a personal style, as well as continued improvement in developing skills in illustration methods and materials. Lab Fee Required.

Prerequisite: ARTA 150 or GRAD 153 and GRAD 107 or Permission of the Program Coordinator

## Credits: 3

This course prepares students to graduate with the professional skills necessary for gallery representation or transfer to a four-year fine art institution, as reflected in a prepared portfolio. Each student creates an articulate "artist's statement" and a finished professional portfolio of original artwork. Studio Fee Required.

- ARTA 002 - Studio Art Elective Credits: 3

Total Semester Hours: 15

Summer Session

## Total Program Hours: 60

## Technology General Education Courses

Choose from the list of approved General Education courses in the College catalog.

## Studio Art Elective Courses (Recommended)

Recommended courses listed below but student can also choose from any ARTA, PHOT, GRAD or ARTA/PHOT designations.

## ARTA 106 - Art Appreciation

## Credits: 3

This course builds an informed foundation for students wishing to understand and enjoy art. Art theory, practice, and history are introduced, through which students expand their awareness of visual arts and are encouraged to realize their own innate creative potential. All mediums are studied: painting, sculpture, photography, multimedia, film, design, and printmaking, including a comprehensive global/gender inclusive art history survey.

Prerequisite: ENGL 011

## PHOT 109 - Intro. to Digital Photography

## Credits: 3

This course introduces students to the basic concepts of photography through the use and understanding of their digital SLR camera and photo imaging software. Among topics to be covered are exposure control, composition, lighting, lenses, effects of color on photographs, depth of field, and perspective control. Post process topics include creating a contact sheet, cropping, adjusting print exposure, outputting to web or print media, and selective exposure control. Student must provide their own DSLR (Digital Single Lens Reflex) camera.

## Developmental Courses

Sussex has embraced a practice of directed self-choice whereby students are encouraged, through guided conversations with an advisor, to best determine their readiness for this course. Students should be aware that Developmental Studies exist and are available to help strengthen skills and encourage success. Pursuing testing and/or developmental courses is entirely up to the student. Further, testing, though providing a valuable reference point for reflection, does not create for the student an obligation to follow Accuplacer recommendations.

The exception to this is where students seek enrollment in higher-level math courses. Students wishing to enroll in the following math courses are required to take and adhere to placement guidance from, the Advanced Algebra and Functions test, as part of Accuplacer, through the college's testing center, for admission into any of the following courses: MATH 110, MATH 112, and MATH 113. Please note, courses in other disciplines may also require advanced mathematics placement. Students should check with their advisor.

## Fire Science Technology, A.A.S.

This program is designed to serve the career and volunteer fire fighter, industrial fire protection personnel, fire protection specialist or the recent high school graduate who has an interest in fire service. The program will be offered primarily in the evening for part-time students. Upon completion of the program, students will have attained the skills and knowledge to perform their current duties more effectively and to prepare them for greater levels of responsibility within the fire service system.

## Upon completion of this program, graduates will be able to:

- Be prepared with a scientific understanding of fire hazards and their control with emphasis on effective operating procedures at fires and other emergencies.
- Demonstrate the skills necessary to incorporate the theory and applications to become a credentialed professional in the fire service.


## First Year

## Fall Semester

## COLL 101 - Foundations for Success

## Credits: 3

This is a student-centered course covering numerous strategies to encourage students to become active and empowered learners. A primary goal of this course is to help students make the most out of their college experience. Students will obtain information about college life and culture and develop strategies and techniques to enhance success in their academic, personal and professional lives. The course is infused with opportunities to understand, practice and implement critical thinking. Students will also gain practical information to help prepare to transfer to a four-year university or enter the workforce directly. All topics will be presented in both theory and practice. This course is required of all degree-seeking candidates and must be taken within the initial 16 credits after entry.

## ENGL 101 - English Composition I

Credits: 3
This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects which include personal, rhetorical, and expository models. Research skills are introduced.

Credits: 3
This course is designed to provide the student with a level of knowledge necessary to function in today's technological society. Topics include computer and network terminology, hardware, software, and processing concepts. A large portion of the class time is dedicated to exercises performed using integrated software packages. Lab Fee Required.

Corequisite: COMS 110S

## FRST 101 - Intro. to Fire Science

Credits: 3
This course is an introduction to the fundamentals of fire protection engineering. It is a study of fire hazards and controlling mechanisms, detection and alarm systems, fire behavior and the physical and chemical effects of combustion upon a single dwelling to problem areas such as high-rise buildings.

## FRST 103 - Fire Prevention

## Credits: 3

This course provides fundamental information regarding the history and philosophy of fire prevention, organization and operation of a fire prevention bureau, use of fire codes, identification and correction of fire hazards, and the relationships of fire prevention with built-in fire protection systems, fire investigation, and fire and life-safety education.

Prerequisite: FRST 101

Total Semester Hours: 15

Winter Session

## Spring Semester

## ENGL 201 - Effective Speaking

## Credits: 3

This is a course in public speaking which stresses speech organization, effective delivery and critical listening skills. A strong emphasis is placed on student performance to help the student gain speech practice and develop self-confidence in a variety of speaking situations.

## Prerequisite: ENGL 015 and ENGL 031

- GSOC 000 - Social Science Gen Ed Requirement Credits: 3

Credits: 3
This course examines the organization and management of the fire service. Topics include discussion of new technologies, changing organization structures, personnel and equipment, manpower and training, reporting systems and municipal budgets.

Prerequisite: FRST 101

## FRST 105 - Fire Protection Systems

## Credits: 3

This course provides information relating to the features of design and operation of fire detection and alarm systems, heat and smoke control systems, special protection and sprinkler systems, water supply for fire protection and portable fire extinguishers.

Prerequisite: FRST 101

## FRST 110 - Fire Behavior and Combustion

## Credits: 3

This course explores the theories and fundamentals of how and why fires start, spread, and how they are controlled.
Prerequisite: FRST 101

Total Semester Hours: 15

Summer Session

## Second Year

## Fall Semester

## HUMN 101 - Survey of World Culture I

## Credits: 3

This survey course explores the evolution of western and non-western key ideas in art, music, and literature from prehistoric times to the 14th century. Emphasis is placed on the comparison of social, economic, religious, and political forces in the arts in a variety of cultures and diverse people.

- LSCI 000 - Science Gen Ed Requirement Credits: 3
- FREE 000 - Free Elective Credits: 3

Credits: 3
This course progressively covers fireground tactics and strategies from before the fact fireground preparation, through systematically planning, implementing and managing the strategic and/or tactical plan, to a process of reviewing events and critiquing performance.

## Prerequisite: FRST 101

## FRST 107 - Fire Investigation

## Credits: 3

This course instructs fire personnel to observe fire patterns, cause and origin, and clues of arson presented. Preserving the fire scene, the fire setter, legal considerations and fire investigations are also discussed.

Prerequisite: FRST 101

Total Semester Hours: 15

Winter Session

Spring Semester

## HUMN 102 - Survey of World Culture II

## Credits: 3

This survey course explores the evolution of western and non-western key ideas in art, music, and literature from the 15 th to 21 st century societies. Emphasis is placed on the comparison of social, economic, religious, and political forces in the arts in a variety of cultures and diverse people.

## FRST 202 - Bldg. Constr. for Fire Protect.

## Credits: 3

This course studies the components of building construction that relate to fire and safety. The focus of this course is on fire fighter safety. The elements of construction and design of structures are shown to be key factors when inspecting buildings, preplanning fire operations, and operating at emergencies.

Prerequisite: FRST 101

## FRST 205 - Fire Protection Hydraulics \& Water Supply

## Credits: 3

This course is a review of hydraulic calculations and formulas, how to apply the standards to firefighting equipment and water supply. Sprinkler systems, fire pumps and hose lines are covered. This course requires fieldwork.

## FRST 208 - Hazardous Materials

## Credits: 3

This course provides basic fire chemistry relating to the categories of hazardous materials including problems of recognition, reactivity, and health encountered by firefighters.

Prerequisite: FRST 101

## FRST 210 - Occupational Health \& Safety

Credits: 3
This course covers the basic principles of Federal, State and FFPA standards and legislation emphasizing such topics as blood borne pathogens, NJ PEOSHA codes and related codes for general industry. It also addresses issues facing the firefighter such as injury, death, and health. This course is designed for N.F.P .A. 1500.

Prerequisite: FRST 101

Total Semester Hours: 15

Summer Session

Total Program Hours: 60

## Social Science General Education Courses

## POLS 106 - State \& Local Government

## Credits: 3

This course provides a general introduction to the study of sub-national governments within the American political system. The course is designed to encourage active student participation in the political process.

## PSYC 101 - Introduction to Psychology

## Credits: 3

This course is an introduction to the science of human behavior and mental processes. Emphasis is placed on the relationship between the nervous system and behavior, learning, perception, development, motivation, personality, attitude formation and prejudice, psychopathology and psychotherapy.

Credits: 3
This course is an introduction to the analysis and description of structures and dynamics of human society. Emphasis is placed on the application of scientific methods of observation and analysis of social groups, intergroup relations, social change, social stratification, and social institutions.

## Science General Education Courses (Recommended)

Recommended courses listed below but student can also choose from the list of approved General Education courses in the College catalog.

## CHEM 107 - Forensic Science

## Credits: 4

This course introduces the student to the basic principles of forensic science and the application of those principles in the collection, examination, evaluation, and interpretation of crime scene evidence. The course provides the student with the opportunity to explore the intersection of several scientific areas (e.g., biological, physical, chemical, medical, and behavioral science) as they apply to the investigation and resolution of crimes.

Corequisite: CHEM 107L
Prerequisite: MATH 010, MATH 015, MATH 017, or MATH 023 and MATH 040

## BIOS 122 - Intro. to Environmental Science

## Credits: 4

This course is designed to explore the factors influencing the environment and to increase awareness of environmental problems. Topics include air, land, and water resources, ecology, waste management, and the human effects on the environment. Lab exercises and field trips will supplement the theory presented. Lab Fee Required.

Corequisite: BIOS 122L

## Program/Option/Certificate Free Elective:

Choose any course from the College Catalog.

## Developmental Courses

Sussex has embraced a practice of directed self-choice whereby students are encouraged, through guided conversations with an advisor, to best determine their readiness for this course. Students should be aware that Developmental Studies exist and are available to help strengthen skills and encourage success. Pursuing testing and/or developmental courses is entirely up to the student. Further, testing, though providing a valuable reference point for reflection, does not create for the student an obligation to follow Accuplacer recommendations.

The exception to this is where students seek enrollment in higher-level math courses. Students wishing to enroll in the following math courses are required to take and adhere to placement guidance from, the Advanced Algebra and Functions test, as part of Accuplacer, through the college's testing center, for admission into any of the following courses: MATH 110, MATH 112, and MATH 113. Please note, courses in other disciplines

## Fire Science Technology, Certificate

This program is designed to serve the career and volunteer fire fighter, industrial fire protection personnel, fire protection specialist or the recent high school graduate who has an interest in fire service. The program will be offered primarily in the evening for part-time students. Upon completion of the program, students will have attained the skills and knowledge to perform their current duties more effectively and to prepare them for greater levels of responsibility within the fire service system. Courses completed to satisfy the requirements of the certificate program may be used to meet the requirements for the A.A.S. degree in Fire Science Technology.

## Upon completion of this program, graduates will be able to:

- Be prepared with a scientific understanding of fire hazards and their control with emphasis on effective operating procedures at fires and other emergencies.
- Demonstrate the skills necessary to incorporate the theory and applications to become a credentialed professional in the fire service.


## First Year

## Fall Semester

## ENGL 101 - English Composition I

## Credits: 3

This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects which include personal, rhetorical, and expository models. Research skills are introduced.

## COMS 110-Computer Concepts \& Applications

## Credits: 3

This course is designed to provide the student with a level of knowledge necessary to function in today's technological society. Topics include computer and network terminology, hardware, software, and processing concepts. A large portion of the class time is dedicated to exercises performed using integrated software packages. Lab Fee Required.

Corequisite: COMS 110S

## FRST 101 - Intro. to Fire Science

## Credits: 3

This course is an introduction to the fundamentals of fire protection engineering. It is a study of fire hazards and controlling mechanisms, detection and alarm systems, fire behavior and the physical and chemical effects of combustion upon a single dwelling to problem areas such as high-rise buildings.

Credits: 3
This course provides fundamental information regarding the history and philosophy of fire prevention, organization and operation of a fire prevention bureau, use of fire codes, identification and correction of fire hazards, and the relationships of fire prevention with built-in fire protection systems, fire investigation, and fire and life-safety education.

Prerequisite: FRST 101

## FRST 106 - Fire Tactics and Strategy

Credits: 3
This course progressively covers fireground tactics and strategies from before the fact fireground preparation, through systematically planning, implementing and managing the strategic and/or tactical plan, to a process of reviewing events and critiquing performance.

Prerequisite: FRST 101

Total Semester Hours: 15

## Winter Session

## Spring Semester

## FRST 104 - Fire Administration

## Credits: 3

This course examines the organization and management of the fire service. Topics include discussion of new technologies, changing organization structures, personnel and equipment, manpower and training, reporting systems and municipal budgets.

Prerequisite: FRST 101

## FRST 110 - Fire Behavior and Combustion

Credits: 3
This course explores the theories and fundamentals of how and why fires start, spread, and how they are controlled.
Prerequisite: FRST 101

## FRST 202 - Bldg. Constr. for Fire Protect.

## Credits: 3

This course studies the components of building construction that relate to fire and safety. The focus of this course is on fire fighter safety. The
elements of construction and design of structures are shown to be key factors when inspecting buildings, preplanning fire operations, and operating at emergencies.

Prerequisite: FRST 101

- CERT 000 - Certificate Elective Credits: 3


## FRST 208 - Hazardous Materials

Credits: 3
This course provides basic fire chemistry relating to the categories of hazardous materials including problems of recognition, reactivity, and health encountered by firefighters.

Prerequisite: FRST 101

## FRST 210 - Occupational Health \& Safety

## Credits: 3

This course covers the basic principles of Federal, State and FFPA standards and legislation emphasizing such topics as blood borne pathogens, NJ PEOSHA codes and related codes for general industry. It also addresses issues facing the firefighter such as injury, death, and health. This course is designed for N.F.P .A. 1500.

Prerequisite: FRST 101

Total Semester Hours: 18

Summer Session

## Total Program Hours: 33

Certificate Electives

## FRST 205 - Fire Protection Hydraulics \& Water Supply

## Credits: 3

This course is a review of hydraulic calculations and formulas, how to apply the standards to firefighting equipment and water supply. Sprinkler systems, fire pumps and hose lines are covered. This course requires fieldwork.

Prerequisite: FRST 101

FRST 250 - Special Topics in Fire Science

Credits: 3
This course focuses on selected topics in Fire Science technology. Since topics may change each time the course is offered, students should consult the course-offering schedule each semester.

## Developmental Courses

Sussex has embraced a practice of directed self-choice whereby students are encouraged, through guided conversations with an advisor, to best determine their readiness for this course. Students should be aware that Developmental Studies exist and are available to help strengthen skills and encourage success. Pursuing testing and/or developmental courses is entirely up to the student. Further, testing, though providing a valuable reference point for reflection, does not create for the student an obligation to follow Accuplacer recommendations.

The exception to this is where students seek enrollment in higher-level math courses. Students wishing to enroll in the following math courses are required to take and adhere to placement guidance from, the Advanced Algebra and Functions test, as part of Accuplacer, through the college's testing center, for admission into any of the following courses: MATH 110, MATH 112, and MATH 113. Please note, courses in other disciplines may also require advanced mathematics placement. Students should check with their advisor.

## Game Development Option, A.A.S. - Computer Information Systems

A degree in Game Development will prepare students for entry-level positions in programming, testing and game design. During the final semester of the degree program, game artists and developers will work in conjunction to create and manage a complete marketable game.

## Upon completion of this program, graduates will be able to:

- Recognize and evaluate critical and aesthetic issues within computer graphics and mixed media.
- Compare and contrast game requirements based on genre.
- Analyze player control, manual and visual interface design, and usability.
- Identify phases in the game development cycle, as well as be skilled in project management and game documentation.
- Work collaboratively and individually with an understanding of the production process utilized in industry-standard studios.
- Communicate effectively in oral format on research and creative issues.
- Apply critical thinking and aesthetic judgments in critiquing mixed media and computer graphics productions.
- Function on multi-disciplinary teams.
- Merge complex artwork and code to create a working video game.
- Create a project report.
- Set a mood using sound effects, ambient and environmental sounds, and music.
- Demonstrate professionalism through creative and intellectual independence.
- Demonstrate knowledge of the legal and ethical issues related to sound and video sampling and the current copyright laws pertaining to music, video and audio recordings.


## First Year

Fall Semester

## COLL 101 - Foundations for Success

## Credits: 3

This is a student-centered course covering numerous strategies to encourage students to become active and empowered learners. A primary goal of this course is to help students make the most out of their college experience. Students will obtain information about college life and culture and
develop strategies and techniques to enhance success in their academic, personal and professional lives. The course is infused with opportunities to understand, practice and implement critical thinking. Students will also gain practical information to help prepare to transfer to a four-year university or enter the workforce directly. All topics will be presented in both theory and practice. This course is required of all degree-seeking candidates and must be taken within the initial 16 credits after entry.

## COMS 113 - Intro. to Information Systems

## Credits: 3

This course is concerned with how organizations utilize information technology. The course deals with the operational activities involved in gathering, processing, storing, distributing and the use of information and its associated changing technologies. The case studies present students with managerial decision-making activities. Software platforms are used for the analysis. Lab Fee Required.

## COMS 114 - Intro. to Computer Science I

## Credits: 3

This course introduces the student to the fundamentals of computer science using an emphasis on programming methodology and problem solving. Topics include introductory concepts of computer systems, algorithm design, programming languages, software engineering, and data abstraction with related applications. A high level programming language is completely discussed and is used as a means to demonstrate concepts. Lab Fee Required.

## ENGL 101 - English Composition I

## Credits: 3

This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects which include personal, rhetorical, and expository models. Research skills are introduced.

## GRAD 115 - Intro. to Game Theory \& Develop.

## Credits: 3

This course is targeted as an introduction to game theory and development. Students will be engaged throughout the course to design both new and classic games through a user-friendly game programming interface. In addition, students will learn to create and design their own pixel art to enhance the look and feel of their own game. Many topics will be addressed throughout the course including game design, theory, creation, and production. Students will learn how games are distributed and design game programs that are platform independent. Lab fee required.

Total Semester Hours: 15

Winter Session

Spring Semester

Credits: 3
This course is designed to provide the student with an overview of all critical business functions. Topics include forms of business ownership, legal aspects of business, human resource management, finance, marketing, accounting, management information systems, international business and contemporary business issues. Students taking this course are prepared for more advanced courses in business.

## COMS 115 - Intro. to Computer Science II

## Credits: 3

This course is the continuation of COMS 114. Topics include intermediate to advanced programming techniques with logical data structures and the design and analysis of such structures. The course also covers techniques for program development, algorithm analysis, efficiency, along with abstraction, an introduction to data structures, searching, sorting, recursion and string manipulation. Lab Fee Required.

Prerequisite: COMS 114 or Equivalent

## COMS 132-Game Programming

## Credits: 3

Elements of game programming are established with an emphasis on programming methodology, problem solving, and the graphics essential for game development. Topics include introductory game theory, algorithm design, programming languages, software engineering, and data abstraction with related applications. A high level programming language is completely discussed and is used as a means to demonstrate the concepts.

Prerequisite: COMS 114 Introduction of Computer Science I or COMS 142 Programming in C++

## ENGL 102 - English Composition II

## Credits: 3

This course introduces students to short fiction, poetry, drama, and the novel. Written assignments are based on the readings. Writing skills learned in Composition I are further developed. Students will write a research paper which demonstrates understanding of literary criticism.

Prerequisite: ENGL 101 (Grade of C or better)

## MATH 108 - Statistics

## Credits: 3

This course includes the following topics: organization of data, measures of central tendency and dispersion, probability, the normal and binomial distributions, confidence intervals, hypothesis testing, analysis of variance, and correlation.

Prerequisite: MATH 017 (Grade of C or betterI) or MATH 023 (Grade of C or betterI) or appropriate algebra placement score

Total Semester Hours: 15

Second Year

Fall Semester

## COMS 155 - Web Site Development I

## Credits: 3

This course is an introduction to Web Site Development. Students will receive intensive hands-on experience in coding web pages, including linking, layout and design, forms, graphics, security concerns, and maintaining a Web Site. Lab Fee Required.

Prerequisite: COMS 110 or any course above COMS 110

## ECON 101 - Macroeconomics

## Credits: 3

This course is an analysis of major economic concepts. Topics include the elements of national income; the economic roles of government and labor; classical economics; monetary institutions and policies; the Keynesian model and modern fiscal policy; the macroeconomic aspects of world trade.

- GHMN 000 - Humanities Gen Ed Requirement Credits: 3


## GRAD 128 - Digital Imagery \& Editing

## Credits: 3

This course provides students with the intensive exploration of advanced digital imaging as it applies to photography creating PDF documents, optimizing web graphics and complex layered images. Students will perfect their ability to creatively use digital imaging software to create sophisticated graphics for print and the web. Further study and practical application will be applied to creating documents for both the Internet and print mediums. An emphasis is placed on developing quality portfolio pieces. Lab Fee Required.

Prerequisite: GRAD 105

Total Semester Hours: 15

Winter Session

Spring Semester

## Credits: 3

This course is an exploration of economic factors that affect the firm and individual consumers. Topics include the laws of supply and demand, elasticity, consumer demand and utility theory, production, pricing, competitive behavior, monopoly and imperfect competition, labor economics, international trade.

## COMS 210 - Systems Analysis \& Design

## Credits: 3

This course examines techniques of computer systems analysis and design with an emphasis on structuring a computer system based on the needs of the user. Final projects will provide students with practical use of contemporary system analysis and design tools. Lab Fee Required.

Prerequisite: COMS 113 or COMS 114 or COMS 120 or COMS 142

## COMS 223 - Data Structures

## Credits: 3

This course focuses on intermediate to advanced programming topics dealing with logical structures of data, together with the design and analysis of related algorithms. Topics include arrays, lists, linked lists, trees, stacks, graphs, and memory management. Algorithms for searching, sorting and information retrieval are also explored. Students demonstrate proficiency by completing laboratory assignments. Lab Fee Required.

Prerequisite: COMS 115 or COMS 143 Recommended

## GRAD 262 - Game Production

## Credits: 3

This course is designed to bring practical experience, of working in collaborative teams, to produce games of the highest professional quality. Students utilize industry-standard software and advanced programming to explore the practical challenges of managing the development of a game. Emphasizes is on documentation and management skills, game design, character development, storyboarding, user interface, interactive storytelling, 3D animation, special effects, audio, and testing.

Prerequisite: GRAD 235 Video and Motion Graphics
GDEV000 Program Elective Credits: 3

Total Semester Hours: 15

Summer Session

## Total Program Hours: 60

## HIST 101 - Hist of Western Civilization I

Credits: 3
This course emphasizes the political, social, economic, technological, and cultural forces that influenced the historical development of Western Civilization to 1648. Major topics include: Ancient Civilizations, Greece and Rome, Middle Ages, Renaissance, and Reformation.

## Program Electives

Choose one course from below:

## COMS 230-Networks and Telecommunications

## Credits: 3

This course is an introduction to data communications. Topics include various transmission systems, hardware, software and local area networks. Laboratory assignments will include the installation and maintenance of a local area network -Novell NetWare. . Lab Fee Required.

Prerequisite: COMS 113 or COMS 114 or COMS 120 or COMS 142

## COMS 240 - Computer Information Systems Internship

Credits: 3
This is a college-supervised program in a data processing environment. The course is designed to expose students to the methods and procedures utilized by data processing professionals.

Prerequisite: COMS 120, COMS 206, COMS 214; Permission of the Program Coordinator

## Developmental Courses

Sussex has embraced a practice of directed self-choice whereby students are encouraged, through guided conversations with an advisor, to best determine their readiness for this course. Students should be aware that Developmental Studies exist and are available to help strengthen skills and encourage success. Pursuing testing and/or developmental courses is entirely up to the student. Further, testing, though providing a valuable reference point for reflection, does not create for the student an obligation to follow Accuplacer recommendations.

The exception to this is where students seek enrollment in higher-level math courses. Students wishing to enroll in the following math courses are required to take and adhere to placement guidance from, the Advanced Algebra and Functions test, as part of Accuplacer, through the college's testing center, for admission into any of the following courses: MATH 110, MATH 112, and MATH 113. Please note, courses in other disciplines may also require advanced mathematics placement. Students should check with their advisor.

## Geology Option, A.S. - Science/Mathematics

This program is designed for students who wish to pursue a bachelor's degree at a four-year institution, majoring in Geology or a related science.

# Upon completion of this program, graduates will be able to: 

- Science is an evidence-based way of thinking about the natural world and understanding how it operates.
- Science is a process with rules of operation that allow our understanding of the natural world to evolve.
- Science is based on reproducible evidence and observations that contain uncertainties.
- The sciences are related to each other, mathematics, and everyday life.
- Science is driven by globalization, technology, and new instrumentation and measurement tools.
- Scientific meanings of theory and law are different than popular meanings.


## First Year

Fall Semester

## COLL 101 - Foundations for Success

## Credits: 3

This is a student-centered course covering numerous strategies to encourage students to become active and empowered learners. A primary goal of this course is to help students make the most out of their college experience. Students will obtain information about college life and culture and develop strategies and techniques to enhance success in their academic, personal and professional lives. The course is infused with opportunities to understand, practice and implement critical thinking. Students will also gain practical information to help prepare to transfer to a four-year university or enter the workforce directly. All topics will be presented in both theory and practice. This course is required of all degree-seeking candidates and must be taken within the initial 16 credits after entry.

## ENGL 101 - English Composition I

## Credits: 3

This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects which include personal, rhetorical, and expository models. Research skills are introduced.

## MATH 113 - Calculus I

## Credits: 4

This course includes a review of algebraic and transcendental functions and their graphs; study of the concepts of limits and continuity, the derivative and its applications; indeterminate forms; introduction to integration and its applications.

Prerequisite: MATH 110 and MATH 112 (Grades of C or better) or appropriate pre-calculus placement score

## GEOL 101 - Physical Geology

## Credits: 4

This course is designed to introduce students to earth and its physical processes, including the origin and nature of rocks and minerals, weather and its erosional forces, mountain building, volcanism, metamorphism, origin of ore deposits, plate tectonics, and problems of water supply and

## Winter Session

## Spring Semester

## ENGL 102 - English Composition II

## Credits: 3

This course introduces students to short fiction, poetry, drama, and the novel. Written assignments are based on the readings. Writing skills learned in Composition I are further developed. Students will write a research paper which demonstrates understanding of literary criticism.

Prerequisite: ENGL 101 (Grade of C or better)

## MATH 114 - Calculus II

## Credits: 4

This course is the second semester of a three semester sequence of introductory calculus. Topics include integration techniques, applications of integration, delete in.... forms infinite series, parametric equations, and polar coordinates.

Prerequisite: MATH 113 (Grade of C or better)

## BIOS 122 - Intro. to Environmental Science

## Credits: 4

This course is designed to explore the factors influencing the environment and to increase awareness of environmental problems. Topics include air, land, and water resources, ecology, waste management, and the human effects on the environment. Lab exercises and field trips will supplement the theory presented. Lab Fee Required.

Corequisite: BIOS 122L

## GEOL 110 - Historical Geology

## Credits: 4

This course will introduce the student to the study of planet Earth through time. The class will study the concepts of stratigraphy (the study of strata) and the fossils they contain. This course will concentrate on the geologic history of North America with special attention to the Appalachian Basin and New Jersey. This course will discuss the history of the Earth, geological processes and biological history. This course will include labs and several field trips to observe concepts taught in the lectures. Lab Fee Required.

Corequisite: GEOL 110L

Total Semester Hours: 15

Summer Session

Second Year

## Fall Semester

## CHEM 110 - College Chemistry I

## Credits: 4

This course covers general chemical principles and their applications in research and industry. Topics include matter and measurement; math in chemistry; atoms; molecules, and ions; elemental periodicity; stoichiometry; formulas and , equations; the mole; intramolecular and intermolecular bonds; reaction types including redox and acid/base; properties and reactions of solutions, gases, and the solid state; industrial processes. The lab component covers materials separation, analytical methods and instruments, qualitative and quantitative analysis; and lab report writing skills. This course is scheduled during the day in the fall semester, and during the evening in the spring semester. Lab Fee Required.

Corequisite: MATH 110, CHEM 110L

## PHYS 120 - Physics I with Calculus

## Credits: 4

This course will introduce the student to problem solving and laboratory techniques in calculus based physics. Topics include vectors, forces, mechanics, kinematics, fluids, thermodynamics, and waves. Lab Fee Required.

Corequisite: PHYS 120L
Prerequisite: MATH 113, MATH 114 (Grade of C or better) (MATH 114 may be taken concurrently)

## COMS 110-Computer Concepts \& Applications

## Credits: 3

This course is designed to provide the student with a level of knowledge necessary to function in today's technological society. Topics include computer and network terminology, hardware, software, and processing concepts. A large portion of the class time is dedicated to exercises performed using integrated software packages. Lab Fee Required.

Corequisite: COMS 110S

## GEOG 105 - Cultural Geography

This course will function as a map to the cultural landscape of our world. It combines aspects of economic and cultural geography. It will examine the interrelations between humans and their natural environments as well as examine the difference between one place and another in terms of the customs, mores and institutions that create and maintain human societies.

- GHMN 000 - Humanities Gen Ed Requirement Credits: 3

Total Semester Hours: 17

Winter Session

## Spring Semester

## CHEM 112 - College Chemistry II

## Credits: 4

This course is a continuation of CHEM 110, College Chemistry I. Topics include chemical kinetics; chemical equilibrium; chemical thermodynamics, electrochemistry, nuclear chemistry, main-group element chemistry, metals and metallurgy, transition metals and coordination chemistry, environmental chemistry; introduction to organic and biological chemistry. The lab component covers kinetics, electrochemistry, and coordination compounds. The course is scheduled during the day in the spring semester, and during the evening in the fall semester. Lab Fee Required.

Corequisite: CHEM 112L
Prerequisite: CHEM 110 (Grade of C or better)

## PHYS 121 - Physics II with Calculus

## Credits: 4

This course is a continuation of Physics I with Calculus. Topics include electromagnetism, circuits, electromagnetic waves, optics, and relativity. Lab Fee Required.

Corequisite: MATH 213 (Grade of C), PHYS 121L
Prerequisite: PHYS 120 (Grade of C)

- GSOC 000 - Social Science Gen Ed Requirement Credits: 3
- GEOL 000 - Option Elective Credits: 3

Total Semester Hours: 14

Summer Semester

## Total Program Hours: 60

## Humanities General Education Courses (Recommended)

Recommended courses listed below but student can also choose from the list of approved General Education courses in the College catalog.

## HUMN 101 - Survey of World Culture I

Credits: 3
This survey course explores the evolution of western and non-western key ideas in art, music, and literature from prehistoric times to the 14th century. Emphasis is placed on the comparison of social, economic, religious, and political forces in the arts in a variety of cultures and diverse people.

## HUMN 102 - Survey of World Culture II

## Credits: 3

This survey course explores the evolution of western and non-western key ideas in art, music, and literature from the 15th to 21st century societies. Emphasis is placed on the comparison of social, economic, religious, and political forces in the arts in a variety of cultures and diverse people.

## PHIL 205 - Contemporary Ethical Issues

Credits: 3
This course is an introduction to the study of moral theories and their justification, including an examination of contemporary moral concerns as test cases.

## AMSL 101 - American Sign Language I

## Credits: 3

This course is designed to develop basic communicative skills in American Sign Language. This course will emphasize grammatical structures, sign vocabulary, fingerspelling, numbers, expressive and receptive skills, facial grammar and non-manual communication, and the anatomy and physiology of the human hearing system and hearing loss. Additionally, this course provides an introduction to the culture of the Deaf community.

Corequisite: ENGL 021 and ENGL 032

## SPAN 101 - Elementary Spanish I

## Credits: 3

This is an introductory course in Spanish emphasizing the fundamentals of speaking, reading, writing, and listening. The course focuses on building basic vocabulary and introducing students to the Hispanic culture. It is designed for students with no Spanish experience.

Credits: 3
This course is a survey of Western Civilization since 1648 with emphasis on the concepts and historical movements vital to understanding the modem world. Major topics include the development of law and government, the emergence of the major ideologies of the nineteenth and twentieth centuries, the industrial revolution and economic modernization, 20th century "isms" and the impact of social and cultural development in Western Europe.

## Social Science General Education Courses (Recommended)

Recommended courses listed below but student can also choose from the list of approved General Education courses in the College catalog.

## ANTH 101 - Introduction to Anthropology

## Credits: 3

This course is an integrated overview of the four fields of anthropology. Physical anthropology, cultural anthropology, linguistics, and archeology are explored as subfields and together as an integrated whole. Emphasis is placed on the study of the social and biological origins of human culture, religious diversity, linguistic diversity, and patterns of social inequalities.

## POLS 101 - Intro. to Political Science

## Credits: 3

This course provides a general introduction to the discipline of political science. The course focuses on the major sub-disciplines of political science including practical theory, international relations, comparative politics, and identity politics. The course is designed to encourage active student participation in the political process.

## PSYC 101 - Introduction to Psychology

## Credits: 3

This course is an introduction to the science of human behavior and mental processes. Emphasis is placed on the relationship between the nervous system and behavior, learning, perception, development, motivation, personality, attitude formation and prejudice, psychopathology and psychotherapy.

Prerequisite: Proficient in all Developmental English Courses

## SOCA 101 - Intro. to Sociology

## Credits: 3

This course is an introduction to the analysis and description of structures and dynamics of human society. Emphasis is placed on the application of scientific methods of observation and analysis of social groups, intergroup relations, social change, social stratification, and social institutions.

## BIOS 110 - Biology I

Credits: 4
This course is designed to familiarize the student with the general principles and unifying concepts of biological science. Topics include scientific investigations, the physical and chemical properties of living matter, cell structure and function, energy transformations, genetics, evolution and diversity. Lab Fee Required.

Corequisite: BIOS 110L
Prerequisite: MATH 040 or the approved score on the College Level Math Placement Test

## PHYS 105 - Introductory Astronomy

## Credits: 4

This course provides an introduction to descriptive space science covering the historical development of astronomy and planetology. Basic physical laws are introduced to help explain the tools used in the investigation of solar systems. Appropriate laboratory experiences are provided.

Corequisite: PHYS 105L
Prerequisite: MATH 106 or higher, or Permission of Instructor

## PHYS 107 - Introductory Meteorology

## Credits: 4

This introductory course consists of five areas of concentration-atmospheric components; weather systems; upper air dynamics; satellite and radar interpretation of severe and weather elements; a review of historical weather events and their social and geographical effects; systems examined include hurricanes; severe thunderstorms and the mesosyclone; forms of precipitation; hourly observations; cloud identification; interpretation NCEP/NOAH data for forecast modeling data.

Corequisite: PHYS 107L

## PHYS 108 - The Physics \& Technology of Clean Energy

## Credits: 4

This course is designed to explore the approaches to energy that are more sustainable for the earth and its people. Students will learn the design and specific uses of appropriate clean energy systems. Topics include energy, electricity, biofuels, wind energy, hydroelectric power, solar power, connection to the grid and the human and environmental effects of energy use. Lab exercises and field trips will supplement the theory presented. Lab Fee Required.

Corequisite: PHYS 108L
Prerequisite: MATH 017 or MATH 023 or Proficiency on the College Placement Test

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The exception to this is where students seek enrollment in higher-level math courses. Students wishing to enroll in the following math courses are required to take and adhere to placement guidance from, the Advanced Algebra and Functions test, as part of Accuplacer, through the college's testing center, for admission into any of the following courses: MATH 110, MATH 112, and MATH 113. Please note, courses in other disciplines may also require advanced mathematics placement. Students should check with their advisor.

## Graphic and Digital Design, C.O.A.

## Graphic Design, A.A.S.

Graphic designers combine artistic ability with technical knowledge to create designs used in print and electronic media that inform, motivate, educate or sell. The objective of this focused multimedia program is designed to provide traditional techniques and the dynamic structure of current computer-based technology. The program will build the groundwork for a career and provide real time in a simulated work environment while preparing a competitive portfolio. Students will develop initiative and critical thinking skills needed to compete in the global market place. Approximately one-half of all program graduates go on to complete a baccalaureate degree in graphic design, film, video, illustration or game art.

## Upon completion of this program, graduates will be able to:

- Analyze the history of visual culture and design theory, and apply historical relevance in the context of modern industry issues and trends.
- Execute technical, aesthetic, and conceptual decisions based on understanding the functions of graphic design, illustration, web design and animation.
- Implement current and emerging technologies using both PC and Macintosh platforms as production tools.
- Utilize problem solving techniques and critical thinking skills across a wide range of media to capture the attention of intended audiences.
- Collaborate with diverse teams of creative contributors, production personnel and clients while working with creative constraints and deadlines.
- Apply knowledge of intellectual property issues.
- Produce a professional portfolio in both traditional and digital formats.
- Qualify for various entry-level industry positions, including desktop publishing, graphic designers, production artists, web designers, digital image processors, digital illustrators and assistant art directors.

First Year

## Fall Semester

## COLL 101 - Foundations for Success

## Credits: 3

This is a student-centered course covering numerous strategies to encourage students to become active and empowered learners. A primary goal of this course is to help students make the most out of their college experience. Students will obtain information about college life and culture and develop strategies and techniques to enhance success in their academic, personal and professional lives. The course is infused with opportunities to understand, practice and implement critical thinking. Students will also gain practical information to help prepare to transfer to a four-year university or enter the workforce directly. All topics will be presented in both theory and practice. This course is required of all degree-seeking candidates and must be taken within the initial 16 credits after entry.

Credits: 3
This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects which include personal, rhetorical, and expository models. Research skills are introduced.

## GRAD 101 - Design I

## Credits: 3

This course is an exploration of the fundamental principles of design through a series of weekly lectures, discussions, and short readings reinforced by studio assignments and critiques. This class focuses on developing the ability to skillfully use and combine core design elements and utilize design principles while mastering the craft of materials to convey meaning. Assignments are organized and designed to engage students with optimal learning opportunities in developing critical thinking skills and professional vocabulary allowing for further study. Although this course is not a software-oriented course student will be introduced to the computer utilizing Adobe Illustrator and Photoshop to gain very basic skills.

## GRAD 105 - Vector Graphics \& Page Design

## Credits: 3

This course emphasizes techniques and applications used to produce published documents for both Internet and print media. Students will learn to design documents, publications, and related projects using industry standard software on both MAC and PC platforms. An emphasis is placed on basic computer graphic skills through practical experience with two-dimensional paint and draw programs, as well as layout programs for print and web. Projects covered include advertising design, page layout, computer illustrations, digital imaging, and the scanning and manipulation of images. Lab Fee Required.

Prerequisite: Any COMS course

## GRAD 107 - Drawing for Designers

## Credits: 3

This is a studio course where students will observe and create in the physical world away from the computer. This course suggests that real-world observation is invaluable in the planning of traditional illustration, digital illustration, 2D graphics, and 3D generated images. Areas of instruction will include graphic design drawing elements (such as line, value, texture, color, and composition), perspective, architecture, and environments. The course will also emphasize basic drawing techniques, anatomy for the artist, life drawing, lighting, texturing, and storyboarding. Students will learn how to efficiently work with pencil, charcoal, ink, markers, and mixed media. Lab Fee Required.

Total Semester Hours: 15

## Winter Session

## Spring Semester

## ENGL 201 - Effective Speaking

Credits: 3
This is a course in public speaking which stresses speech organization, effective delivery and critical listening skills. A strong emphasis is placed on student performance to help the student gain speech practice and develop self-confidence in a variety of speaking situations.

Prerequisite: ENGL 015 and ENGL 031

## ARTA 103 - Art History I

## Credits: 3

This course surveys visual artistic expression from the Neolithic period to the fourteenth century, including ancient, medieval and non-European art forms. The development of artistic concepts in the ancient world, gender, and non-western art are central topics in this general survey course.

Prerequisite: ENGL 021, ENGL 032 or Placement into ENGL 101

- MAST 000 - Math/Science/Technology Gen Ed Requirement Credits: 3


## GRAD 109 - Intro. to Digital Marketing

## Credits: 3

This course focuses on techniques for writing, editing and researching content for social media platforms, and students will publish their work on their own Websites and Blogs. An emphasis is placed on the skills needed for quality storytelling via social media communication. Students will explore blogging, podcasting and social software technology. Students will implement social media research campaigns, develop original web content, and discuss interactive writing, interactive publishing, and the role of the interactive writer. Copyright law, libel law, information ethics and culture will be explored.

## GRAD 128 - Digital Imagery \& Editing

## Credits: 3

This course provides students with the intensive exploration of advanced digital imaging as it applies to photography creating PDF documents, optimizing web graphics and complex layered images. Students will perfect their ability to creatively use digital imaging software to create sophisticated graphics for print and the web. Further study and practical application will be applied to creating documents for both the Internet and print mediums. An emphasis is placed on developing quality portfolio pieces. Lab Fee Required.

Prerequisite: GRAD 105

Total Semester Hours: 15

Summer Session

Second Year

## ARTA 104 - Art History II

## Credits: 3

This course surveys the history of art from the fourteenth through the twenty first centuries. The development of artistic concepts in the contemporary world, art and gender, and non-western art and architecture are central topics in this general survey course. Emphasis is place on viewing art forms in context of culture and gender and understanding the philosophical foundations and critical theories that support and influence them

Prerequisite: ENGL 021, ENGL 032 or Placement into ENGL 101

## GRAD 122 - Typography \& Layout

## Credits: 3

This course is an introduction to typography and layout as applied to visual communication. Students will explore the history of typography, type recognition, typographic terms, fundamentals of type, and the appropriate use of typography in a variety of design applications. Emphasis is placed on the basic design principles of typographic compositions and typesetting. A range of theoretical and applied projects will be used to investigate typography as a fundamental communication tool. Students use both traditional and digital media employing page layout and software programs that utilize type. Lab Fee Required.

Prerequisite: GRAD 101, GRAD 105

## GRAD 135 - Advertising and Package Design

## Credits: 3

This course introduces the student to the development, scheduling, and production of 3D primary and secondary packaging plus related print materials. The focus of the course is on design, research, marketing, advertising, and sales for the retail marketplace. Students will obtain a working knowledge of product related resources such as photography, printing, product/model comprehensives, sales samples, molding, and quality control. The course will also explore the preparation of all products and material for final production. Lab Fee Required.

Prerequisite: GRAD 122

## GRAD 144 - Color for Designers

## Credits: 3

This course is an introduction to color intended for the designer in a technology driven world. The course will emphasize insight into color terminology, traditional color theory, and the perception and use of color in all media. Additional focus is placed on the essential principles and elements of design and their application to a variety of studio projects. Further exploration of the future of color will also be covered. Lab Fee Required.

Prerequisite: GRAD 101, GRAD 105

## GRAD 119 - Website Management for Digital Marketing

Credits: 3
This course is designed to introduce students to WordPress Content Management System for either personal or business website use. The course
covers the basics on how to use the WordPress platform including installation, content management, and configuration. Prior web publishing experience is not required. Familiarity with web browsers and email is highly recommended. Lab Fee Required.

Total Semester Hours: 15

## Winter Session

## Spring Semester

- GHMN 000 - Humanities Gen Ed Requirement Credits: 3
- GSOC 000 - Social Science Gen Ed Requirement Credits: 3


## GRAD 201 - Presentation \& Print Production

## Credits: 3

This course will begin with training in various hand cutting and assembly techniques enabling the student to develop professional-level skills in craftsmanship. These skills combined with methods of presenting work will allow the student to develop into a well-rounded creative professional. Emphasis is placed on basic skills in cutting, mounting, folding, 3D construction and wrapping. Students will have the opportunity to apply these skills on a variety of projects. In the later part of the class lectures and projects will focus on preparing accurate files using a variety of software applications. Topics include setting up mechanical files, film separations, screen angles, trapping, process and spot color, file formats, creating plates for specialized inks and processes, and an overview of the life cycle of a print job. Completed projects would be suitable for inclusion in student portfolios. Lab Fee Required.

Prerequisite: GRAD 122, GRAD 128

## GRAD 235 - Video and Motion Graphics

## Credits: 3

This course introduces students to software products (editing suites and special effects) that are now widely used in the gaming and entertainment industries for editing and graphic manipulation. Students will learn to use specialized compositing tools to edit scenes, insert graphic effects, place sound effects and blend music to create a final professional product. Software packages used in this class include Adobe's After Effects® and Premiere ${ }^{\circledR}$.

## GRAD 280 - Graphic Design Internship

## Credits: 2

This course is designed for Graphic Design majors who have demonstrated advanced skill levels and for those who have potential to perform professionally in a work environment. Internships include practical work experience in an on or off campus business or project (i.e. advertising agencies, graphic design businesses or corporate art departments). An emphasis on personal presentation and success in the workplace is covered

Corequisite: GRAD 135
Prerequisite: GRAD 122, GRAD 144

Credits: 1
In this course, students will develop a portfolio of professional quality which is representative of technical and creative skills and career objectives. Excellent portfolio organization and resume presentation, will be stressed. Cover letters, interviewing styles and image presentation will be discussed. Students will write their goals, both short and long range, create a resume and develop a digital and printed portfolio for critique, suitable for presentation to a school, client or job interview.

Corequisite: GRAD 135
Prerequisite: GRAD 122, GRAD 144

Total Semester Hours: 15

Summer Session

Total Program Hours: 60

# Math, Science, Technology, Humanities \& Social Science General Education Courses 

Choose from the list of approved courses in the College catalog.

## Developmental Courses

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The exception to this is where students seek enrollment in higher-level math courses. Students wishing to enroll in the following math courses are required to take and adhere to placement guidance from, the Advanced Algebra and Functions test, as part of Accuplacer, through the college's testing center, for admission into any of the following courses: MATH 110, MATH 112, and MATH 113. Please note, courses in other disciplines may also require advanced mathematics placement. Students should check with their advisor.

## Health and Exercise Science, C.O.A.

The Certificate of Achievement in Health and Exercise Science involves studying human movement, understanding strength training programs, learning health behavior change strategies, learning about the prevention and treatment of athletic injuries, understanding health promotion and disease prevention, teaching group fitness classes, and more.

## First Year

## BIOS 107 - Nutrition Fundamentals

## Credits: 3

This course is designed to acquaint students with nutritional research concepts, the role of nutrients in the human body, the relation of nutrition to human behavior, and the study of nutrition-related health problems. This course interweaves concepts related to the science of human metabolism and body composition.

## EXSC 101 - Intro. to Exercise Science

## Credits: 3

This is an introductory-level course to acquaint students with the development and structure of the field of exercise science. The current scientific development of the field is stressed, with additional emphasis on careers, certifications, professional organizations, and industry research and resource development. Requires proficiency in all developmental English and mathematical courses.

Total Semester Hours: 6

## Winter Session

## Spring Semester

## PSYC 101 - Introduction to Psychology

## Credits: 3

This course is an introduction to the science of human behavior and mental processes. Emphasis is placed on the relationship between the nervous system and behavior, learning, perception, development, motivation, personality, attitude formation and prejudice, psychopathology and psychotherapy.

Prerequisite: Proficient in all Developmental English Courses

## EXSC 105 - First Aid and Emergency Care

## Credits: 3

This course in first aid is designed to acquaint students with information about prevention of accidents and injuries, and about emergency assessment, recognition and treatment of trauma, and sudden illnesses. Upon successful completion of the requirements, students will receive AAOS First Aid certification.

Credits: 1
This course is designed to teach the student about the different training principles and modalities of anaerobic exercise training. Anaerobic training typically involves more explosive and rapid exercises to improve performance on the athletic field but has also shown to have many health benefits for those not training for sport. Students taking this course will participate in a variety of anaerobic conditioning programs to understand the technique, effort, and safety involved in this training style. Lab fee required.

## EXSC 125 - Group Fitness

Credits: 1
This course is designed to educate the student on how to design and lead group exercise classes. Students are expected to conduct and participate in group exercise classes emphasizing a variety of training styles such as total body conditioning, stretching and strengthening, and boot camp. This course will also teach the importance of safety and monitoring of proper exercise technique during group exercise classes.

Total Semester Hours: 8

Summer Session I

Second Year

Fall Semester

## BIOS 150 - Nutrition, Fitness \& Wellness

## Credits: 3

This course covers topics in sports nutrition and basic exercise science. The primary goal of this course is to develop the student's understanding of how food fuels the body and affects optimal fitness and sports performance. Students will gain an in-depth understanding of the roles of carbohydrate, protein, and fat in the diets of active people as well as the role that nutrition plays in disease prevention. Consideration is also given to the ways in which food, fluids, and nutritional supplements support optimal health and training, performance, and recovery.

## EXSC 121 - Aerobic Conditioning

## Credits: 1

This course is designed to educate the student about the different training principles and modalities of aerobic exercise training. Students taking this course will participate in a variety of aerobic conditioning programs to understand the technique, effort, and safety involved in this training style. Lab fee required.

## Credits: 1

This course is designed to teach students proper resistance training techniques and programming for all major muscle groups of the body. Proper handling of the resistance equipment, weight room etiquette, training theory, and program design will also be discussed in this course. Students taking this course will be required to participate in weight training sessions to develop a better understanding of the exercises and training style.

Total Semester Hours: 5

## Winter Session

## Spring Semester

## Health Science, A.A.S.

The Associate in Health Science Degree program was designed to be the next step in health care educational opportunities. Students, who have completed a non-credit post-secondary health care training program, culminating in certification or licensure, are encouraged to enroll in this degree program. This program offers the general educational component which, when completed and combined with credit awarded for their prior health care education, qualify the student to be awarded an Associate of Applied Science Degree in Health Science.

Credit for certification/licensure will be granted after completion of the degree requirements (with grades of "C" or higher) resulting in 61/62 credits. The number of credits awarded for non-credit training will be determined by a review committee consisting of appropriate faculty and administrators at the College. Applicants are required to submit the following documentation for review: a copy of current license or certificate, transcripts and a diploma from the completed training program, and a current resume.

## Program Goals:

- Provide educational opportunities for allied health and nursing personnel.
- Engage in public health education within the framework of legal, ethical, and professional standards.
- Adapt health education research findings into practice settings.
- Provide leadership in the health profession.
- Establish a personal commitment to professional growth.


## First Year

## Fall Semester

## COMS 110-Computer Concepts \& Applications

Credits: 3
This course is designed to provide the student with a level of knowledge necessary to function in today's technological society. Topics include computer and network terminology, hardware, software, and processing concepts. A large portion of the class time is dedicated to exercises

Corequisite: COMS 110S

## ENGL 101 - English Composition I

Credits: 3
This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects which include personal, rhetorical, and expository models. Research skills are introduced.

## MATH 105-Technical Mathematics

## Credits: 3

This course is intended for students who have introductory algebra proficiency, and who need to apply mathematical concepts in a technical program. The purpose of the course is to prepare AAS students for the mathematical aspects of their work in the technical trades.

Prerequisite: Proficiency on the College Placement Examination or grade of C or better in MATH 017/MATH 023.

## PSYC 101 - Introduction to Psychology

## Credits: 3

This course is an introduction to the science of human behavior and mental processes. Emphasis is placed on the relationship between the nervous system and behavior, learning, perception, development, motivation, personality, attitude formation and prejudice, psychopathology and psychotherapy.

Prerequisite: Proficient in all Developmental English Courses

Total Semester Hours: 15

## Winter Session

## Spring Semester

## ENGL 125 - Tech. Writing \& Communication I

## Credits: 3

This course focuses on expository writing for business, industrial, and scientific fields, emphasizing the principles for organizing, writing, and revising clear, readable documents and reports. Students will practice written, oral, reading, and reasoning skills. Research skills will be advanced.

## Credits: 3

This course is an introduction to the analysis and description of structures and dynamics of human society. Emphasis is placed on the application of scientific methods of observation and analysis of social groups, intergroup relations, social change, social stratification, and social institutions.

GHMN 000 - Gen Ed Humanities Credits: 3
HSCI 000 - Program Elective Credits: 3*

Total Semester Hours: 15

Summer Session

Second Year

## Fall Semester

- HSCI 000 - Program Elective Credits: 3*
- HSCI 000 - Program Elective Credits: 3 *
- HSCI 000 - Program Elective Credits: 3 *
- HSCI 000 - Program Elective Credits: 3 *
- HSCI 000 - Program Elective Credits: 3 *

Total Semester Hours: 15

## Winter Session

## Spring Semester

- HSCI 000 - Program Elective Credits: 3 *
- HSCI 000 - Program Elective Credits: 3 *
- HSCI 000 - Program Elective Credits: 3 *
- HSCI 000 - Program Elective Credits: 3 *
- HSCI 000 - Program Elective Credits: 3 *

Total Semester Hours: 15

## Humanities General Education Courses

Choose from the list of approved General Education Humanites courses in the College catalog.

## Program Electives

*Candidates may have a current external certification or license to transfer in to the program. The value of the block of credits granted for professional certification/licensure will be between 0-30 credits and is based on completed health science program clock hours. The number of electives required will depend on the number of credits granted for professional certification. Students must meet with the program Advisor to determine the number of credits, if any, will be granted.

Students needing additional electives should choose from BIOS, CHEM, EXSC, MEDA, PSYC and SOCA course designations.

## Developmental Courses

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## History Option, A.A. - Liberal Arts

The History Option is primarily designed to prepare students to transfer into the junior year of a baccalaureate degree program in history. In addition, students seeking admission into political science or pre-law programs would receive a solid academic foundation upon which to build a successful major.

## The objectives of this program are to:

- Demonstrate general knowledge of historical inquiry and research.
- Describe the interconnection between economics, politics, society and culture, and analyze the effects of these influences on historic development.
- Provide examples of the impact of individual and collective action upon historic development.
- Examine the impact of perspective on the interpretation of historic events.
- Communicate clearly in both oral and written form.
- Demonstrate critical thinking and problem-solving skills.


## First Year

## Credits: 3

This is a student-centered course covering numerous strategies to encourage students to become active and empowered learners. A primary goal of this course is to help students make the most out of their college experience. Students will obtain information about college life and culture and develop strategies and techniques to enhance success in their academic, personal and professional lives. The course is infused with opportunities to understand, practice and implement critical thinking. Students will also gain practical information to help prepare to transfer to a four-year university or enter the workforce directly. All topics will be presented in both theory and practice. This course is required of all degree-seeking candidates and must be taken within the initial 16 credits after entry.

## ENGL 101 - English Composition I

## Credits: 3

This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects which include personal, rhetorical, and expository models. Research skills are introduced.

- HIST 001 - History Gen Ed Requirement Credits: 3
- GHMN 000 - Humanities Gen Ed Requirement Credits: 3
- GTEC 000 - Technology Gen Ed Requirement Credits: 3

Total Semester Hours: 15

Winter Session

## Spring Semester

## ENGL 102 - English Composition II

Credits: 3
This course introduces students to short fiction, poetry, drama, and the novel. Written assignments are based on the readings. Writing skills learned in Composition I are further developed. Students will write a research paper which demonstrates understanding of literary criticism.

Prerequisite: ENGL 101 (Grade of C or better)

- HIST 001 - History Gen Ed Requirement Credits: 3
- MATH 900 - Math Gen Ed Requirement Credits: 3
- GHMN 000 - Humanities Gen Ed Requirement Credits: 3


## Credits: 3

This course provides a general introduction to the study of the American Political System. This course focuses on the U.S. Constitutional System, the institutions of government, and means of popular participation. The course is designed to encourage active student participation in the political process.

Total Semester Hours: 15

## Summer Session

Second Year

## Fall Semester

## HIST 105 - U.S. History I

## Credits: 3

This course is an examination of United States history from the age of discovery through the Civil War. Particular emphasis will be placed on the social, economic, and political forces that were responsible for the development of the new nation.

- LSCI 000 - Science Gen Ed Requirement Credits: 4
- GSOC 000 - Social Science Gen Ed Requirement Credits: 3
- PHIL 000 - Philosophy Gen Ed Requirement Credits: 3


## ANTH 120 - Cultural Anthropology

## Credits: 3

This course is a study of a broad range of human behavior from a cross-cultural perspective including language and communication, concepts of love \& beauty, marriage \& the family, economic systems \& political organization and religion \& magic. This course provides a background to human cultural origins and variability.

Total Semester Hours: 16

## Winter Session

## ENGL 201 - Effective Speaking

Credits: 3
This is a course in public speaking which stresses speech organization, effective delivery and critical listening skills. A strong emphasis is placed on student performance to help the student gain speech practice and develop self-confidence in a variety of speaking situations.

Prerequisite: ENGL 015 and ENGL 031

## HIST 106 - U.S. History II

## Credits: 3

This course is an examination of United States history from Reconstruction through the present. Particular emphasis will be placed on major themes in United States' politics, society, economics, and diplomacy.

## ANTH 115 - Biological Anthropology

## Credits: 4

This course examines how Homo sapiens evolved. It starts with a core understanding of scientific methodology, evolutionary theory, and the genetic code. The paleontological record and methodologies for dating fossils and artifacts are studied. Anatomy, behavior, and classification of non-human primates with emphasis on the common ancestry Homo sapiens share with them are studied. Comparison and contrasting primate and hominin fossil records over the last 8 million years are also studied. Students will examine Paleolithic artifacts that highlight critical periods of human evolution. The course surveys human phenotypic diversity across clinical gradations. The interplay between anatomically modern human biology and cultural behavior is shown to be a key to understanding human evolution.

Prerequisite: Proficiency in Reading, Writing \& Math on College Placement Test or equivalency.

- LSCI 000 - Science Gen Ed Requirement Credits: 4

Total Semester Hours: 14

Summer Session

## Total Program Hours: 60

## Philosophy, Technology, Math and Science General Education Courses

Choose from the list of approved courses in the College catalog.

## Humanities General Education Courses (Recommended)

catalog.

## AMSL 101 - American Sign Language I

## Credits: 3

This course is designed to develop basic communicative skills in American Sign Language. This course will emphasize grammatical structures, sign vocabulary, fingerspelling, numbers, expressive and receptive skills, facial grammar and non-manual communication, and the anatomy and physiology of the human hearing system and hearing loss. Additionally, this course provides an introduction to the culture of the Deaf community.

Corequisite: ENGL 021 and ENGL 032

## AMSL 102 - American Sign Language II

## Credits: 3

This course strengthens students' expressive and receptive skills in American Sign Language, broadens their understanding of the Deaf community, culture and language, and provides an additional vocabulary base of several hundred signs from American Sign Language. This course instructs the student in the use of classifiers as well as providing them with an introduction to the idiomatic vocabulary of American Sign Language.

Prerequisite: AMSL 101

## SPAN 101 - Elementary Spanish I

## Credits: 3

This is an introductory course in Spanish emphasizing the fundamentals of speaking, reading, writing, and listening. The course focuses on building basic vocabulary and introducing students to the Hispanic culture. It is designed for students with no Spanish experience.

## SPAN 102 - Elementary Spanish II

## Credits: 3

This course is a continuation of SPAN 101 with an emphasis on the fundamentals of reading, speaking, writing, and listening. The course focuses on building basic vocabulary and continuing the study of Hispanic culture.

Prerequisite: SPAN 101 (Grade of C or better) or two years of high school Spanish (Grade of C or better)

## Social Science General Education Courses (Recommended)

Recommended courses listed below but student can also choose from the list of approved Social Science General Education courses in the College catalog.

## SOCA 101 - Intro. to Sociology

Credits: 3
This course is an introduction to the analysis and description of structures and dynamics of human society. Emphasis is placed on the application of scientific methods of observation and analysis of social groups, intergroup relations, social change, social stratification, and social institutions.

## History General Education Courses

Recommended courses listed below but student can also choose from the list of approved History General Education\ courses in the College catalog. Must choose a level I \& II sequence.

## HIST 101 - Hist of Western Civilization I

## Credits: 3

This course emphasizes the political, social, economic, technological, and cultural forces that influenced the historical development of Western Civilization to 1648. Major topics include: Ancient Civilizations, Greece and Rome, Middle Ages, Renaissance, and Reformation.

## HIST 102 - Hist of Western Civilization II

Credits: 3
This course is a survey of Western Civilization since 1648 with emphasis on the concepts and historical movements vital to understanding the modem world. Major topics include the development of law and government, the emergence of the major ideologies of the nineteenth and twentieth centuries, the industrial revolution and economic modernization, 20th century "isms" and the impact of social and cultural development in Western Europe.

## Developmental Courses

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## Horticultural Science, A.S.

The Associate in Science degree in Horticultural Science is designed for individuals who have a strong interest in occupations that relate to horticulture, nursery production, landscape design, landscape maintenance, the production of organic fruits and vegetables, and similar agricultural endeavors. Students interested in transferring to a four-year college or university need some foundational knowledge of plant biology, chemistry, horticulture fundamentals, soil science, and greenhouse management.

## The objectives of this program are to:

- Demonstrate a working knowledge of business management principles as they apply to the field of horticulture, horticulture management, and related endeavors.
- Categorize plants based on growth, morphological characteristics, taxonomic classifications, and habitat requirements.
- Demonstrate proficiency in written communication, oral communication, computer applications and problem-solving.
- Develop solutions for a wide variety of plant health issues.
- Apply classroom theory and hands-on practice in real-world horticultural environments.
- Describe and implement both conventional and organic methods of horticultural maintenance, such as fertilization and pest control.
- Demonstrate proficiency in the selection and use of native plants in ecological restoration projects.


## First Year

Fall Semester

## COLL 101 - Foundations for Success

## Credits: 3

This is a student-centered course covering numerous strategies to encourage students to become active and empowered learners. A primary goal of this course is to help students make the most out of their college experience. Students will obtain information about college life and culture and develop strategies and techniques to enhance success in their academic, personal and professional lives. The course is infused with opportunities to understand, practice and implement critical thinking. Students will also gain practical information to help prepare to transfer to a four-year university or enter the workforce directly. All topics will be presented in both theory and practice. This course is required of all degree-seeking candidates and must be taken within the initial 16 credits after entry.

## ENGL 101 - English Composition I

## Credits: 3

This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects which include personal, rhetorical, and expository models. Research skills are introduced.

## MATH 110 - Pre-Calculus I

## Credits: 3

This course is designed to strengthen algebraic skills and give students the math confidence to proceed with calculus and other higher forms of mathematics. Topics include the study of functions, graphing techniques, polynomial, rational, exponential and logarithmic functions and systems of equations and inequalities.

Prerequisite: MATH 040 (Grade of C or betterI) or appropriate pre-calculus placement score

## CHEM 110 - College Chemistry I

## Credits: 4

This course covers general chemical principles and their applications in research and industry. Topics include matter and measurement; math in chemistry; atoms; molecules, and ions; elemental periodicity; stoichiometry; formulas and , equations; the mole; intramolecular and intermolecular bonds; reaction types including redox and acid/base; properties and reactions of solutions, gases, and the solid state; industrial

## AGSC 101 - Intro. to Agricultural Science

## Credits: 3

This course introduces students to career opportunities and the general concepts of horticulture which includes plant taxonomy, physiology, crops, and their general management.

Total Semester Hours: 16

## Winter Session

## Spring Semester

## ENGL 102 - English Composition II

## Credits: 3

This course introduces students to short fiction, poetry, drama, and the novel. Written assignments are based on the readings. Writing skills learned in Composition I are further developed. Students will write a research paper which demonstrates understanding of literary criticism.

Prerequisite: ENGL 101 (Grade of C or better)

## BIOS 110 - Biology I

Credits: 4
This course is designed to familiarize the student with the general principles and unifying concepts of biological science. Topics include scientific investigations, the physical and chemical properties of living matter, cell structure and function, energy transformations, genetics, evolution and diversity. Lab Fee Required.

Corequisite: BIOS 110L
Prerequisite: MATH 040 or the approved score on the College Level Math Placement Test

## BUSA 101 - Intro. to Business

## Credits: 3

This course is designed to provide the student with an overview of all critical business functions. Topics include forms of business ownership, legal aspects of business, human resource management, finance, marketing, accounting, management information systems, international business and contemporary business issues. Students taking this course are prepared for more advanced courses in business.

Credits: 4
This course is a continuation of CHEM 110, College Chemistry I. Topics include chemical kinetics; chemical equilibrium; chemical thermodynamics, electrochemistry, nuclear chemistry, main-group element chemistry, metals and metallurgy, transition metals and coordination chemistry, environmental chemistry; introduction to organic and biological chemistry. The lab component covers kinetics, electrochemistry, and coordination compounds. The course is scheduled during the day in the spring semester, and during the evening in the fall semester. Lab Fee Required.

Corequisite: CHEM 112L
Prerequisite: CHEM 110 (Grade of C or better)

Total Semester Hours: 14

Summer Session

Second Year

Fall Semester

## AGSC 107-Agriculture Pest Control \& Mgmt.

## Credits: 4

This course is designed to introduce the student to the fundamental theories, principles, and practices of pest control for agriculture and ornamental horticulture crops. Diagnostic skills for insect, disease, and weed identification are presented.

Corequisite: AGSC 107L

## BIOS 130 - Introduction to Botany

## Credits: 4

This course is designed to study the structural and functional adaptations of algae and plants to the environment. It includes the study of the following processes: Seed germination, growth, photosynthesis, reproduction, and transport. Plant evolution and their relationship to the environment and to humans will be discussed. The laboratory component of the course includes field and laboratory studies of plant diversity, morphology and physiology. Students will design and carry out their own independent investigations. Lab Fee Required.

Corequisite: BIOS 130L
Prerequisite: BIOS 110 or Permission of Instructor

## HORT 201 - Introduction to Soil Science

## Credits: 4

This course acquaints the student, through in class lectures and hands on labs, with soil concepts, plant nutrients, and their influence on plant
growth. Emphasis will be placed on soil testing, nutrient deficiency symptoms, and fertilizer requirements.
Corequisite: HORT 201L

- GSOC 000 - Social Science Gen Ed Requirement Credits: 3

Total Semester Hours: 15

## Winter Session

## Spring Semester

## HORT 102 - Plant Propagation

## Credits: 4

This course acquaints the student, through in class lectures and hands on labs, with the techniques and facilities needed for plant propagation in the greenhouse and nursery industry.

Corequisite: HORT 102L

## HORT 204-Greenhouse Management

## Credits: 4

This course covers all aspects of the greenhouse business including construction, heating, cooling, and ventilation of a modern greenhouse. Lab Fee Required.

Corequisite: HORT 204L
Prerequisite: BIOS 110 (Grade of C or better)

- GHMN 000 - Humanities Gen Ed Requirement Credits: 3
- GSOC 000 - Social Science Gen Ed Requirement Credits: 3


## COLL 210 - Capstone for Biological and Clinical Sciences

## Credits: 1

This capstone course is designed to assist students in the transition from the community college experience to a four year educational institution. Students are required to creatively analyze, synthesize, and evaluate knowledge gained during previous semesters. Students will read several papers from the current research literature in their area of interest and will write a review paper on that topic. Additional assignments are designed to involve students in critical thinking and problem-solving. Throughout the semester students will engage in self-reflection activities related to their major and overall community college experience.

Prerequisite: Must have completed 45 credits

## Total Program Hours: 60

## Humanities General Education Courses (Recommended)

Recommended courses listed below but student can also choose from the list of approved General Education courses in the College catalog.

## HIST 105 - U.S. History I

## Credits: 3

This course is an examination of United States history from the age of discovery through the Civil War. Particular emphasis will be placed on the social, economic, and political forces that were responsible for the development of the new nation.

## HIST 106 - U.S. History II

## Credits: 3

This course is an examination of United States history from Reconstruction through the present. Particular emphasis will be placed on major themes in United States' politics, society, economics, and diplomacy.

## HUMN 101 - Survey of World Culture I

## Credits: 3

This survey course explores the evolution of western and non-western key ideas in art, music, and literature from prehistoric times to the 14th century. Emphasis is placed on the comparison of social, economic, religious, and political forces in the arts in a variety of cultures and diverse people.

## HUMN 102 - Survey of World Culture II

## Credits: 3

This survey course explores the evolution of western and non-western key ideas in art, music, and literature from the 15th to 21st century societies. Emphasis is placed on the comparison of social, economic, religious, and political forces in the arts in a variety of cultures and diverse people.

Credits: 3
This course is an introduction to the study of moral theories and their justification, including an examination of contemporary moral concerns as test cases.

## Social Sciences General Education Courses (Recommended)

Recommended courses listed below but student can also choose from the list of approved General Education courses in the College catalog.

## ANTH 101 - Introduction to Anthropology

## Credits: 3

This course is an integrated overview of the four fields of anthropology. Physical anthropology, cultural anthropology, linguistics, and archeology are explored as subfields and together as an integrated whole. Emphasis is placed on the study of the social and biological origins of human culture, religious diversity, linguistic diversity, and patterns of social inequalities.

## ECON 102 - Microeconomics

Credits: 3
This course is an exploration of economic factors that affect the firm and individual consumers. Topics include the laws of supply and demand, elasticity, consumer demand and utility theory, production, pricing, competitive behavior, monopoly and imperfect competition, labor economics, international trade.

## PSYC 101 - Introduction to Psychology

## Credits: 3

This course is an introduction to the science of human behavior and mental processes. Emphasis is placed on the relationship between the nervous system and behavior, learning, perception, development, motivation, personality, attitude formation and prejudice, psychopathology and psychotherapy.

Prerequisite: Proficient in all Developmental English Courses

## SOCA 101 - Intro. to Sociology

## Credits: 3

This course is an introduction to the analysis and description of structures and dynamics of human society. Emphasis is placed on the application of scientific methods of observation and analysis of social groups, intergroup relations, social change, social stratification, and social institutions.

Sussex has embraced a practice of directed self-choice whereby students are encouraged, through guided conversations with an advisor, to best determine their readiness for this course. Students should be aware that Developmental Studies exist and are available to help strengthen skills and encourage success. Pursuing testing and/or developmental courses is entirely up to the student. Further, testing, though providing a valuable reference point for reflection, does not create for the student an obligation to follow Accuplacer recommendations.

The exception to this is where students seek enrollment in higher-level math courses. Students wishing to enroll in the following math courses are required to take and adhere to placement guidance from, the Advanced Algebra and Functions test, as part of Accuplacer, through the college's testing center, for admission into any of the following courses: MATH 110, MATH 112, and MATH 113. Please note, courses in other disciplines may also require advanced mathematics placement. Students should check with their advisor.

## Hotel and Restaurant Management Option, A.A.S. - Business Management

This program is designed as a terminal degree and prepares students for immediate entry into a career. This program provides students with fundamental business knowledge and prepares them for careers in the Hotel and Restaurant Industry, business development and management, government, retail, and not-for-profit organizations.

## The objectives of this program are to:

- Obtain entry-level and supervisory careers in the Hotel and Restaurant Industry, business development and management, government, retail or not-for-profit organizations.
- Analyze contemporary business problems and propose effective solutions using case studies and SWOT analysis (strengths, weaknesses, opportunities, and threats).
- Identify ethical and unethical business behaviors and explain the impact of each type of behavior on an organization's stakeholders (i.e., customers, competitors, investors, creditors, government regulators, employees, etc.).
- Design and deliver effective oral presentations as commonly used in contemporary business environments.
- Use applications software for basic word processing, spreadsheet, and presentation projects.


## First Year

## Fall Semester

## COLL 101 - Foundations for Success

## Credits: 3

This is a student-centered course covering numerous strategies to encourage students to become active and empowered learners. A primary goal of this course is to help students make the most out of their college experience. Students will obtain information about college life and culture and develop strategies and techniques to enhance success in their academic, personal and professional lives. The course is infused with opportunities to understand, practice and implement critical thinking. Students will also gain practical information to help prepare to transfer to a four-year university or enter the workforce directly. All topics will be presented in both theory and practice. This course is required of all degree-seeking candidates and must be taken within the initial 16 credits after entry.

## ENGL 101 - English Composition I

## Credits: 3

This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects which include personal, rhetorical, and expository models. Research skills are introduced.

## CULA 103 - Food Service Sanitation

Credits: 1
This course provides the student with an in-depth study of food microbiology and a review of significant food-borne illnesses. Emphasis will be placed on food safety and adherence to local, state and federal regulations that address food service sanitation. The course is intended to prepare students for the National Restaurant Association Educational Foundation Certification exam and the New Jersey State Department of Health Food Service Managers Sanitation course exam

## COMS 110-Computer Concepts \& Applications

Credits: 3
This course is designed to provide the student with a level of knowledge necessary to function in today's technological society. Topics include computer and network terminology, hardware, software, and processing concepts. A large portion of the class time is dedicated to exercises performed using integrated software packages. Lab Fee Required.

Corequisite: COMS 110S

- HOST 101 - Introduction to Hotel, Restaurant and Institutional Management Credits: 3
- GHMN 000 - Humanities Gen Ed Requirement Credits: 3

Total Semester Hours: 16

Winter Session

Spring Semester

## ENGL 125 - Tech. Writing \& Communication I

## Credits: 3

This course focuses on expository writing for business, industrial, and scientific fields, emphasizing the principles for organizing, writing, and revising clear, readable documents and reports. Students will practice written, oral, reading, and reasoning skills. Research skills will be advanced.

- MATH 900 - Math Gen Ed Requirement Credits: 3


## BUSA 101 - Intro. to Business

## Credits: 3

This course is designed to provide the student with an overview of all critical business functions. Topics include forms of business ownership, legal aspects of business, human resource management, finance, marketing, accounting, management information systems, international business and contemporary business issues. Students taking this course are prepared for more advanced courses in business.

Credits: 3
This course is a comprehensive hands-on study of Office Automation which provides the student with extended knowledge of Windows, word processing, electronic spreadsheets, and data base management. Lab Fee Required.

Prerequisite: COMS 110 or Higher

- GSOC 000 - Social Science Gen Ed Requirement Credits: 3

Total Semester Hours: 15

Summer Session

Second Year

## Fall Semester

## ACCT 101 - Accounting Princ. I Financial

## Credits: 3

This course is a study of accounting principles and procedures. The accounting cycle is covered for a service industry. Additional topics include accounting for merchandising operations; cash and short-term investments; inventory; the acquisition, allocation, and disposal of tangible and intangible assets; and current liabilities.

## BUSA 211 - Mgmt. \& Organizational Behavior

Credits: 3
This course is an introduction to management structure and transformational processes in organizations. Topics include planning, organizing, staffing, organizational control, motivation, group dynamics behavior, leadership, managing change and contemporary issues.

Prerequisite: BUSA 101

## BUSA 110 - Business Communications

## Credits: 3

This course is an exploration of the communication process in business. Topics include communication theory, styles of communication, business letters and reports, resume writing, employment letters and interviews, oral communication, business presentations, and communication technology. The use of computers in business is also covered.

- HOST 136 - Hospitality Marketing Credits: 3 (FA)
- GSOC 000 - Social Science Gen Ed Requirement Credits: 3


## Total Semester Hours: 15

## Winter Session

## Spring Semester

## BUSA 205-Business Law I

Credits: 3
This course is an introduction to the judicial process as it pertains to business law. Topics include the history of business law, contracts, business torts, white-collar crime, UCC sales, paper and securities. An in-depth study of rights and obligations as they apply to contract law is performed.

## ECON 101 - Macroeconomics

## Credits: 3

This course is an analysis of major economic concepts. Topics include the elements of national income; the economic roles of government and labor; classical economics; monetary institutions and policies; the Keynesian model and modern fiscal policy; the macroeconomic aspects of world trade.

- HOST 108 - Hotel \& Restaurant Operations Credits: 3 (SP)
- HOST 201 - Food \& Beverage Management Credits: 3 (SP)


## HOST 280 - Hospitality \& Culinary Arts Internship

## Credits: 2

This course is designed to give the culinary arts or hospitality student professional work experience in a job related to the specific program. The student will receive hands-on work experience in a job related to the program, complete course assignments, and develop a portfolio.

Prerequisite: Permission of Coordinator or Chair

Total Semester Hours: 14

Summer Session

## Total Program Hours: 60

## Humanities General Education Courses (Recommended)

Recommended courses listed below but student can also choose from the list of approved General Education courses in the College catalog.

## HUMN 101 - Survey of World Culture I

Credits: 3
This survey course explores the evolution of western and non-western key ideas in art, music, and literature from prehistoric times to the 14th century. Emphasis is placed on the comparison of social, economic, religious, and political forces in the arts in a variety of cultures and diverse people.

## HUMN 102 - Survey of World Culture II

## Credits: 3

This survey course explores the evolution of western and non-western key ideas in art, music, and literature from the 15th to 21st century societies. Emphasis is placed on the comparison of social, economic, religious, and political forces in the arts in a variety of cultures and diverse people.

## Social Science General Education Courses (Recommended)

Recommended courses listed below but student can also choose from the list of approved General Education courses in the College catalog.

## PSYC 101 - Introduction to Psychology

## Credits: 3

This course is an introduction to the science of human behavior and mental processes. Emphasis is placed on the relationship between the nervous system and behavior, learning, perception, development, motivation, personality, attitude formation and prejudice, psychopathology and psychotherapy.

Prerequisite: Proficient in all Developmental English Courses

## SOCA 101 - Intro. to Sociology

Credits: 3
This course is an introduction to the analysis and description of structures and dynamics of human society. Emphasis is placed on the application of scientific methods of observation and analysis of social groups, intergroup relations, social change, social stratification, and social institutions.

## MATH 104 - Contemporary Mathematics

Credits: 3
This course surveys several basic concepts of mathematics designed to give non-scientific/non-technical majors an understanding of the breadth of mathematics in areas other than computational application. Topics include: logic, financial management, geometry, measurement, probability and statistics.

Prerequisite: MATH 017/MATH 023 (Grade of C or better) or appropriate algebra placement score

## Developmental Courses

Sussex has embraced a practice of directed self-choice whereby students are encouraged, through guided conversations with an advisor, to best determine their readiness for this course. Students should be aware that Developmental Studies exist and are available to help strengthen skills and encourage success. Pursuing testing and/or developmental courses is entirely up to the student. Further, testing, though providing a valuable reference point for reflection, does not create for the student an obligation to follow Accuplacer recommendations.

The exception to this is where students seek enrollment in higher-level math courses. Students wishing to enroll in the following math courses are required to take and adhere to placement guidance from, the Advanced Algebra and Functions test, as part of Accuplacer, through the college's testing center, for admission into any of the following courses: MATH 110, MATH 112, and MATH 113. Please note, courses in other disciplines may also require advanced mathematics placement. Students should check with their advisor.

## Human Services, A.S.

The Human Services A.S. is designed to transfer into Bachelor of Social Work Programs. Program graduates transfer successfully as junior into Bachelor of Social Work Programs in most nearby colleges, through pre-set Transfer Agreements with those programs. Social Work is a field dedicated to empowering individuals, families and communities, with a particular emphasis on addressing issues of economic and social inequality. Social workers practice in a wide range of settings, including group homes, shelters, hospitals, mental health facilities, schools, nursing homes, and substance abuse rehabilitation programs. They help individuals, families, and groups cope with problems such as homelessness, inadequate housing, serious illness, disabilities, unemployment, lack of job skills, unwanted pregnancy, and family disruptions.

## The objectives of this program are to:

- Analyze the historical context of current social problems.
- Identify the major casework methodologies used in direct service settings.
- Apply basic ethical principles in the practice of social work.
- Demonstrate familiarity with the Ecological Systems Theory approach to the dynamic interactions between micro, mezzo and macro systems in the life of the individual.
- Describe the relationships among socio-cultural factors, economic factors and social problems.


## First Year

Fall Semester

## Credits: 3

This is a student-centered course covering numerous strategies to encourage students to become active and empowered learners. A primary goal of this course is to help students make the most out of their college experience. Students will obtain information about college life and culture and develop strategies and techniques to enhance success in their academic, personal and professional lives. The course is infused with opportunities to understand, practice and implement critical thinking. Students will also gain practical information to help prepare to transfer to a four-year university or enter the workforce directly. All topics will be presented in both theory and practice. This course is required of all degree-seeking candidates and must be taken within the initial 16 credits after entry.

## ENGL 101 - English Composition I

## Credits: 3

This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects which include personal, rhetorical, and expository models. Research skills are introduced.

## PSYC 101 - Introduction to Psychology

## Credits: 3

This course is an introduction to the science of human behavior and mental processes. Emphasis is placed on the relationship between the nervous system and behavior, learning, perception, development, motivation, personality, attitude formation and prejudice, psychopathology and psychotherapy.

Prerequisite: Proficient in all Developmental English Courses

## COMS 110-Computer Concepts \& Applications

## Credits: 3

This course is designed to provide the student with a level of knowledge necessary to function in today's technological society. Topics include computer and network terminology, hardware, software, and processing concepts. A large portion of the class time is dedicated to exercises performed using integrated software packages. Lab Fee Required.

Corequisite: COMS 110S

## HUMS 101 - Intro. to Social Work \& Social Welfare

## Credits: 3

This course introduces students to social service agencies and policies, the history of social welfare programs, and the goals and values of social work as a profession.

Total Semester Hours: 15

## Winter Session

## Spring Semester

## ENGL 102 - English Composition II

Credits: 3
This course introduces students to short fiction, poetry, drama, and the novel. Written assignments are based on the readings. Writing skills learned in Composition I are further developed. Students will write a research paper which demonstrates understanding of literary criticism.

Prerequisite: ENGL 101 (Grade of C or better)

## MATH 104 - Contemporary Mathematics

## Credits: 3

This course surveys several basic concepts of mathematics designed to give non-scientific/non-technical majors an understanding of the breadth of mathematics in areas other than computational application. Topics include: logic, financial management, geometry, measurement, probability and statistics.

Prerequisite: MATH 017/MATH 023 (Grade of C or better) or appropriate algebra placement score

## SOCA 101 - Intro. to Sociology

## Credits: 3

This course is an introduction to the analysis and description of structures and dynamics of human society. Emphasis is placed on the application of scientific methods of observation and analysis of social groups, intergroup relations, social change, social stratification, and social institutions.

- HIST 101 - History of Western Civilization I Credits: 3

OR

- HIST 105 - U.S. History I Credits: 3
- LSCI 000 - Science Gen Ed Requirement Credits: 3

Total Semester Hours: 15

Summer Session

Second Year

Fall Semester

Credits: 3
This course will focus on skills, theories, and principles of interviewing in human service settings. Emphasis will be placed on counseling techniques, group dynamics and cultural bias in the interview process. Offered fall semester only.

## SOCA 215 - Perspectives On Race, Gender, Class and Culture

## Credits: 3

This course explores the effects of social structure and of dominant and sub-cultural norms and values on individuals, families and groups. Racism, sexism, homophobia, ageism, class bias and rigid gender roles are examined in depth with focus on the effects of advanced industrial capitalism on these phenomena.

## Prerequisite: SOCA 101

- HIST 102 - History of Western Civilization II Credits: 3


## OR

- HIST 106 - U.S. History II Credits: 3


## POLS 105 - American Government

## Credits: 3

This course provides a general introduction to the study of the American Political System. This course focuses on the U.S. Constitutional System, the institutions of government, and means of popular participation. The course is designed to encourage active student participation in the political process.

- HUMS 000 - Program Elective: Credits 3

Total Semester Hours: 15

## Winter Session

## Spring Semester

## ANTH 115 - Biological Anthropology

## Credits: 4

This course examines how Homo sapiens evolved. It starts with a core understanding of scientific methodology, evolutionary theory, and the genetic code. The paleontological record and methodologies for dating fossils and artifacts are studied. Anatomy, behavior, and classification of non-human primates with emphasis on the common ancestry Homo sapiens share with them are studied. Comparison and contrasting primate and hominin fossil records over the last 8 million years are also studied. Students will examine Paleolithic artifacts that highlight critical periods of human evolution. The course surveys human phenotypic diversity across clinical gradations. The interplay between anatomically modern human biology and cultural behavior is shown to be a key to understanding human evolution.

Prerequisite: Proficiency in Reading, Writing \& Math on College Placement Test or equivalency.

## HUMS 205 - Social Welfare Policy

Credits: 3
This course examines the history and philosophy of U.S. social welfare policy from World War I through the present. The relative impact of political, social, and economic forces on policy decisions is examined in depth, and U.S. Policy is compared to that of other western democracies.

Prerequisite: HUMS 101 and SOCA 101

## HUMS 220 - Field Exp. in Human Services I

## Credits: 2

This is a combined field work and field seminar course. Students spend 120 hours as interns in a social service agency in direct contact with agency workers and agency service population, and under the task supervision of a Masters-level agency employee. They spend an additional 30 hours in seminar. Interviewing and counseling skills learned in earlier program courses are applied in the field setting. Additional skills are acquired in the lecture and integrated into the field setting as the semester progresses. All these skills are reinforced and expanded upon through the production of two process recordings or project logs per week per student, which are shared and analyzed in the seminar component of the course.

Prerequisite: Completion of 21 credits toward the A.S. in Human Services; HUMS 120 (Grade of C+ or Higher); or Permission of Program Coordinator.

- HUMN 000 - Program Elective Credits: 3
- HUMN 000 - Program Elective Credits: 3


## Total Semester Hours: 15

Summer Semester

## Total Program Hours: 60

## Humanities General Education Courses (Recommended)

Choose HIST 101 \& HIST 102 or HIST 105 \& HIST 106

## HIST 101 - Hist of Western Civilization I

## Credits: 3

This course emphasizes the political, social, economic, technological, and cultural forces that influenced the historical development of Western Civilization to 1648. Major topics include: Ancient Civilizations, Greece and Rome, Middle Ages, Renaissance, and Reformation.

Credits: 3
This course is a survey of Western Civilization since 1648 with emphasis on the concepts and historical movements vital to understanding the modem world. Major topics include the development of law and government, the emergence of the major ideologies of the nineteenth and twentieth centuries, the industrial revolution and economic modernization, 20th century "isms" and the impact of social and cultural development in Western Europe.

## HIST 105 - U.S. History I

Credits: 3
This course is an examination of United States history from the age of discovery through the Civil War. Particular emphasis will be placed on the social, economic, and political forces that were responsible for the development of the new nation.

## HIST 106 - U.S. History II

## Credits: 3

This course is an examination of United States history from Reconstruction through the present. Particular emphasis will be placed on major themes in United States' politics, society, economics, and diplomacy.

## Science General Education Courses (Recommended)

Recommended courses listed below but student can also choose from the list of approved General Education courses in the College catalog.

## BIOS 101 - General Biology

## Credits: 4

This course introduces the student to the principles of modem biology. Emphasis is on the chemistry, structure, heredity, reproduction, development, ecology, and evolution of living things. For non-science majors. Lab Fee Required.

Corequisite: BIOS 101L

## BIOS 102 - Intro. to Human Biology

## Credits: 4

This course is an introduction to human anatomy and physiology for the non-biology major. It is designed to develop an appreciation for the structure and functions of the human body; to point out the relationship of body systems to health and disease; and to emphasize human biology as it relates to everyday living experiences. Lab Fee Required.

Corequisite: BIOS 102L

## ANTH 120 - Cultural Anthropology

## Credits: 3

This course is a study of a broad range of human behavior from a cross-cultural perspective including language and communication, concepts of love \& beauty, marriage \& the family, economic systems \& political organization and religion \& magic. This course provides a background to human cultural origins and variability.

- HUMS Credits: 3
- SOCA Credits: 3
- PSYC Credits: 3


## Developmental Courses

Sussex has embraced a practice of directed self-choice whereby students are encouraged, through guided conversations with an advisor, to best determine their readiness for this course. Students should be aware that Developmental Studies exist and are available to help strengthen skills and encourage success. Pursuing testing and/or developmental courses is entirely up to the student. Further, testing, though providing a valuable reference point for reflection, does not create for the student an obligation to follow Accuplacer recommendations.

The exception to this is where students seek enrollment in higher-level math courses. Students wishing to enroll in the following math courses are required to take and adhere to placement guidance from, the Advanced Algebra and Functions test, as part of Accuplacer, through the college's testing center, for admission into any of the following courses: MATH 110, MATH 112, and MATH 113. Please note, courses in other disciplines may also require advanced mathematics placement. Students should check with their advisor.

## Humanities, C.O.A.

This Certificate of Achievement is intended for the enhancement of previous education, self-enrichment and enjoyment, and broader exposure to world cultures that may benefit employees in law, education, human services, business, hospitality, retail, and numerous other fields.

If the student chooses two semesters of a world language, this would also be a benefit in any field of employment.
The curriculum integrates writing and literature, culture, and the history of ideas, with the further option of one or two semesters of a language. Emphasis is placed on multicultural understanding and critical thinking skills such as critical analysis of texts and creative works and comparison of ideas. Students who complete this certificate of achievement will be able to demonstrate knowledge of history, cultural diversity, and heritage.

## First Year

Fall Semester

## ENGL 101 - English Composition I

## Credits: 3

This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects

- GHMN 000 Humanities Gen Ed Requirement Credits: 3

CERT 000 - Humanities Certificate Electives Credits: 3

Total Semester Hours: 12

Winter Session

Spring Semester

ENGL 102 - English Composition II

## Credits: 3

This course introduces students to short fiction, poetry, drama, and the novel. Written assignments are based on the readings. Writing skills learned in Composition I are further developed. Students will write a research paper which demonstrates understanding of literary criticism.

Prerequisite: ENGL 101 (Grade of C or better)
GHMN 000 - Humanities Gen Ed Requirement Credits: 3
CERT 000 - Humanities Certificate Electives Credits: 3

Total Semester Hours: 9

## Illustration Option, A.A.S. - Graphic Design

This program is for individuals seeking the skills and education necessary to work commercially as an illustrator. A variety of specialized areas including children's books, editorial, comic books, fashion, commercial or advertising, and scientific illustration will be explored through investigating the history, the modern world, and utilizing hands-on experience with digital imaging and computer-aided drawing software in addition to traditional mediums. In-depth study of the elements and principles of art and design will be encouraged to master technical and creative skills in digital arts, illustration, design techniques, and drawing. A portfolio demonstrating digital imaging, drawing, and illustration skills will be presented upon completion of the program. Approximately one-half of all program graduates go on to complete a baccalaureate degree in game art, animation, graphic design, film, video, or illustration.

## The objectives of this program are to:

- Analyze the history of visual culture and design theory, and apply historical relevance in the context of modern industry issues and trends.
- Execute technical, aesthetic, and conceptual decisions based on understanding the functions of graphic design and illustration.
- Implement current and emerging technologies using both PC and Macintosh platforms as production tools.
- Utilize problem-solving techniques and critical thinking skills across a wide range of media to capture the attention of intended audiences.
- Collaborate with diverse teams of creative contributors, production personnel, and clients while working with creative constraints and deadlines.
- Apply knowledge of intellectual property issues.
- Produce a professional portfolio in both traditional and digital formats.
- Qualify for various entry-level industry positions, including desktop publishing, graphic designers, production artists, web designers, digital image processors, digital illustrators, and assistant art directors.

Fall Semester

## COLL 101 - Foundations for Success

## Credits: 3

This is a student-centered course covering numerous strategies to encourage students to become active and empowered learners. A primary goal of this course is to help students make the most out of their college experience. Students will obtain information about college life and culture and develop strategies and techniques to enhance success in their academic, personal and professional lives. The course is infused with opportunities to understand, practice and implement critical thinking. Students will also gain practical information to help prepare to transfer to a four-year university or enter the workforce directly. All topics will be presented in both theory and practice. This course is required of all degree-seeking candidates and must be taken within the initial 16 credits after entry.

## ENGL 101 - English Composition I

## Credits: 3

This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects which include personal, rhetorical, and expository models. Research skills are introduced.

## GRAD 101 - Design I

## Credits: 3

This course is an exploration of the fundamental principles of design through a series of weekly lectures, discussions, and short readings reinforced by studio assignments and critiques. This class focuses on developing the ability to skillfully use and combine core design elements and utilize design principles while mastering the craft of materials to convey meaning. Assignments are organized and designed to engage students with optimal learning opportunities in developing critical thinking skills and professional vocabulary allowing for further study. Although this course is not a software-oriented course student will be introduced to the computer utilizing Adobe Illustrator and Photoshop to gain very basic skills.

## GRAD 105 - Vector Graphics \& Page Design

## Credits: 3

This course emphasizes techniques and applications used to produce published documents for both Internet and print media. Students will learn to design documents, publications, and related projects using industry standard software on both MAC and PC platforms. An emphasis is placed on basic computer graphic skills through practical experience with two-dimensional paint and draw programs, as well as layout programs for print and web. Projects covered include advertising design, page layout, computer illustrations, digital imaging, and the scanning and manipulation of images. Lab Fee Required.

Prerequisite: Any COMS course

Credits: 3
This is a studio course where students will observe and create in the physical world away from the computer. This course suggests that real-world observation is invaluable in the planning of traditional illustration, digital illustration, 2D graphics, and 3D generated images. Areas of instruction will include graphic design drawing elements (such as line, value, texture, color, and composition), perspective, architecture, and environments. The course will also emphasize basic drawing techniques, anatomy for the artist, life drawing, lighting, texturing, and storyboarding. Students will learn how to efficiently work with pencil, charcoal, ink, markers, and mixed media. Lab Fee Required.

Total Semester Hours: 15

Winter Session

Spring Semester

## ENGL 201 - Effective Speaking

## Credits: 3

This is a course in public speaking which stresses speech organization, effective delivery and critical listening skills. A strong emphasis is placed on student performance to help the student gain speech practice and develop self-confidence in a variety of speaking situations.

Prerequisite: ENGL 015 and ENGL 031

- MAST 000 - Math/Science/Technology Gen Ed Requirement Credits: 3


## GRAD 128 - Digital Imagery \& Editing

## Credits: 3

This course provides students with the intensive exploration of advanced digital imaging as it applies to photography creating PDF documents, optimizing web graphics and complex layered images. Students will perfect their ability to creatively use digital imaging software to create sophisticated graphics for print and the web. Further study and practical application will be applied to creating documents for both the Internet and print mediums. An emphasis is placed on developing quality portfolio pieces. Lab Fee Required.

## Prerequisite: GRAD 105

## GRAD 138 - Comic Book Illustration

## Credits: 3

This course will provide a comprehensive introduction to the language and form of narrative illustration. The emphasis is on teaching the narrative language, use of tools, page and panel design, anatomy, drafting, perspective, storytelling and arrangement of images, while surveying various styles and genres related to the topic. Attention to developing essential drawing skills needed to create narrative illustrations on any level and for many types of applications will be explored. Completed projects would be suitable for inclusion in student portfolios.

Credits: 3
This course is designed to introduce the student to the essential craft of developing characters for stories, games, and other forms of video entertainment. Before any of these entertainment forms can be pursued, an artist must develop successful characters. Students will learn that the thousands of hours of work and countless frames of video involved in these endeavors all depend on the success of the artist's vision, and they will have the opportunity to study different forms of character development ranging from the elegant lines of Japanese Anime to the poignant expressions of King Kong. Pencil, paper, clay, and polymer will all be used along with sketched storyboards to help character designer's work with authors and directors to identify and realize projects. Lab Fee Required.

Total Semester Hours: 15

Summer Session

Second Year

## Fall Semester

## ARTA 103 - Art History I

## Credits: 3

This course surveys visual artistic expression from the Neolithic period to the fourteenth century, including ancient, medieval and non-European art forms. The development of artistic concepts in the ancient world, gender, and non-western art are central topics in this general survey course.

Prerequisite: ENGL 021, ENGL 032 or Placement into ENGL 101

## GRAD 109 - Intro. to Digital Marketing

## Credits: 3

This course focuses on techniques for writing, editing and researching content for social media platforms, and students will publish their work on their own Websites and Blogs. An emphasis is placed on the skills needed for quality storytelling via social media communication. Students will explore blogging, podcasting and social software technology. Students will implement social media research campaigns, develop original web content, and discuss interactive writing, interactive publishing, and the role of the interactive writer. Copyright law, libel law, information ethics and culture will be explored.

## GRAD 139 - Children's Book Illustration

## Credits: 3

This class allows students to develop a children's book from an initial concept to a "dummy book" ready to submit to publishers. Students will have the opportunity to explore a variety of mediums and diverse illustration techniques using video enrichment and lectures about illustrators, writers and the publishing industry. Developing students' drawing skills will be emphasized in all class work, from preliminary sketches to final works. Students will develop creative thinking skills as they learn how to transform ideas into images that tell a story. Exploration of the different children's book genres will be covered.

Credits: 3
This course is designed to introduce the student to techniques used by artists and graphic designers when they create characters and environments prior to animation on the computer. Students begin by using a paper and pencil approach to create characters and the world they inhabit. Students then learn to map out on paper the way that the story will unfold. The use of this "pencil and paper" approach helps students explore and develop their own creative process and teaches them to take their ideas from intangible abstracts to fully visualized concepts. Lab Fee Required.

## GRAD 144 - Color for Designers

Credits: 3
This course is an introduction to color intended for the designer in a technology driven world. The course will emphasize insight into color terminology, traditional color theory, and the perception and use of color in all media. Additional focus is placed on the essential principles and elements of design and their application to a variety of studio projects. Further exploration of the future of color will also be covered. Lab Fee Required.

Prerequisite: GRAD 101, GRAD 105

Total Semester Hours: 15

Winter Session

## Spring Semester

## ARTA 104 - Art History II

## Credits: 3

This course surveys the history of art from the fourteenth through the twenty first centuries. The development of artistic concepts in the contemporary world, art and gender, and non-western art and architecture are central topics in this general survey course. Emphasis is place on viewing art forms in context of culture and gender and understanding the philosophical foundations and critical theories that support and influence them

Prerequisite: ENGL 021, ENGL 032 or Placement into ENGL 101

## GRAD 230 - Directed Themes in Illustration

## Credits: 3

This course has students specialize in a single area of illustration of $r$ the entire term by choosing illustration projects in children's book, editorial, comic book, fashion, commercial or advertising, scientific, or caricature drawings to explore in a related series of instructor-directed themes. At the completion of this course, the student will have created a series of related portfolio projects that demonstrate advanced problem solving ability of a personal style, as well as continued improvement in developing skills in illustration methods and materials. Lab Fee Required.

Credits: 2
This course is designed for Graphic Design majors who have demonstrated advanced skill levels and for those who have potential to perform professionally in a work environment. Internships include practical work experience in an on or off campus business or project (i.e. advertising agencies, graphic design businesses or corporate art departments). An emphasis on personal presentation and success in the workplace is covered

Corequisite: GRAD 135
Prerequisite: GRAD 122, GRAD 144

## GRAD 281 - Portfolio Prep. \& Presentation

## Credits: 1

In this course, students will develop a portfolio of professional quality which is representative of technical and creative skills and career objectives. Excellent portfolio organization and resume presentation, will be stressed. Cover letters, interviewing styles and image presentation will be discussed. Students will write their goals, both short and long range, create a resume and develop a digital and printed portfolio for critique, suitable for presentation to a school, client or job interview.

Corequisite: GRAD 135
Prerequisite: GRAD 122, GRAD 144

- GSOC 000 - Social Science Gen Ed Requirement Credits: 3
- GHMN 000 - Humanities Gen Ed Requirement Credits: 3

Total Semester Hours: 15

Summer Semester

Total Program Hours: 60

## Math, Science, Technology, Humanities or Social Science General Education Courses

Choose from the list of approved courses in the College catalog.

## Developmental Courses

Sussex has embraced a practice of directed self-choice whereby students are encouraged, through guided conversations with an advisor, to best determine their readiness for this course. Students should be aware that Developmental Studies exist and are available to help strengthen skills and encourage success. Pursuing testing and/or developmental courses is entirely up to the student. Further, testing, though providing a valuable reference point for reflection, does not create for the student an obligation to follow Accuplacer recommendations.

The exception to this is where students seek enrollment in higher-level math courses. Students wishing to enroll in the following math courses are required to take and adhere to placement guidance from, the Advanced Algebra and Functions test, as part of Accuplacer, through the college's testing center, for admission into any of the following courses: MATH 110, MATH 112, and MATH 113. Please note, courses in other disciplines

## Independent Film, C.O.A.

Designed for students who want informal experience in film such as the operation of video or digital SLR cameras, digital video software, and audio editing software. The student will gain practical experience in film production, have an opportunity to refine skills, and develop a portfolio of work. Students will have the ability to write, produce, direct, analyze and evaluate broadcast segments and develop a personal and professional portfolio in film. Students will be prepared for entry-level opportunities in film festivals and broadcast production.

## First Year

## Fall Semester

## COMM 203 - Writing for the Media

## Credits: 3

This course introduces techniques for writing commercials, interviews, news and dramatic material to be broadcast. Theory and formatting of this specialized type of writing are practiced and analyzed.

## COMM 230 - Crit. Analy. \& Survey of Cinema

## Credits: 3

This course will explore the film genres, film terms, and styles by examining the racially, ethnically, culturally and sexually diverse themes of producers and directors throughout the world. The course also will provide a historical survey of the cinema. Emphasis will be on writing critical pieces that demonstrate knowledge of aesthetic principles and culturally diverse themes as they apply to film as an art form.

Prerequisite: ENGL 101

## GRAD 150 - Storyboarding \& Sequential Storytelling

## Credits: 3

This course is designed to introduce the student to techniques used by artists and graphic designers when they create characters and environments prior to animation on the computer. Students begin by using a paper and pencil approach to create characters and the world they inhabit. Students then learn to map out on paper the way that the story will unfold. The use of this "pencil and paper" approach helps students explore and develop their own creative process and teaches them to take their ideas from intangible abstracts to fully visualized concepts. Lab Fee Required.

## Total Semester Hours: 9

## Spring Semester

## COMM 132-Cinematography

Credits: 3
This course serves as an introduction to the filmmaker's art. Film theory and basic history will augment an intensive examination of the image making process. Lectures, labs, and practical assessments will be used in the production of several small projects and a cooperative long-form project.

## GRAD 235 - Video and Motion Graphics

## Credits: 3

This course introduces students to software products (editing suites and special effects) that are now widely used in the gaming and entertainment industries for editing and graphic manipulation. Students will learn to use specialized compositing tools to edit scenes, insert graphic effects, place sound effects and blend music to create a final professional product. Software packages used in this class include Adobe's After Effects ${ }^{\circledR}$ and Premiere®.

Total Semester Hours: 6

## Information Systems Option, A.S. - Science/Mathematics

Information Systems involves the application of computing principles by combining the fields of management and technology. The program is centered on the design, implementation, and testing of information systems as related to current practices. Graduates of the Information Systems Program should be able to transfer into four-year institutions that support a baccalaureate degree in this discipline.

## The objectives of this program are to:

- Demonstrate the ability to solve problems, conduct research and think critically.
- Demonstrate an understanding of computer architecture.
- Ability to analyze IT problems within a business environment.
- Develop effective communication skills within an organization.
- Demonstrate the ability to work both individually and as a team member.
- Exhibit professionalism and ethical behavior.
- Adapt to advancements in the area of information technology

First Year

Fall Semester

## Credits: 3

This is a student-centered course covering numerous strategies to encourage students to become active and empowered learners. A primary goal of this course is to help students make the most out of their college experience. Students will obtain information about college life and culture and develop strategies and techniques to enhance success in their academic, personal and professional lives. The course is infused with opportunities to understand, practice and implement critical thinking. Students will also gain practical information to help prepare to transfer to a four-year university or enter the workforce directly. All topics will be presented in both theory and practice. This course is required of all degree-seeking candidates and must be taken within the initial 16 credits after entry.

## ENGL 101 - English Composition I

Credits: 3
This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects which include personal, rhetorical, and expository models. Research skills are introduced.

## COMS 113 - Intro. to Information Systems

## Credits: 3

This course is concerned with how organizations utilize information technology. The course deals with the operational activities involved in gathering, processing, storing, distributing and the use of information and its associated changing technologies. The case studies present students with managerial decision-making activities. Software platforms are used for the analysis. Lab Fee Required.

- LSCI 000 - Science Gen Ed Requirement Credits: 4


## COMS 155 - Web Site Development I

## Credits: 3

This course is an introduction to Web Site Development. Students will receive intensive hands-on experience in coding web pages, including linking, layout and design, forms, graphics, security concerns, and maintaining a Web Site. Lab Fee Required.

Prerequisite: COMS 110 or any course above COMS 110

Total Semester Hours: 16

Winter Session

Spring Semester

ENGL 102 - English Composition II

Credits: 3

This course introduces students to short fiction, poetry, drama, and the novel. Written assignments are based on the readings. Writing skills learned in Composition I are further developed. Students will write a research paper which demonstrates understanding of literary criticism.

Prerequisite: ENGL 101 (Grade of C or better)

## COMS 114 - Intro. to Computer Science I

## Credits: 3

This course introduces the student to the fundamentals of computer science using an emphasis on programming methodology and problem solving. Topics include introductory concepts of computer systems, algorithm design, programming languages, software engineering, and data abstraction with related applications. A high level programming language is completely discussed and is used as a means to demonstrate concepts. Lab Fee Required.

- LSCI 000 - Science Gen Ed Requirement Credits: 4


## COMS 230-Networks and Telecommunications

Credits: 3
This course is an introduction to data communications. Topics include various transmission systems, hardware, software and local area networks.
Laboratory assignments will include the installation and maintenance of a local area network -Novell NetWare. . Lab Fee Required.
Prerequisite: COMS 113 or COMS 114 or COMS 120 or COMS 142

## MATH 108 - Statistics

## Credits: 3

This course includes the following topics: organization of data, measures of central tendency and dispersion, probability, the normal and binomial distributions, confidence intervals, hypothesis testing, analysis of variance, and correlation.

Prerequisite: MATH 017 (Grade of C or betterI) or MATH 023 (Grade of C or betterI) or appropriate algebra placement score

Total Semester Hours: 16

Summer Session

Second Year

Fall Semester

## MATH 113 - Calculus I

Credits: 4
This course includes a review of algebraic and transcendental functions and their graphs; study of the concepts of limits and continuity, the derivative and its applications; indeterminate forms; introduction to integration and its applications.

Prerequisite: MATH 110 and MATH 112 (Grades of C or better) or appropriate pre-calculus placement score

- GHUM 000 - Humanities Gen Ed Requirement Credits: 3


## COMS 115 - Intro. to Computer Science II

## Credits: 3

This course is the continuation of COMS 114. Topics include intermediate to advanced programming techniques with logical data structures and the design and analysis of such structures. The course also covers techniques for program development, algorithm analysis, efficiency, along with abstraction, an introduction to data structures, searching, sorting, recursion and string manipulation. Lab Fee Required.

Prerequisite: COMS 114 or Equivalent

## COMS 218 - Database Management Systems

Credits: 3
This course presents the concepts of database systems and data models. Topics include introductory to advanced design concepts, implementation, SQL, integrity, management and performance, web technologies, administration and security. Lab Fee Required.

Prerequisite: COMS 113 or COMS 114 or COMS 120 or COMS 142

- GSOC 000 - Social Science Gen Ed Requirement Credits: 3

Total Semester Hours: 16

## Winter Session

## Spring Semester

- GSOC 000 - Social Science Gen Ed Requirement Credits: $\mathbf{3}$


## COMS 239 - Fund. of Computer Architecture

## Credits: 3

This course is an introduction to computer organization and architecture. Topics covered are the overview of the early Von Neumann model through modern architectural models. Topics also presented include data representation, digital logic, circuit diagrams, assembly language organization, processors, memory addressing, memory storage, input/output processing, and interfaces. Lab Fee Required.

Corequisite: COMS 114 or COMS 142

- INFO 000 - Option Elective Credits: 3
- INFO 000 - Option Elective Credits: 3


## Science General Education Courses (Recommended)

Recommended courses listed below but student can also choose from the list of approved General Education courses in the College catalog.

## PHYS 110 - Physics I

## Credits: 4

This course is designed to introduce students to problem-solving techniques in physics. Topics include forces, energy, mechanics, momentum, heat, and kinetic theory. Includes applications to the life sciences and everyday life. Lab Fee Required.

Corequisite: PHYS 110L
Prerequisite: MATH 112 (Grade of C or better)

## PHYS 112 - Physics II

## Credits: 4

This course is a continuation of Physics I. Emphasis is placed on showing the connections found in electromagnetism, optics, and modern physics. Includes applications to the life sciences and everyday life. Lab Fee Required.

Corequisite: PHYS 112L
Prerequisite: PHYS 110 (Grade of C or better)

## BIOS 110 - Biology I

## Credits: 4

This course is designed to familiarize the student with the general principles and unifying concepts of biological science. Topics include scientific investigations, the physical and chemical properties of living matter, cell structure and function, energy transformations, genetics, evolution and diversity. Lab Fee Required.

Corequisite: BIOS 110L
Prerequisite: MATH 040 or the approved score on the College Level Math Placement Test

## BIOS 112 - Biology II

## Credits: 4

This course is a continuation of Biology I and maintains its emphasis on major biological concepts and connections. Topics include plant and

Corequisite: BIOS 112L
Prerequisite: BIOS 110 (Grade of C or better)

## CHEM 110 - College Chemistry I

## Credits: 4

This course covers general chemical principles and their applications in research and industry. Topics include matter and measurement; math in chemistry; atoms; molecules, and ions; elemental periodicity; stoichiometry; formulas and , equations; the mole; intramolecular and intermolecular bonds; reaction types including redox and acid/base; properties and reactions of solutions, gases, and the solid state; industrial processes. The lab component covers materials separation, analytical methods and instruments, qualitative and quantitative analysis; and lab report writing skills. This course is scheduled during the day in the fall semester, and during the evening in the spring semester. Lab Fee Required.

Corequisite: MATH 110, CHEM 110L

## CHEM 112 - College Chemistry II

## Credits: 4

This course is a continuation of CHEM 110, College Chemistry I. Topics include chemical kinetics; chemical equilibrium; chemical thermodynamics, electrochemistry, nuclear chemistry, main-group element chemistry, metals and metallurgy, transition metals and coordination chemistry, environmental chemistry; introduction to organic and biological chemistry. The lab component covers kinetics, electrochemistry, and coordination compounds. The course is scheduled during the day in the spring semester, and during the evening in the fall semester. Lab Fee Required.

Corequisite: CHEM 112L
Prerequisite: CHEM 110 (Grade of C or better)

## Humanities General Education Courses (Recommended)

Choose from the list of approved General Education courses in the College catalog.

## Option Elective Courses (Recommended)

Recommended courses listed below but student can also choose from COMS designated course except COMS 110.

## COMS 120 - Computer Software Applications

## Credits: 3

This course is a comprehensive hands-on study of Office Automation which provides the student with extended knowledge of Windows, word processing, electronic spreadsheets, and data base management. Lab Fee Required.

Prerequisite: COMS 110 or Higher

## Credits: 3

This course is designed to introduce the student to the programming language Python. Python and its various packages are essential tools for many programmers, engineers, researchers, and data scientists across academia and industry. In addition to learning the basics of Python, an introduction to parts of NumPy, SciPy, and Matplotlib will be covered.

## COMS 142 - Programming in C++

## Credits: 3

This course is an introduction to programming in C++. The topics covered include data storage types, formatted input/output, logical and mathematical operators, user written functions, and one dimensional arrays. Students are required to write short programs to gain proficiency in the techniques taught. Lab Fee Required.

## COMS 143 - Advanced Programming in C++

## Credits: 3

This course is a continuation of COMS 142 , presenting some of the more advanced features of programming in $\mathrm{C}++$. The topics covered will include multidimensional arrays, strings, file input/output, data structures and object oriented techniques. Lab Fee Required.

Prerequisite: COMS 142 or Equivalent

## COMS 210 - Systems Analysis \& Design

## Credits: 3

This course examines techniques of computer systems analysis and design with an emphasis on structuring a computer system based on the needs of the user. Final projects will provide students with practical use of contemporary system analysis and design tools. Lab Fee Required.

Prerequisite: COMS 113 or COMS 114 or COMS 120 or COMS 142

## COMS 221-Operating Systems

## Credits: 3

This course is an introduction to the concepts and facilities of operating systems and control language software. Topics include multiprogramming, timesharing, virtual storage and the management of programs and data within the system. Different types of operating systems will be discussed. Lab Fee Required.

Prerequisite: COMS 114 or COMS 142

## COMS 223 - Data Structures

## Credits: 3

This course focuses on intermediate to advanced programming topics dealing with logical structures of data, together with the design and analysis of related algorithms. Topics include arrays, lists, linked lists, trees, stacks, graphs, and memory management. Algorithms for searching, sorting and information retrieval are also explored. Students demonstrate proficiency by completing laboratory assignments. Lab Fee Required.

# Social Science General Education Courses (Recommended) 

Recommended courses listed below but student can also choose from the list of approved General Education courses in the College catalog.

## ECON 101 - Macroeconomics

## Credits: 3

This course is an analysis of major economic concepts. Topics include the elements of national income; the economic roles of government and labor; classical economics; monetary institutions and policies; the Keynesian model and modern fiscal policy; the macroeconomic aspects of world trade.

## ECON 102 - Microeconomics

## Credits: 3

This course is an exploration of economic factors that affect the firm and individual consumers. Topics include the laws of supply and demand, elasticity, consumer demand and utility theory, production, pricing, competitive behavior, monopoly and imperfect competition, labor economics, international trade.

## Developmental Courses

Sussex has embraced a practice of directed self-choice whereby students are encouraged, through guided conversations with an advisor, to best determine their readiness for this course. Students should be aware that Developmental Studies exist and are available to help strengthen skills and encourage success. Pursuing testing and/or developmental courses is entirely up to the student. Further, testing, though providing a valuable reference point for reflection, does not create for the student an obligation to follow Accuplacer recommendations.

The exception to this is where students seek enrollment in higher-level math courses. Students wishing to enroll in the following math courses are required to take and adhere to placement guidance from, the Advanced Algebra and Functions test, as part of Accuplacer, through the college's testing center, for admission into any of the following courses: MATH 110, MATH 112, and MATH 113. Please note, courses in other disciplines may also require advanced mathematics placement. Students should check with their advisor.

## Information Technology Option, A.A.S. - Computer Information Systems

This program is designed as a terminal degree and prepares students for immediate entry into a career. This program provides students with technical knowledge and prepares them for careers in the IT fields to work for computer companies, consulting firms, businesses, financial companies, government, retail and not-for-profit organizations.

## The objectives of this program are to:

- Apply computer science concepts directly to situations found in the working environment.
- Interpret problems and apply solutions in a variety of situations, including networking, operating systems, and IT skills.
- Interpret concepts found in technical manuals on networking and operating systems design.
- Communicate technical information effectively, in both verbal and written forms.
- Demonstrate effective problem-solving skills based on technical knowledge and practice.
- Understand, integrate, and apply network construction knowledge and skills professionally.
- Demonstrate professionalism with attitude, conduct, and ethical work practices.
- Communicate skillfully with other industry professionals involved in the IT process.


## First Year

## Fall Semester

## COLL 101 - Foundations for Success

## Credits: 3

This is a student-centered course covering numerous strategies to encourage students to become active and empowered learners. A primary goal of this course is to help students make the most out of their college experience. Students will obtain information about college life and culture and develop strategies and techniques to enhance success in their academic, personal and professional lives. The course is infused with opportunities to understand, practice and implement critical thinking. Students will also gain practical information to help prepare to transfer to a four-year university or enter the workforce directly. All topics will be presented in both theory and practice. This course is required of all degree-seeking candidates and must be taken within the initial 16 credits after entry.

## ENGL 101 - English Composition I

## Credits: 3

This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects which include personal, rhetorical, and expository models. Research skills are introduced.

## COMS 113 - Intro. to Information Systems

## Credits: 3

This course is concerned with how organizations utilize information technology. The course deals with the operational activities involved in gathering, processing, storing, distributing and the use of information and its associated changing technologies. The case studies present students with managerial decision-making activities. Software platforms are used for the analysis. Lab Fee Required.

## BUSA 101 - Intro. to Business

## Credits: 3

This course is designed to provide the student with an overview of all critical business functions. Topics include forms of business ownership, legal aspects of business, human resource management, finance, marketing, accounting, management information systems, international business and contemporary business issues. Students taking this course are prepared for more advanced courses in business.

## COMS 111 - IT Fundamentals

Credits: 3
This course teaches the fundamentals of IT device installation, configuration, and maintenance of a systems hardware components through textbook and lab exercises. Students will learn all the skills they need to become certified professionals and customer-friendly technicians using today's tools and technologies. Lab Fee Required.

Total Semester Hours: 15

## Winter Session

## Spring Semester

## ENGL 102 - English Composition II

## Credits: 3

This course introduces students to short fiction, poetry, drama, and the novel. Written assignments are based on the readings. Writing skills learned in Composition I are further developed. Students will write a research paper which demonstrates understanding of literary criticism.

Prerequisite: ENGL 101 (Grade of C or better)

## COMS 114 - Intro. to Computer Science I

## Credits: 3

This course introduces the student to the fundamentals of computer science using an emphasis on programming methodology and problem solving. Topics include introductory concepts of computer systems, algorithm design, programming languages, software engineering, and data abstraction with related applications. A high level programming language is completely discussed and is used as a means to demonstrate concepts. Lab Fee Required.

## COMS 230-Networks and Telecommunications

## Credits: 3

This course is an introduction to data communications. Topics include various transmission systems, hardware, software and local area networks.
Laboratory assignments will include the installation and maintenance of a local area network -Novell NetWare. . Lab Fee Required.
Prerequisite: COMS 113 or COMS 114 or COMS 120 or COMS 142

## MATH 108 - Statistics

## Credits: 3

This course includes the following topics: organization of data, measures of central tendency and dispersion, probability, the normal and binomial distributions, confidence intervals, hypothesis testing, analysis of variance, and correlation.

Prerequisite: MATH 017 (Grade of C or betterI) or MATH 023 (Grade of C or betterI) or appropriate algebra placement score

## COMS 155 - Web Site Development I

## Credits: 3

This course is an introduction to Web Site Development. Students will receive intensive hands-on experience in coding web pages, including linking, layout and design, forms, graphics, security concerns, and maintaining a Web Site. Lab Fee Required.

Prerequisite: COMS 110 or any course above COMS 110

Total Semester Hours: 15

Summer Session

Second Year

## Fall Semester

## ECON 101 - Macroeconomics

## Credits: 3

This course is an analysis of major economic concepts. Topics include the elements of national income; the economic roles of government and labor; classical economics; monetary institutions and policies; the Keynesian model and modern fiscal policy; the macroeconomic aspects of world trade.

- COMS 233 - Internetworking Design Credits: 3


## COMS 218 - Database Management Systems

Credits: 3
This course presents the concepts of database systems and data models. Topics include introductory to advanced design concepts, implementation, SQL, integrity, management and performance, web technologies, administration and security. Lab Fee Required.

Prerequisite: COMS 113 or COMS 114 or COMS 120 or COMS 142

## COMS 221-Operating Systems

## Credits: 3

This course is an introduction to the concepts and facilities of operating systems and control language software. Topics include multiprogramming, timesharing, virtual storage and the management of programs and data within the system. Different types of operating systems will be discussed. Lab Fee Required.

## Prerequisite: COMS 114 or COMS 142

## COMS 141 - Linux Fundamentals for Cyber Security

## Credits: 3

This course supplies critical knowledge for securing a Linux operating and also for using cybersecurity tools as a basis for future study in forensics. In a lab setting, concepts introduced range from proper set-up and installation of accounts through administration of devices, services, and processes - all with a focus on security through scripting. Lab Fee Required.

Total Semester Hours: 15

Winter Session

## Spring Semester

## ECON 102 - Microeconomics

## Credits: 3

This course is an exploration of economic factors that affect the firm and individual consumers. Topics include the laws of supply and demand, elasticity, consumer demand and utility theory, production, pricing, competitive behavior, monopoly and imperfect competition, labor economics, international trade.

## COMS 210 - Systems Analysis \& Design

## Credits: 3

This course examines techniques of computer systems analysis and design with an emphasis on structuring a computer system based on the needs of the user. Final projects will provide students with practical use of contemporary system analysis and design tools. Lab Fee Required.

Prerequisite: COMS 113 or COMS 114 or COMS 120 or COMS 142

## COMS 234-Networking Management \& Security

## Credits: 3

This course builds upon the student's understanding of the concepts of internetworking technology and design. Advanced routing techniques such as Virtual LAN's and Access Lists are discussed and configured. Routing protocols are introduced and discussed. Network management is introduced and demonstrated.

Credits: 3
This is a college-supervised program in a data processing environment. The course is designed to expose students to the methods and procedures utilized by data processing professionals.

Prerequisite: COMS 120, COMS 206, COMS 214; Permission of the Program Coordinator

Total Semester Hours: 15

Summer Semester

## Total Program Hours: 60

## Humanities General Education Courses (Recommended)

Recommended courses listed below but student can also choose from the list of approved Humanities General Education courses in the College catalog.

## HIST 101 - Hist of Western Civilization I

Credits: 3
This course emphasizes the political, social, economic, technological, and cultural forces that influenced the historical development of Western Civilization to 1648. Major topics include: Ancient Civilizations, Greece and Rome, Middle Ages, Renaissance, and Reformation.

## Developmental Courses

Sussex has embraced a practice of directed self-choice whereby students are encouraged, through guided conversations with an advisor, to best determine their readiness for this course. Students should be aware that Developmental Studies exist and are available to help strengthen skills and encourage success. Pursuing testing and/or developmental courses is entirely up to the student. Further, testing, though providing a valuable reference point for reflection, does not create for the student an obligation to follow Accuplacer recommendations.

The exception to this is where students seek enrollment in higher-level math courses. Students wishing to enroll in the following math courses are required to take and adhere to placement guidance from, the Advanced Algebra and Functions test, as part of Accuplacer, through the college's testing center, for admission into any of the following courses: MATH 110, MATH 112, and MATH 113. Please note, courses in other disciplines may also require advanced mathematics placement. Students should check with their advisor.

## Interactive Design Skills, C.O.A.

visitor interest. Students will present a portfolio of graphic and web design skills to document their preparation for positions as web designers, graphic designers, or multimedia artists.

## First Year

Fall Semester

## COMS 155 - Web Site Development I


#### Abstract

Credits: 3 This course is an introduction to Web Site Development. Students will receive intensive hands-on experience in coding web pages, including linking, layout and design, forms, graphics, security concerns, and maintaining a Web Site. Lab Fee Required.


Prerequisite: COMS 110 or any course above COMS 110

## GRAD 115 - Intro. to Game Theory \& Develop.

## Credits: 3

This course is targeted as an introduction to game theory and development. Students will be engaged throughout the course to design both new and classic games through a user-friendly game programming interface. In addition, students will learn to create and design their own pixel art to enhance the look and feel of their own game. Many topics will be addressed throughout the course including game design, theory, creation, and production. Students will learn how games are distributed and design game programs that are platform independent. Lab fee required.

## GRAD 128 - Digital Imagery \& Editing

## Credits: 3

This course provides students with the intensive exploration of advanced digital imaging as it applies to photography creating PDF documents, optimizing web graphics and complex layered images. Students will perfect their ability to creatively use digital imaging software to create sophisticated graphics for print and the web. Further study and practical application will be applied to creating documents for both the Internet and print mediums. An emphasis is placed on developing quality portfolio pieces. Lab Fee Required.

Prerequisite: GRAD 105

## GRAD 119 - Website Management for Digital Marketing

## Credits: 3

This course is designed to introduce students to WordPress Content Management System for either personal or business website use. The course covers the basics on how to use the WordPress platform including installation, content management, and configuration. Prior web publishing experience is not required. Familiarity with web browsers and email is highly recommended. Lab Fee Required.

## COMS 156 - Web Site Development II

## Credits: 3

This course is a continuation of Web Site Development I. Students will move into more complex techniques that may include, but are not limited to, Cascading Style Sheets, an introduction to scripting and CGI/Server-side scripting, and XML. Lab Fee Required.

Prerequisite: COMS 155 (Grade of C or better or better)

## GRAD 142 - Digital Typography and Color

## Credits: 3

This course is an introduction to the fundamentals of type. Topics covered will include letterforms, text layout and problem solving for print and digital media. The technology and history of typography will be covered as well as page layout and software programs utilizing type. Students will also learn about the nature of color on paper and on the computer, in the printing press and beyond. Color theory, history and preparation information about color for print and web will be covered. Lab Fee Required.

Prerequisite: GRAD 101 and GRAD 105

## GRAD 219 - Digital Marketing II

## Credits: 3

This course is designed to focus on how businesses are using Social Media as advertising tools as well as how to create and organize a welldesigned social media campaign. The use of social media platforms, such as, Facebook, YouTube, Twitter, etc., will be examined in depth. Students explore the importance of growing a social media audience and keeping their organization or clients relevant by tackling socially relevant projects, as well as the advantages of sharing social content, and ethical concerns. Social Media Marketing, Blogging, Search Engine Optimization, Email Marketing and PPC (Pay-per-click) Advertising are reviewed to create Viral Advertising campaigns. Lab Fee Required.

Total Semester Hours: 9

## Interior Design Option, A.F.A. - Studio Arts

The Associate in Fine Arts Degree Interior Design Option develops an understanding and ability to create within the discipline of Interior Design through the study of art, history, theory, technology, and studio work. The degree is intended to provide students with the necessary portfolio to transfer seamlessly to a Bachelor of Fine Arts program majoring in Interior Design.

## The objectives of this program are to:

- Exhibit competency using the elements and principles of design and composition.
- Demonstrate an ability to make connections between theory and practice.
- Demonstrate critical thinking and qualitative decision-making based on current design trends, art historical concepts, social, political, or personal issues.
- Develop a professional portfolio of artwork.


## First Year

## Fall Semester

## COLL 101 - Foundations for Success


#### Abstract

Credits: 3 This is a student-centered course covering numerous strategies to encourage students to become active and empowered learners. A primary goal of this course is to help students make the most out of their college experience. Students will obtain information about college life and culture and develop strategies and techniques to enhance success in their academic, personal and professional lives. The course is infused with opportunities to understand, practice and implement critical thinking. Students will also gain practical information to help prepare to transfer to a four-year university or enter the workforce directly. All topics will be presented in both theory and practice. This course is required of all degree-seeking candidates and must be taken within the initial 16 credits after entry.


## ENGL 101 - English Composition I

## Credits: 3

This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects which include personal, rhetorical, and expository models. Research skills are introduced.

## ARTA 101 - Basic Design

## Credits: 3

This course provides an introduction to the practical and theoretical applications of two-dimensional design. This is a lecture course where students explore methods for developing their intuitive responses to form and shape, line, color and value, space, and other basic elements of composition and design.

## ARTA 108 - Basic Drawing

## Credits: 3

This course introduces students to the basic foundations of drawing methods, including a broad-based survey of art history and appreciation. Students experiment with a variety of materials: pencil, charcoal, and conte-crayon practicing 1,2 and 3 point perspective, and elemental architectural drawing techniques within an historical context. Students explore various elements of personal expression while comparing their efforts to major works of art. The course also introduces the art of still life, landscape, portrait, life drawing, gesture and contour drawing and classical drawing techniques. Studio fee required.

Winter Session

Spring Semester

## ENGL 102 - English Composition II

## Credits: 3

This course introduces students to short fiction, poetry, drama, and the novel. Written assignments are based on the readings. Writing skills learned in Composition I are further developed. Students will write a research paper which demonstrates understanding of literary criticism.

Prerequisite: ENGL 101 (Grade of C or better)

## ARTA 103 - Art History I

## Credits: 3

This course surveys visual artistic expression from the Neolithic period to the fourteenth century, including ancient, medieval and non-European art forms. The development of artistic concepts in the ancient world, gender, and non-western art are central topics in this general survey course.

Prerequisite: ENGL 021, ENGL 032 or Placement into ENGL 101

## ARTA 110 - Intro to Color

## Credits: 3

This course develops an understanding of the expressive and compositional qualities of color and its role in the creation of art and design through lectures and experiment. Various color theories and their applications are explored with reference to works of art. Students create compositions using color as the primary criteria for expression. Studio fee required.

## BCST 112 - Print Reading and Sketching

## Credits: 3

This course is a thorough exploration into the structure of blueprints and reading them. Emphasis is on components of blueprints, basic technical diagrams, interpretation of building, piping and plumbing, electrical, air conditioning and refrigeration drawings. Students will practice techniques to create pictorial and multiple-view drawings in the style of a blueprint to convey information simply and completely. Lab Fee Required.

## GRAD 101 - Design I

## Credits: 3

This course is an exploration of the fundamental principles of design through a series of weekly lectures, discussions, and short readings
reinforced by studio assignments and critiques. This class focuses on developing the ability to skillfully use and combine core design elements and utilize design principles while mastering the craft of materials to convey meaning. Assignments are organized and designed to engage students with optimal learning opportunities in developing critical thinking skills and professional vocabulary allowing for further study. Although this course is not a software-oriented course student will be introduced to the computer utilizing Adobe Illustrator and Photoshop to gain very basic skills.

Total Semester Hours: 15

Summer Session

Second Year

## Fall Semester

## SOCA 101 - Intro. to Sociology

## Credits: 3

This course is an introduction to the analysis and description of structures and dynamics of human society. Emphasis is placed on the application of scientific methods of observation and analysis of social groups, intergroup relations, social change, social stratification, and social institutions.

## ARTA 115 - Three Dimensional Design

## Credits: 3

This course introduces the basic concepts of three-dimensional design. In a workshop setting students examine three-dimensional relationships and explore methods of shaping and structuring space. Lab Fee Required.

## ARTA 150 - Life Drawing I

## Credits: 3

This course establishes the basic vocabulary necessary to begin drawing the human form. It defines the concepts of the "nude" as an art form and as a point of departure for all other forms of drawing. Emphasis is placed on gesture and contour drawings, use of drawing materials, anatomy studies, and drawing the human form in traditional ways. Studio Fee Required.

## COMS 225 - Computer Aided Design

## Credits: 3

This course is an introduction to the principles of Computer-Aided Design (CAD) and the operation of CAD Systems. Students will use data entry devices to prepare working diagrams and schematic designs on industrial level workstations with Auto CAD. Lab Fee Required.

## ARTA 104 - Art History II

## Credits: 3

This course surveys the history of art from the fourteenth through the twenty first centuries. The development of artistic concepts in the contemporary world, art and gender, and non-western art and architecture are central topics in this general survey course. Emphasis is place on viewing art forms in context of culture and gender and understanding the philosophical foundations and critical theories that support and influence them

Prerequisite: ENGL 021, ENGL 032 or Placement into ENGL 101

Total Semester Hours: 15

## Winter Session

## Spring Semester

## ARTA 107 - History of Contemporary Art

## Credits: 3

This course surveys the history of Contemporary Art, beginning with its roots in the Modernism of Europe at the beginning of the twentieth century and developing comparisons and historical connections to Contemporary Art in today's world art market. Emphasis is placed on viewing art forms in context of their history and intention and understanding the philosophical foundations and critical theories that support and influence them.

## COMS 226 - Computer Aided Design II

## Credits: 3

This course is a follow-up for COMS 225 Computer Aided Design (CAD). It includes intermediate to advanced topics utilizing AutoCAD. Students will extend their knowledge of 2D and 3D CAD design, drafting, modeling, architectural drawing, and engineering. Projects are integrated into the class lectures. Lab Fee Required.

## GRAD 105 - Vector Graphics \& Page Design

## Credits: 3

This course emphasizes techniques and applications used to produce published documents for both Internet and print media. Students will learn to design documents, publications, and related projects using industry standard software on both MAC and PC platforms. An emphasis is placed on basic computer graphic skills through practical experience with two-dimensional paint and draw programs, as well as layout programs for print and web. Projects covered include advertising design, page layout, computer illustrations, digital imaging, and the scanning and manipulation of images. Lab Fee Required.

## DESN 120 - History of Design

## Credits: 3

This broad based survey course tracks major developments in the field of design in the areas of architecture, furniture design, fashion, industrial design and interior design emphasizing multi-cultural and historical contexts. The development of schools and trends, the relationships between historical, cultural, and political movements and the interaction of art, design, and culture are fully explored.

## ARTA 260 - Portfolio Development

Credits: 3
This course prepares students to graduate with the professional skills necessary for gallery representation or transfer to a four-year fine art institution, as reflected in a prepared portfolio. Each student creates an articulate "artist's statement" and a finished professional portfolio of original artwork. Studio Fee Required.

Total Semester Hours: 15

Summer Session

Total Program Hours: 60

## Technology General Education Courses

Choose from the list of approved General Education courses in the College catalog.

## Developmental Courses

Sussex has embraced a practice of directed self-choice whereby students are encouraged, through guided conversations with an advisor, to best determine their readiness for this course. Students should be aware that Developmental Studies exist and are available to help strengthen skills and encourage success. Pursuing testing and/or developmental courses is entirely up to the student. Further, testing, though providing a valuable reference point for reflection, does not create for the student an obligation to follow Accuplacer recommendations.

The exception to this is where students seek enrollment in higher-level math courses. Students wishing to enroll in the following math courses are required to take and adhere to placement guidance from, the Advanced Algebra and Functions test, as part of Accuplacer, through the college's testing center, for admission into any of the following courses: MATH 110, MATH 112, and MATH 113. Please note, courses in other disciplines may also require advanced mathematics placement. Students should check with their advisor.

## Liberal Arts Electives

Liberal Arts Electives provide comprehensive, non-specialized study within the typical liberal arts disciplines, the humanities, the behavioral \& social sciences, mathematics, and the natural sciences.

The following qualify as Liberal Arts Electives except where noted. Transfer institution policies vary.

| AGSC | GRMN |
| :--- | :--- |
| AMSL (check transfer college) | HIST |
| ANTH | HORT |
| ARTA | HUMN |
| BIOS | ITAL |
| CHEM | MATH (100 level and higher) |
| CHIN | MUSC |
| COMM | PHIL |
| COMS (Limit 1) | PHOT |
| CRJS 105 only (Criminology) | PHYS |
| DESN | POLS |
| ECON | PSYC (Except PSYC103 \& PSYC120) |
| EDUC | RUSS |
| ENGL (except ENGL 101 \& ENGL 102) | SOCA |
| FREN | SPAN |
| GEOG | THEA (formerly PERA) |
| GEOL | WMST |

According to SCCC policy, you may also choose one introductory course in a career area. See the list below. Transfer institution policies vary.

## Introductory Course

## ACCT 101 - Accounting Princ. I Financial

## Credits: 3

This course is a study of accounting principles and procedures. The accounting cycle is covered for a service industry. Additional topics include accounting for merchandising operations; cash and short-term investments; inventory; the acquisition, allocation, and disposal of tangible and intangible assets; and current liabilities.

## AGSC 101 - Intro. to Agricultural Science

Credits: 3
This course introduces students to career opportunities and the general concepts of horticulture which includes plant taxonomy, physiology, crops, and their general management.

## AOTE 101 - Automotive Fundamentals

## Credits: 3

This course is designed as an entry-level survey of automotive systems and their repair. It is a prerequisite for all other automotive technology courses. With approval of the program coordinator, appropriate ASE certification may be substituted for this course. Lab Fee Required.

## BCST 101 - Intro. to Building Construction

Credits: 1
This course is a survey of the construction industry including a brief overview the overall construction processes from initial concept through startup of the complete facility, career opportunities in the construction industry, employability, and an introduction to the materials and systems used in construction, with an emphasis on vocabulary building. Students will become familiar with The U.S. Green Building Council Leadership in Energy and Environmental Design (LEED).

Corequisite: BCST 103 Construction Safety, Tools and Equipment

## BUSA 101 - Intro. to Business

## Credits: 3

This course is designed to provide the student with an overview of all critical business functions. Topics include forms of business ownership, legal aspects of business, human resource management, finance, marketing, accounting, management information systems, international business and contemporary business issues. Students taking this course are prepared for more advanced courses in business.

## CDEV 101 - Intro. to Early Childhood Educ.

## Credits: 3

This course presents an overview of early childhood education. Observing and assessing children in a pre-school setting will be part of the course. Any student thinking of parenthood or a career working with young children would benefit from this course.

## CRJS 100 - Intro. to the Crim. Justice Sys.

## Credits: 3

This course is an overview of the criminal justice system in the United States. Topics include a study of the criminal justice system, the police, courts, and corrections. This course is a prerequisite for all other criminal justice courses except CRJS 105 and CRJS 110.

## CYBR 100 - Introduction to Cyber Crime

## Credits: 3

The student will focus on technology-based crimes. Explore cyber forensics including information warfare, cyber terrorism, information theft, data corruption, and disruption of service. Discussion on computing devices as instruments furthering exploitation of children, organized crime and other criminal acts. Identify vulnerabilities within national and private infrastructure, assess risks and security measures.

Prerequisite: COMS 110

## ENGR 100 - Introduction to Engineering

## Credits: 3

This course explores the topic of engineering and is appropriate for both those intending to major in engineering and those with an interest in
learning about the various fields of engineering and other aspects of what engineers do. You will learn how to formulate, articulate, and solve problems, how to analyze problems using various case studies, and how to present the results of engineering work in a suitable format. They will also learn about the different disciplines of engineering and the multidisciplinary nature of modern engineering design.

Corequisite: PHYS 120
Prerequisite: MATH 113

## EXSC 101 - Intro. to Exercise Science

## Credits: 3

This is an introductory-level course to acquaint students with the development and structure of the field of exercise science. The current scientific development of the field is stressed, with additional emphasis on careers, certifications, professional organizations, and industry research and resource development. Requires proficiency in all developmental English and mathematical courses.

## FRST 101 - Intro. to Fire Science

## Credits: 3

This course is an introduction to the fundamentals of fire protection engineering. It is a study of fire hazards and controlling mechanisms, detection and alarm systems, fire behavior and the physical and chemical effects of combustion upon a single dwelling to problem areas such as high-rise buildings.

## GRAD 101 - Design I

## Credits: 3

This course is an exploration of the fundamental principles of design through a series of weekly lectures, discussions, and short readings reinforced by studio assignments and critiques. This class focuses on developing the ability to skillfully use and combine core design elements and utilize design principles while mastering the craft of materials to convey meaning. Assignments are organized and designed to engage students with optimal learning opportunities in developing critical thinking skills and professional vocabulary allowing for further study. Although this course is not a software-oriented course student will be introduced to the computer utilizing Adobe Illustrator and Photoshop to gain very basic skills.

## HOST 101 - Introduction to Hotel, Restaurant, and Institutional Management

## Credits: 3

This course is designed to provide the student with an overview of the hospitality industry and focuses on the role of the professional manager within the industry. Topics include hotel and restaurant operation; meeting, event, and convention planning; travel and tourism; recreation and leisure management; gaming and casino operation; hospitality marketing; and human resource management within the framework of the hospitality industry. Career opportunities within the industry will also be addressed, as well as the ethical operation of hospitality enterprises

## HUMS 101 - Intro. to Social Work \& Social Welfare

## Credits: 3

This course introduces students to social service agencies and policies, the history of social welfare programs, and the goals and values of social

## LEGA 100 - Intro. to the American Legal Sys

## Credits: 3

POLS 111 This course is an introduction to the fundamental principles of the American Legal System. Topics include the structure of the state and federal court systems, legal terminology, and constitutional law decisions affecting every citizen and how to work within the system. Students will visit the Superior Court.

## OPTC 101 - Fundamentals of Optics I

## Credits: 3

This course is an introduction to the optics and photonics industry with a focus on utilizing optical technology in devices and scientific research. Exploration into the history of optics provides context for how the study of light has reached the forefront of technological and scientific discovery. Students study terminology and the physical concepts necessary to understand how light is created, manipulated, and measured with the goal of constructing a foundation from which to delve further into the optics industry.

## SCMG 101 - Principles of Supply Chain Mgmt.

Credits: 3
The course surveys the basic concepts of Supply Chain to give students an understanding of the breadth and scope of Supply Chain in the overall business climate. Students explore a comprehensive overview of business and the inter-relationships/inter-dependence of the various business elements.

Corequisite: BUSA 101 Introduction to Business

## Literature Electives

Literature Electives: Transfer institution policies vary.

## Liberal Arts, A.A.

This program is structured to provide a knowledge base in languages and literature, the social sciences, humanities, mathematics, and the sciences which lay a diversified foundation for students seeking to transfer to a four-year institution. The program is also designed to accommodate students who wish to complete their liberal arts education with an associate degree. The Associate of Arts in Liberal Arts provides opportunities to develop self-understanding, global awareness, and critical thinking skills. Students may select the general option or choose one of the specialized options: Anthropology, Communications/ Broadcasting, Communication/Journalism, Dramatic Arts,

Elementary/Secondary Education, English, History, Pre-Law, Psychology, Sociology. Law, government service, medicine, publishing, and teaching are only a few of the possibilities open to liberal arts graduates, because of the broad foundation achieved upon graduation.

## The objectives of this program are to:

- Communicate clearly in both oral and written form.
- Demonstrate skill in critical thinking, problem-solving, and research.
- Understand basic vocabulary, facts and concepts of the humanities, social sciences and natural sciences.
- Examine the values in one's personal life and society.
- Understand the basics of a foreign language.


## First Year

## Fall Semester

## COLL 101 - Foundations for Success


#### Abstract

Credits: 3 This is a student-centered course covering numerous strategies to encourage students to become active and empowered learners. A primary goal of this course is to help students make the most out of their college experience. Students will obtain information about college life and culture and develop strategies and techniques to enhance success in their academic, personal and professional lives. The course is infused with opportunities to understand, practice and implement critical thinking. Students will also gain practical information to help prepare to transfer to a four-year university or enter the workforce directly. All topics will be presented in both theory and practice. This course is required of all degree-seeking candidates and must be taken within the initial 16 credits after entry.


## ENGL 101 - English Composition I

## Credits: 3

This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects which include personal, rhetorical, and expository models. Research skills are introduced.

- MATH 900 - Math Gen Ed Requirement Credits: 3
- GHMN 000 - Humanities Gen Ed Requirement Credits: 3
- GSOC 000 - Social Science Gen Ed Requirement Credits: 3

Total Semester Hours: 15

Winter Session

## Spring Semester

## ENGL 102 - English Composition II

## Credits: 3

This course introduces students to short fiction, poetry, drama, and the novel. Written assignments are based on the readings. Writing skills learned in Composition I are further developed. Students will write a research paper which demonstrates understanding of literary criticism.

Prerequisite: ENGL 101 (Grade of C or better)

- LSCI 000 - Science Gen Ed Requirement Credits: 3
- GTEC 000 - Technology Gen Ed Requirement Credits: 3
- GHMN 000 - Humanities Gen Ed Requirement Credits: 3
- GSOC 000 - Social Science Gen Ed Requirement Credits: 3

Total Semester Hours: 15

Summer Session

Second Year

## Fall Semester

## ENGL 201 - Effective Speaking

## Credits: 3

This is a course in public speaking which stresses speech organization, effective delivery and critical listening skills. A strong emphasis is placed on student performance to help the student gain speech practice and develop self-confidence in a variety of speaking situations.

Prerequisite: ENGL 015 and ENGL 031

- GMSC 000 - Math or Science Gen Ed Requirement Credits: 3
- HIST 001 - History Gen Ed Requirement Credits: 3
- GLIT 000 - Literature Elective Credits: 3
- LIBA 000 - Liberal Arts Elective Credits: 3

Total Semester Hours: 15

## Winter Session

## Spring Semester

- HIST 001 - History Gen Ed Requirement Credits: 3
- GLCA 001 - Global and Cultural Awareness Gen Ed Requirement Credits: 3
- PHIL 000 - Philosophy Gen Ed Requirement Credits: 3


# Social Science, Humanities, Global and Cultural Awareness, History, Literature, Math and Science, Liberal Arts, Technology and Philosophy General Education Courses 

Choose from the list of approved courses in the College catalog.

## Developmental Courses

Sussex has embraced a practice of directed self-choice whereby students are encouraged, through guided conversations with an advisor, to best determine their readiness for this course. Students should be aware that Developmental Studies exist and are available to help strengthen skills and encourage success. Pursuing testing and/or developmental courses is entirely up to the student. Further, testing, though providing a valuable reference point for reflection, does not create for the student an obligation to follow Accuplacer recommendations.

The exception to this is where students seek enrollment in higher-level math courses. Students wishing to enroll in the following math courses are required to take and adhere to placement guidance from, the Advanced Algebra and Functions test, as part of Accuplacer, through the college's testing center, for admission into any of the following courses: MATH 110, MATH 112, and MATH 113. Please note, courses in other disciplines may also require advanced mathematics placement. Students should check with their advisor.

## Machine Tool Technology Option, A.A.S. - Technical Studies

The Machine Tool Technology A.A.S program gives the students an opportunity to gain a broader knowledge and to achieve a higher skill level in machining than is offered in the one-year certificate program. Students are required to develop advanced skills in planning, designing, producing CAD prints, and setting up and operating machine tools to produce precision parts to specifications. The students receive training in programming, setting up, and operating CNC turning and machining centers. There is also a general education component integrated into the program to satisfy demands for appropriate workforce skills. Upon completing the A.A.S. degree program, students have the necessary skills to become employed as an entry-level machinist or CNC technician.

## The objectives of this program are to:

- Enter the industry as industrial machinery mechanics, machinery maintenance workers, or millwrights. career opportunities also exist in construction, manufacturing, fabrication, sales, quality control, supervision, and machine-related self-employment.
- Employ safety skills in an industrial setting.
- Communicate procedures and methods to other related disciplines.
- Produce parts to meet blueprint requirements on manual and computer numerical controlled machines.
- Perform programming and setup procedures on a computer numerical controlled lathe and mill.
- Integrate knowledge to design parts using computer-aided drafting software.
- Apply skills to manufacture parts using computer-aided machining software on computer numerical machines.
- Demonstrate professionalism with attitude, conduct and ethical work practices.


## ENGL 101 - English Composition I

Credits: 3
This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects which include personal, rhetorical, and expository models. Research skills are introduced.

## MATH 105-Technical Mathematics

## Credits: 3

This course is intended for students who have introductory algebra proficiency, and who need to apply mathematical concepts in a technical program. The purpose of the course is to prepare AAS students for the mathematical aspects of their work in the technical trades.

Prerequisite: Proficiency on the College Placement Examination or grade of C or better in MATH 017/MATH 023.

## MCHT 103 - Print and Drawing Interpretation

## Credits: 3

This course introduces students to print reading specifically, for machining trades. In a lab setting, students draw prints in CAD software used to make industry standard prints. Lab Fee Required.

Prerequisite: Proficiency on the Basic English writing and Basic Math portion of the Placement Test.

- MCHT 105 - Machine Tool Technology I Credits: 4
- MCHT 115 - Instruments, Tools, \& Machines Credits: 2

Total Semester Hours: 15

Winter Session

## Spring Semester

## ENGL 125 - Tech. Writing \& Communication I

Credits: 3
This course focuses on expository writing for business, industrial, and scientific fields, emphasizing the principles for organizing, writing, and
revising clear, readable documents and reports. Students will practice written, oral, reading, and reasoning skills. Research skills will be advanced.

- GTEC 000 - Technology Gen Ed Requirement Credits: 3


## MCHT 135 - Intro. to CNC Program and Operations

## Credits: 3

This course covers operations on Computer Numerical Control (CNC) Machining Centers and CNC Turning Centers using manual and computergenerated programs to machine products. In a lab setting, specific areas of study include simple and practical programming techniques using CAM software, CNC cutting tools, and mass production procedures. Lab Fee required.

Prerequisite: MCHT 105 with a C or better or permission of the coordinator or department chair.

- TSC 000 - Technical Studies Core Credits: 4

OR

- MCHT 000 - Program Elective Credits: $\mathbf{4}$
- TSC 000 - Technical Studies Core Credits: 3

OR

- MCHT 000 - Program Elective Credits: 3

Total Semester Hours: 16

Summer Session

Second Year

## Fall Semester

- TSC 000 - Technical Studies Core Credits: 4

OR

- MCHT 000 - Program Elective Credits: $\mathbf{4}$
- TSC 000 - Technical Studies Core Credits: 3

OR

- MCHT 000 - Program Elective Credits: 3
- GNED 000 - General Education Requirement Credits: 3
- GHMN 000 - Humanities Credits: 3

OR

- GSOC 000 - Social Science Gen Ed Requirement Credits: 3


## Winter Session

## Spring Semester

- TSC 000 - Technical Studies Core Credits: 3

OR

- MCHT 000 - Program Elective Credits: 3
- TSC 000 - Technical Studies Core Credits: 3

OR

- MCHT 000 - Program Elective Credits: 3
- TSC 000 - Technical Studies Core Credits: 4

OR

- MCHT 000 - Program Elective Credits: 4
- GNED 000 - General Education Requirement Credits: 3


## COMS 225 - Computer Aided Design

Credits: 3
This course is an introduction to the principles of Computer-Aided Design (CAD) and the operation of CAD Systems. Students will use data entry devices to prepare working diagrams and schematic designs on industrial level workstations with Auto CAD. Lab Fee Required.

Prerequisite: Prior exposure to microcomputers and/or drafting

Total Semester Hours: 16

Summer Session

## Total Program Hours: 60

## Humanities/Social Science Gen Ed Requirement

Choose from the list of approved courses listed in the College catalog

## Technical Studies Core or Program Electives Courses (Recommended)

[^0]program. Individuals without sufficient technical training experience must select courses in one of the programs/options listed below to satisfy the Technical Studies credit requirements. All courses should be selected with assistance from a faculty advisor.

## MCHT 125 - Machine Tool Technology II

## Credits: 4

This course is a continuation of MCHT 105 Machine Tool Technology I. Emphasis is placed on personal traits needed to be successful in the trade, shop safety, print reading, layout work, accurate measuring and inspection. Areas of concentration are safety, repair, and maintenance. Setup and advanced operational procedures are covered on the metal lathe, vertical mill, horizontal mill, and drilling machines. New cutting tools and procedures to efficiently remove metal are introduced. The lab portion of the course is designed to allow students the opportunity to develop machining skills through practical experience and repeated performances to become more proficient in the machine tool trade. Lab Fee required.

Prerequisite: MCHT 105 with a C or better or permission of the coordinator or department chair.

## MCHT 147-CNC Turning \& Machine Centers

## Credits: 3

This course is designed for the learner to utilize CAD to make drawings, generate computer programs using CAM software. In a lab setting, students program and operate CNC vertical machining and turning centers to produce parts to specification. Lab Fee required.

Prerequisite: MCHT 125 and MCHT 135 with a C or better or permission of the coordinator or department chair.

## MCHT 218 - Machine Tool Technology III

## Credits: 4

This course is an upper level technical course designed to give learners advanced knowledge and practical experiences required to be employed in the machining field. Areas covered include the application of cutting tools, cutting fluids, types of cutting tool, precision measuring and inspection, basic metallurgy and surface grinding procedures. Advanced setup and machining operations are studied and practiced on lathes, mills, and grinders. The lab portion of the course is designed to allow students the opportunity to develop machining skills through practical experience and repeated performances to become more proficient in the machine tool trade. Lab Fee required.

Prerequisite: MCHT 125 with a C or better or permission of the coordinator or department chair.

## MCHT 225 - Computer Aided Machining I

## Credits: 3

This course is designed to introduce the learner to utilize CAD to make drawings, and create toolpaths in order to generate programs using CAM software. These programs are used to operate Computer Numerical Control (CNC) Turning and Machining Centers. Lab Fee required.

Prerequisite: MCHT 125 and MCHT 135 with a C or better or permission of the coordinator or department chair.

## MCHT 235 - Computer Aided Machining II

Credits: 3
This course is designed to introduce the learner to multi-axis machining. Students use CAM software to create toolpaths in order to generate programs for multi-axis programming. These programs are used to operate Computer Numerical Control (CNC) Machining Centers. Lab Fee required.

Prerequisite: MCHT 147, MCHT 218 and MCHT 225 with a C or better or permission of the coordinator or department chair.

## MCHT 240 - Manufacturing Methods

## Credits: 3

This course is designed to familiarize students, in a lab setting, with current manufacturing processes needed to convert raw materials into quality products. Specific areas of study include product research and development, production planning, and computer automation. Lab Fee required.

Prerequisite: MCHT 147, MCHT 218 and MCHT 225 with a C or better or permission of the coordinator or department chair.

## MCHT 280 - Machine Tool Internship

## Credits: 4

This course is formatted to offer students hands on experience in careers found in the field of Machine Tooling. Students will have the opportunity work in either paid or non-paid positions under the supervision of an approved supervisor.

Prerequisite: MCHT 125 and MCHT 225 with a C or better, or permission of the coordinator or department chair

Select Courses from One of the Following Programs (P)/Options ( O )
(Courses must be approved by appropriate faculty advisor):
Automotive Service Technology (P)
Building Construction Technology (O)
Business Management ( P )
Computer Information Systems (P)
Diesel Service Technology (O)
Engineering Science (O)
Graphic Design (P)
Welding Technology (O)

## Technology General Education Courses (Recommended)

Recommended courses listed below but student can also choose from the list of approved General Education courses in the College catalog.

## COMS 110-Computer Concepts \& Applications

## Credits: 3

This course is designed to provide the student with a level of knowledge necessary to function in today's technological society. Topics include computer and network terminology, hardware, software, and processing concepts. A large portion of the class time is dedicated to exercises performed using integrated software packages. Lab Fee Required.

## Developmental Courses

Sussex has embraced a practice of directed self-choice whereby students are encouraged, through guided conversations with an advisor, to best determine their readiness for this course. Students should be aware that Developmental Studies exist and are available to help strengthen skills and encourage success. Pursuing testing and/or developmental courses is entirely up to the student. Further, testing, though providing a valuable reference point for reflection, does not create for the student an obligation to follow Accuplacer recommendations.

The exception to this is where students seek enrollment in higher-level math courses. Students wishing to enroll in the following math courses are required to take and adhere to placement guidance from, the Advanced Algebra and Functions test, as part of Accuplacer, through the college's testing center, for admission into any of the following courses: MATH 110, MATH 112, and MATH 113. Please note, courses in other disciplines may also require advanced mathematics placement. Students should check with their advisor.

## Machine Tool Technology, Certificate

The Machine Tool certificate program gives the students an opportunity to gain a broader knowledge and to achieve a higher skill level in machining than is offered in the one-year certificate program. Students are required to develop advanced skills in planning, designing, producing CAD prints, and setting up and operating machine tools to produce precision parts to specifications. The students receive training in programming, setting-up and operating CNC turning and machining centers.

There is also a general education component integrated into the program to satisfy demands for appropriate workforce skills. Upon completing the certificate program, students have the necessary skills to become employed as an entry-level machinist or a CNC technician.

## Successful graduates of the Machine Tool Technology Program can:

- Enter the industry as industrial machinery mechanics, machinery maintenance workers or millwrights. Career opportunities also exist in construction, manufacturing, fabrication, sales, quality control, supervision, and machine-related self employment.


## First Year

Fall Semester

## ENGL 101 - English Composition I

## Credits: 3

This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects which include personal, rhetorical, and expository models. Research skills are introduced.

Credits: 3
This course is intended for students who have introductory algebra proficiency, and who need to apply mathematical concepts in a technical program. The purpose of the course is to prepare AAS students for the mathematical aspects of their work in the technical trades.

Prerequisite: Proficiency on the College Placement Examination or grade of C or better in MATH 017/MATH 023.

## MCHT 103 - Print and Drawing Interpretation

## Credits: 3

This course introduces students to print reading specifically, for machining trades. In a lab setting, students draw prints in CAD software used to make industry standard prints. Lab Fee Required.

Prerequisite: Proficiency on the Basic English writing and Basic Math portion of the Placement Test.
MCHT 105 - Machine Tool Technology I Credits: 4
MCHT 115 - Instruments, Tools, \& Machines Credits: 2

Total Semester Hours: 15

Winter Session

## Spring Semester

## MCHT 125 - Machine Tool Technology II

## Credits: 4

This course is a continuation of MCHT 105 Machine Tool Technology I. Emphasis is placed on personal traits needed to be successful in the trade, shop safety, print reading, layout work, accurate measuring and inspection. Areas of concentration are safety, repair, and maintenance. Setup and advanced operational procedures are covered on the metal lathe, vertical mill, horizontal mill, and drilling machines. New cutting tools and procedures to efficiently remove metal are introduced. The lab portion of the course is designed to allow students the opportunity to develop machining skills through practical experience and repeated performances to become more proficient in the machine tool trade. Lab Fee required.

Prerequisite: MCHT 105 with a C or better or permission of the coordinator or department chair.

## MCHT 135 - Intro. to CNC Program and Operations

## Credits: 3

This course covers operations on Computer Numerical Control (CNC) Machining Centers and CNC Turning Centers using manual and computergenerated programs to machine products. In a lab setting, specific areas of study include simple and practical programming techniques using CAM software, CNC cutting tools, and mass production procedures. Lab Fee required.

Prerequisite: MCHT 105 with a C or better or permission of the coordinator or department chair.

## MCHT 147 - CNC Turning \& Machine Centers

## Credits: 3

This course is designed for the learner to utilize CAD to make drawings, generate computer programs using CAM software. In a lab setting, students program and operate CNC vertical machining and turning centers to produce parts to specification. Lab Fee required.

Prerequisite: MCHT 125 and MCHT 135 with a C or better or permission of the coordinator or department chair.

## MCHT 280 - Machine Tool Internship

## Credits: 4

This course is formatted to offer students hands on experience in careers found in the field of Machine Tooling. Students will have the opportunity work in either paid or non-paid positions under the supervision of an approved supervisor.

Prerequisite: MCHT 125 and MCHT 225 with a C or better, or permission of the coordinator or department chair

- CERT 000 - Certificate Elective Credits: 3

Total Semester Hours: 17

Summer Session

## Total Program Hours: 32

## Certificate Electives

## COMS 110-Computer Concepts \& Applications

## Credits: 3

This course is designed to provide the student with a level of knowledge necessary to function in today's technological society. Topics include computer and network terminology, hardware, software, and processing concepts. A large portion of the class time is dedicated to exercises performed using integrated software packages. Lab Fee Required.

Corequisite: COMS 110S

## MCHT 225 - Computer Aided Machining I

## Credits: 3

This course is designed to introduce the learner to utilize CAD to make drawings, and create toolpaths in order to generate programs using CAM software. These programs are used to operate Computer Numerical Control (CNC) Turning and Machining Centers. Lab Fee required.

Prerequisite: MCHT 125 and MCHT 135 with a C or better or permission of the coordinator or department chair.

## Developmental Courses

Students may need to first take some developmental courses that are designed to prepare students for the college-level coursework in their academic plan. This may add to the students' completion time. The number of credits students take each semester will determine when the student will complete his/her program of study.

## Mathematics Option, A.S. - Science/Mathematics

Mathematics prepares students for transfer into the junior year of a baccalaureate program in mathematics, applied mathematics, mathematics education and related field.

## The objectives of this program are to:

- Demonstrate an understanding of the language of mathematics.
- Create and employ mathematical models.
- Use technology effectively.
- Solve applied problems involving derivatives and integrals.
- Utilize and synthesize mathematical knowledge and skills in order to solve problems independently.


## First Year

Fall Semester

## COLL 101 - Foundations for Success

## Credits: 3

This is a student-centered course covering numerous strategies to encourage students to become active and empowered learners. A primary goal of this course is to help students make the most out of their college experience. Students will obtain information about college life and culture and develop strategies and techniques to enhance success in their academic, personal and professional lives. The course is infused with opportunities to understand, practice and implement critical thinking. Students will also gain practical information to help prepare to transfer to a four-year university or enter the workforce directly. All topics will be presented in both theory and practice. This course is required of all degree-seeking candidates and must be taken within the initial 16 credits after entry.

## ENGL 101 - English Composition I

## Credits: 3

This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects which include personal, rhetorical, and expository models. Research skills are introduced.

## MATH 113 - Calculus I

## Credits: 4

This course includes a review of algebraic and transcendental functions and their graphs; study of the concepts of limits and continuity, the

## COMS 114 - Intro. to Computer Science I

Credits: 3
This course introduces the student to the fundamentals of computer science using an emphasis on programming methodology and problem solving. Topics include introductory concepts of computer systems, algorithm design, programming languages, software engineering, and data abstraction with related applications. A high level programming language is completely discussed and is used as a means to demonstrate concepts. Lab Fee Required.

## ECON 101 - Macroeconomics

## Credits: 3

This course is an analysis of major economic concepts. Topics include the elements of national income; the economic roles of government and labor; classical economics; monetary institutions and policies; the Keynesian model and modern fiscal policy; the macroeconomic aspects of world trade.

Total Semester Hours: 16

Winter Session

Spring Semester

## ENGL 102 - English Composition II

## Credits: 3

This course introduces students to short fiction, poetry, drama, and the novel. Written assignments are based on the readings. Writing skills learned in Composition I are further developed. Students will write a research paper which demonstrates understanding of literary criticism.

Prerequisite: ENGL 101 (Grade of C or better)

## MATH 114 - Calculus II

Credits: 4
This course is the second semester of a three semester sequence of introductory calculus. Topics include integration techniques, applications of integration, delete in.... forms infinite series, parametric equations, and polar coordinates.

Prerequisite: MATH 113 (Grade of C or better)

- GSOC 000 - Social Science Gen Ed Requirement Credits: 3

Credits: 3
This course is an exploration of economic factors that affect the firm and individual consumers. Topics include the laws of supply and demand, elasticity, consumer demand and utility theory, production, pricing, competitive behavior, monopoly and imperfect competition, labor economics, international trade.

- GHMN 000 - Humanities Gen Ed Requirement Credits: 3

Total Semester Hours: 16

Summer Session

Second Year

## Fall Semester

- MATH 213 - Calculus III Credits: 4
- MATH $215-$ **Linear Algebra (FA) Credits: 4


## PHYS 120 - Physics I with Calculus

## Credits: 4

This course will introduce the student to problem solving and laboratory techniques in calculus based physics. Topics include vectors, forces, mechanics, kinematics, fluids, thermodynamics, and waves. Lab Fee Required.

Corequisite: PHYS 120L
Prerequisite: MATH 113, MATH 114 (Grade of C or better) (MATH 114 may be taken concurrently)

- GSOC 000 - Social Science Gen Ed Requirements Credits: 3

Total Semester Hours: 15

Winter Session

Spring Semester

COLL 211 - Capstone for Mathematics and Chemistry

## Credits: 1

This capstone course is for Engineering/Physics Option students who have completed all Engineering/Physics-related course requirements and have a total of 45 completed credits. It is designed to assist students in the transition from the community college experience to a four-year educational institution. Students will engage in analysis, writings, and problem-solving work that shall require them to think critically and reflect on the knowledge gained during their community college experience.

Prerequisite: Must have completed 45 credits

## MATH 220 - Ordinary Differ. Equa. w/ Applic

## Credits: 4

This course covers first and second order ordinary differential equations; systems of ordinary differential equations; applications of ordinary differential equations; and numeric and computational modeling techniques. The numeric modeling will be done by computer programming.

Prerequisite: MATH 114 (Grade of C or better)

## PHYS 121 - Physics II with Calculus

## Credits: 4

This course is a continuation of Physics I with Calculus. Topics include electromagnetism, circuits, electromagnetic waves, optics, and relativity. Lab Fee Required.

Corequisite: MATH 213 (Grade of C), PHYS 121L
Prerequisite: PHYS 120 (Grade of C)

## MATH 201 - Discrete Mathematics

Credits: 4
This course provides an introduction to discrete mathematics and its applications. Topics include elementary set theory, logic, combinatorics, relations, graphics and trees, functions and number theory.

Prerequisite: MATH 113 (Grade of C or better)

Total Semester Hours: 13

Summer Semester

## Total Program Hours: 60

Humanities General Education courses (Recommended)

Recommended courses are listed below but students can also choose from the list of approved General Education Requirements in the College Catalog.

- HUMN 101 Survey of World Culture I Credits: 3


## Social Science General Education courses (Recommended)

Recommended courses are listed below but students can also choose from the list of approved General Education courses in the College Catalog.

- PSYC 101 Introduction to Psychology Credits: 3
- SOCA 101 Intro. to Sociology Credits: 3


## Medical Assistant, Certificate

Sussex County Community College Medical Assistant Program will train students to become competent multi-skilled healthcare professionals who are specifically educated to work in ambulatory healthcare settings performing both administrative and clinical duties. During their course of study, SCCC Medical Assistant students will have the opportunity to master a complex set of cognitive, psychomotor, and affective skills via formal education and practical experience that serve as standards for entry into the profession. The acquired skills identify SCCC medical assistant graduates as an indispensable part of a dynamic healthcare facility who can perform the responsibilities demanded by almost any physician's office across the country. Accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP), Sussex County Community College Medical Assisting Program provides its students with the highest quality of education in the field of medical assisting that enables them to become eligible to sit for any NCCA (National Commission for Certifying Agencies) accredited Medical Assistant National Certification Exam.

## Program Outcomes:

- Provides a curriculum that prepares competent entry-level medical assistants in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains outlined in the curriculum and competencies defined by the Commission on Accreditation of Allied Health Educational Programs (CAAHEP) the American Association of Medical Assistants (AAMA) and American Medical Technologist (AMT).
- Offers a program that is sensitive to the Healthcare industry needs.
- Ensures student, faculty, and program adherence to HIPAA regulations, OSHA standards, and the practices and provisions defined by the AAMA and AMT Code of Ethics.
- Delivers quality courses and faculty to enable timely and appropriate student achievement and enable the Medical Assistant Program to meet its mission, goals, and standards.
- Demonstrate effective communication, interpersonal and critical thinking, and problem-solving skills.
- Prepares medical assistant students to sit for a national certification examination administered by any NCCA (National Commission for Certifying Agencies) accredited Medical Assistant National Certification Exam such as CMA-AAMA (American Association of Medical Assistants), RMA-AMT (American Medical Technologists) or CCMA-NHA (National Healthcareer Association)
- Presents the students with a positive learning experience during the required 160 hours of externship off-campus.


## First Year

## Fall Semester

## ENGL 101 - English Composition I

## Credits: 3

This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects which include personal, rhetorical, and expository models. Research skills are introduced.

- MEDA 101 - Human Biology and Medical Terminology I Credits: 3
- MEDA 110 - Administrative Medical Office Procedures Credits: 3
- MEDA 120 - Cardiorespiratory and Emergency/First Aid Procedures Credits: 3
- MEDA 130-Clinical Procedures for Medical Assistant Credits: 3

Total Semester Hours: 15

## Winter Session

## Spring Semester

- MEDA 140 - Pharmacology \& Assisting with Minor Surgical Procedures Credits: 3
- MEDA 150 - Phlebotomy and Lab Procedures Credits: 3
- MEDA 160 - Practice Management and Electronic Health Records Credits: 3
- MEDA 201 - Human Biology and Medical Terminology II Credits: 3

Total Semester Hours: 12

Summer Session

## PSYC 101 - Introduction to Psychology

## Credits: 3

This course is an introduction to the science of human behavior and mental processes. Emphasis is placed on the relationship between the nervous system and behavior, learning, perception, development, motivation, personality, attitude formation and prejudice, psychopathology and psychotherapy.

Prerequisite: Proficient in all Developmental English Courses

- MEDA 260 - Medical Assistant Capstone/Practicum Credits: 6

Total Semester Hours: 9

Total Program Hours: 36

## Mulitimedia Artist, C.O.A.

This certificate is for students who want to acquire fundamental, technical, and conceptual skills used in the field of multimedia. These include the ability to create aesthetically pleasing and functional images, interfaces and motion graphics for the web, and professional techniques for video
editing. Students will be prepared for entry-level positions as motion graphics and video editing specialists, web and graphic designers, and multimedia artists.

## First Year

Fall Semester

## COMS 155 - Web Site Development I

## Credits: 3

This course is an introduction to Web Site Development. Students will receive intensive hands-on experience in coding web pages, including linking, layout and design, forms, graphics, security concerns, and maintaining a Web Site. Lab Fee Required.

Prerequisite: COMS 110 or any course above COMS 110

## GRAD 105 - Vector Graphics \& Page Design

## Credits: 3

This course emphasizes techniques and applications used to produce published documents for both Internet and print media. Students will learn to design documents, publications, and related projects using industry standard software on both MAC and PC platforms. An emphasis is placed on basic computer graphic skills through practical experience with two-dimensional paint and draw programs, as well as layout programs for print and web. Projects covered include advertising design, page layout, computer illustrations, digital imaging, and the scanning and manipulation of images. Lab Fee Required.

Prerequisite: Any COMS course

## GRAD 128 - Digital Imagery \& Editing

## Credits: 3

This course provides students with the intensive exploration of advanced digital imaging as it applies to photography creating PDF documents, optimizing web graphics and complex layered images. Students will perfect their ability to creatively use digital imaging software to create sophisticated graphics for print and the web. Further study and practical application will be applied to creating documents for both the Internet and print mediums. An emphasis is placed on developing quality portfolio pieces. Lab Fee Required.

Prerequisite: GRAD 105

## GRAD 119 - Website Management for Digital Marketing

## Credits: 3

This course is designed to introduce students to WordPress Content Management System for either personal or business website use. The course covers the basics on how to use the WordPress platform including installation, content management, and configuration. Prior web publishing experience is not required. Familiarity with web browsers and email is highly recommended. Lab Fee Required.

Winter Session

Spring Semester

## GRAD 115 - Intro. to Game Theory \& Develop.

## Credits: 3

This course is targeted as an introduction to game theory and development. Students will be engaged throughout the course to design both new and classic games through a user-friendly game programming interface. In addition, students will learn to create and design their own pixel art to enhance the look and feel of their own game. Many topics will be addressed throughout the course including game design, theory, creation, and production. Students will learn how games are distributed and design game programs that are platform independent. Lab fee required.

## GRAD 142 - Digital Typography and Color

## Credits: 3

This course is an introduction to the fundamentals of type. Topics covered will include letterforms, text layout and problem solving for print and digital media. The technology and history of typography will be covered as well as page layout and software programs utilizing type. Students will also learn about the nature of color on paper and on the computer, in the printing press and beyond. Color theory, history and preparation information about color for print and web will be covered. Lab Fee Required.

Prerequisite: GRAD 101 and GRAD 105

## GRAD 235 - Video and Motion Graphics

## Credits: 3

This course introduces students to software products (editing suites and special effects) that are now widely used in the gaming and entertainment industries for editing and graphic manipulation. Students will learn to use specialized compositing tools to edit scenes, insert graphic effects, place sound effects and blend music to create a final professional product. Software packages used in this class include Adobe's After Effects $\mathbb{R}$ and Premiere®.

## GRAD 281 - Portfolio Prep. \& Presentation

## Credits: 1

In this course, students will develop a portfolio of professional quality which is representative of technical and creative skills and career objectives. Excellent portfolio organization and resume presentation, will be stressed. Cover letters, interviewing styles and image presentation will be discussed. Students will write their goals, both short and long range, create a resume and develop a digital and printed portfolio for critique, suitable for presentation to a school, client or job interview.

Corequisite: GRAD 135
Prerequisite: GRAD 122, GRAD 144

## Music Fundamentals, C.O.A.

This program is intended to complement current disciplines, enhance previous education, or for self-enrichment and enjoyment. The curriculum integrates music appreciation, theory, chorus, and piano for the inspiring musical artist. Emphasis is placed on technical and creative skills. You will be able to demonstrate knowledge of the history, cultural diversity, and heritage of music; acquire an appreciation of music and identify a personal aesthetic; recognize music as art and a universal language with organization and structure; identify and articulate the components of music composition; perform as part of an ensemble.

## First Year

## Fall Semester

## MUSC 101 - Music Appreciation

## Credits: 3

This course is a study and appreciation of music through directed listening of recordings, films, demonstrations, live performances and readings. The class will focus on the elements of music by exploring examples from a range of musical styles, including classical music, ethnomusical traditions, jazz, and rock. Active class participation and attendance of live performance(s) are required.

## MUSC 105-Chorus I

## Credits: 1

This course provides training in style and interpretation of music from all periods of history. It allows students the opportunity to perform in public. (Students may participate on a non-credit basis).

## MUSC 150 - Piano Fundamentals I

## Credits: 1

This course is designed to introduce students to the fundamentals of piano playing. Keyboard experience is not required. Group activities focused on literacy and creativity in music through keyboard application. Topics include coordination of hands, ear training, sight reading, transposition, technique and improvisation. Lab Fee Required.

Total Semester Hours: 5

## Spring Semester

## MUSC 106 - Chorus II

## Credits: 1

Continuation of MUSC 105.

## MUSC 110 - Introductory Music Theory

## Credits: 3

This course is a beginning level study of music theory, including: notation (reading and dictation), ear training, keyboard skills and basic harmony. Active class participation is required, and students must have regular access to a piano or keyboard.

## MUSC 115 - Electronic Music I

## Credits: 3

This course is an introduction to electronically generated sound and the hands-on practice of electronic music composition utilizing a Digital Audio Workstation, DAW, and sequencing software Musical Instrument Digital Interface, MIDI. Students will focus on building an appreciation of electronic music styles and techniques through an exploration of electronic music history. Emphasis is on the physical properties of sound, synthesizers, music recording and music arrangement. Lab Fee Required.

Corequisite: MUSC 110

## MUSC 151 - Piano Fundamentals II

## Credits: 1

This is the second in a series of piano classes. Group activities focused on literacy and creativity in music through keyboard application. Topics include coordination of hands, ear training, sight reading, transposition, technique and improvisation. Lab Fee Required.

Prerequisite: MUSC 150 (Grade of C or Higher)

Total Semester Hours: 8

## Music Option, A.A. - Liberal Arts

This option prepares students for transfer to a four-year college with a major in Music. Students can pursue careers in the music business, music production, music performance, and music education. According to workforce statistics, music majors can also find career opportunities in music publishing, professional music ensembles, music administration or management endeavors. Students are given the opportunity to contribute to and work on SCCC productions and workshops. Students will explore history, musicianship, theory, composition, and performance to develop an individual creative identity.

## The objectives of this program are to:

- Demonstrate knowledge of the history, cultural diversity and heritage of music.
- Acquire an appreciation of music and identify a personal aesthetic.
- Recognize music as art and a universal language with organization and structure.
- Identify and articulate the components of music composition.
- Perform music from a variety of genres showing the abilities of a professional.


## First Year

## Fall Semester

## COLL 101 - Foundations for Success

## Credits: 3

This is a student-centered course covering numerous strategies to encourage students to become active and empowered learners. A primary goal of this course is to help students make the most out of their college experience. Students will obtain information about college life and culture and develop strategies and techniques to enhance success in their academic, personal and professional lives. The course is infused with opportunities to understand, practice and implement critical thinking. Students will also gain practical information to help prepare to transfer to a four-year university or enter the workforce directly. All topics will be presented in both theory and practice. This course is required of all degree-seeking candidates and must be taken within the initial 16 credits after entry.

## ENGL 101 - English Composition I

## Credits: 3

This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects which include personal, rhetorical, and expository models. Research skills are introduced.

## MATH 106 - Mathematical Concepts

## Credits: 3

This course surveys several basic concepts of mathematics designed to give non-scientific/non-technical majors an understanding of the breadth of mathematics in areas other than computational application. Topics include: problem solving, the real number system, linear and quadratic equations, exponents and logarithms, graphs and functions, and graph theory.

Prerequisite: Proficiency on the College Placement Examination or Grade of C or Better in MATH 017/MATH 023

## MUSC 105-Chorus I

## Credits: 1

This course provides training in style and interpretation of music from all periods of history. It allows students the opportunity to perform in public. (Students may participate on a non-credit basis).

## MUSC 110 - Introductory Music Theory

## Credits: 3

This course is a beginning level study of music theory, including: notation (reading and dictation), ear training, keyboard skills and basic harmony. Active class participation is required, and students must have regular access to a piano or keyboard.

- MUSC 121 - Voice I Credits: 1

OR

- MUSC 130 - Piano I Credits: 1


## MUSC 160 - Intro. to Aural Comprehension

Credits: 1
This course is designed to develop musical ear training skills by engaging in singing, writing, progress demonstrations and utilizing computerbased work stations. Emphasis is on scales, rhythms, intervals and harmonic progressions. Lab Fee Required.

Corequisite: MUSC 110, MUSC 121 or MUSC 130, MUSC 134
Prerequisite: Music Major or Permission of the Department Chair

- MUSC 002 - Applied Music I Credits: 1

Total Semester Hours: 16

Winter Session

Spring Semester

## ENGL 102 - English Composition II

## Credits: 3

This course introduces students to short fiction, poetry, drama, and the novel. Written assignments are based on the readings. Writing skills learned in Composition I are further developed. Students will write a research paper which demonstrates understanding of literary criticism.

Prerequisite: ENGL 101 (Grade of C or better)

- GMSC 000 - Math or Science Gen Ed Requirement Credits: 3
- GSOC 000 - Social Science Gen Ed Requirement Credits: 3


## MUSC 111 - Music Theory II

Credits: 3
This course is a continued study of music theory, including: notation (reading and dictation), ear training, keyboard skills and basic harmony. Active class participation is required, and students must have regular access to a piano or keyboard. Lab Fee Required.

Corequisite: MUSC 122, MUSC 131
Prerequisite: MUSC 110

- MUSC 002 - Applied Music II Credits: 1

Total Semester Hours: 13

Summer Session

## Second Year

## Fall Semester

## ENGL 201 - Effective Speaking

## Credits: 3

This is a course in public speaking which stresses speech organization, effective delivery and critical listening skills. A strong emphasis is placed on student performance to help the student gain speech practice and develop self-confidence in a variety of speaking situations.

Prerequisite: ENGL 015 and ENGL 031

- LSCI 000 - Science Gen Ed Requirement Credits: 3
- HIST 000 - History Gen Ed Requirement Credits: 3
- GSOC 000 - Social Science Gen Ed Requirement Credits: 3
- GHMN 000 - Humanities Gen Ed Requirement Credits: 3
- MUSC 002 - Applied Music III Credits: 1

Total Semester Hours: 16

Winter Session

Spring Semester

- PHIL 000 - Philosophy Gen Ed Requirement Credits: 3
- HIST 001 - History Gen Ed Requirement Credits: 3
- GHMN 000 - Humanities Gen Ed Requirement Credits: 3
- GLCA 001 - Global and Cultural Awareness Requirement Credits: 3


## Total Program Hours: 60

## Humanities General Education Courses (Recommended)

Recommended courses are listed below but students can also choose from the list of approved General Education courses in the College catalog.

## MUSC 101 - Music Appreciation

## Credits: 3

This course is a study and appreciation of music through directed listening of recordings, films, demonstrations, live performances and readings. The class will focus on the elements of music by exploring examples from a range of musical styles, including classical music, ethnomusical traditions, jazz, and rock. Active class participation and attendance of live performance(s) are required.

## Social Science General Education Courses (Recommended)

Recommended courses listed below but student can also choose from the list of approved General Education courses in the College catalog.

## PSYC 101 - Introduction to Psychology

## Credits: 3

This course is an introduction to the science of human behavior and mental processes. Emphasis is placed on the relationship between the nervous system and behavior, learning, perception, development, motivation, personality, attitude formation and prejudice, psychopathology and psychotherapy.

Prerequisite: Proficient in all Developmental English Courses

## SOCA 101 - Intro. to Sociology

## Credits: 3

This course is an introduction to the analysis and description of structures and dynamics of human society. Emphasis is placed on the application of scientific methods of observation and analysis of social groups, intergroup relations, social change, social stratification, and social institutions.

Students may need to first take some developmental courses that are designed to prepare students for the college-level coursework in their academic plan. This may add to the students' completion time. The number of credits students take each semester will determine when the student will complete his/her program of study.

## Musical Theater Option, A.A. - Liberal Arts

This option prepares students for transfer to a four-year college with a major in Musical Theater. This option serves as a basis for careers in Musical Theater. Students can pursue careers in the music business, music production, music performance, and music education. According to workforce statistics, music majors can also find career opportunities in music publishing, professional music ensembles, music administration, or management endeavors. Students are given the opportunity to contribute to and work on SCCC productions and workshops. Students will explore history, musicianship, theory, composition, and performance to develop an individual creative identity.

## The objectives of this program are to:

- Demonstrate knowledge of the history, cultural diversity and heritage of Musical Theater.
- Acquire an appreciation of music performance and identify a personal aesthetic.
- Recognize music as art and a universal language with organization and structure.
- Identify and articulate the components of music production.
- Perform acting/music from a variety of genres showing the abilities of a professional.


## First Year

Fall Semester

## COLL 101 - Foundations for Success

## Credits: 3

This is a student-centered course covering numerous strategies to encourage students to become active and empowered learners. A primary goal of this course is to help students make the most out of their college experience. Students will obtain information about college life and culture and develop strategies and techniques to enhance success in their academic, personal and professional lives. The course is infused with opportunities to understand, practice and implement critical thinking. Students will also gain practical information to help prepare to transfer to a four-year university or enter the workforce directly. All topics will be presented in both theory and practice. This course is required of all degree-seeking candidates and must be taken within the initial 16 credits after entry.

## ENGL 101 - English Composition I

## Credits: 3

This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects which include personal, rhetorical, and expository models. Research skills are introduced.

## MATH 106 - Mathematical Concepts

Credits: 3
This course surveys several basic concepts of mathematics designed to give non-scientific/non-technical majors an understanding of the breadth of mathematics in areas other than computational application. Topics include: problem solving, the real number system, linear and quadratic equations, exponents and logarithms, graphs and functions, and graph theory.

Prerequisite: Proficiency on the College Placement Examination or Grade of C or Better in MATH 017/MATH 023

## MUSC 105-Chorus I

Credits: 1
This course provides training in style and interpretation of music from all periods of history. It allows students the opportunity to perform in public. (Students may participate on a non-credit basis).

## MUSC 110 - Introductory Music Theory

## Credits: 3

This course is a beginning level study of music theory, including: notation (reading and dictation), ear training, keyboard skills and basic harmony. Active class participation is required, and students must have regular access to a piano or keyboard.

## MUSC 121 - Voice I

## Credits: 1

This course is the first in a sequence facilitating the development of vocal ability and emphasizes technical exercises, repertoire study, and performances before faculty and peers. Lab Fee Required.

## OR

## MUSC 130 - Piano I

## Credits: 1

This course is first in a sequence facilitating the develop keyboard skills and is required of all music students whose primary instrument is not piano. Students are required to complete additional simultaneously scheduled studio/lab time to meet the goals of the class. Lab Fee Required.

Corequisite: MUSC 110, MUSC 134
Prerequisite: Music Majors or Permission of the Chair

## MUSC 160 - Intro. to Aural Comprehension

## Credits: 1

This course is designed to develop musical ear training skills by engaging in singing, writing, progress demonstrations and utilizing computer-

## Spring Semester

## ENGL 102 - English Composition II

## Credits: 3

This course introduces students to short fiction, poetry, drama, and the novel. Written assignments are based on the readings. Writing skills learned in Composition I are further developed. Students will write a research paper which demonstrates understanding of literary criticism.

Prerequisite: ENGL 101 (Grade of C or better)

- GMSC 000 - Math or Science Gen Ed Requirement Credits: 3
- GTEC 000 - Technology Gen Ed Requirement Credits: 3
- GSOC 000 - Social Science Gen Ed Requirement Credits: 3


## MUSC 102 - Dance I

## Credits: 1

This course consists of level one dance lessons (to be arranged) in tap and jazz. This course gives students a foundation for auditions, performance and choreography with a focus on musical theater. Students are expected to attend performance assemblies to meet the goals of the class and participate in public performances. This course is open to musical theater majors. Additional fees are required.

- MUSC 002 - Applied Music I Credits: 1 *

Total Semester Hours: 14

Summer Session

## Second Year

Fall Semester

## ENGL 201 - Effective Speaking

Credits: 3
This is a course in public speaking which stresses speech organization, effective delivery and critical listening skills. A strong emphasis is placed on student performance to help the student gain speech practice and develop self-confidence in a variety of speaking situations.

Prerequisite: ENGL 015 and ENGL 031

- LSCI 000 - Science Gen Ed Requirement Credits: 3
- HIST 001 - History Gen Ed Requirement Credits: 3
- GSOC 000 - Social Science Gen Ed Requirement Credits: 3


## MUSC 101 - Music Appreciation

Credits: 3
This course is a study and appreciation of music through directed listening of recordings, films, demonstrations, live performances and readings. The class will focus on the elements of music by exploring examples from a range of musical styles, including classical music, ethnomusical traditions, jazz, and rock. Active class participation and attendance of live performance(s) are required.

- MUSC 002 - Applied Music II Credits: 1 *

Total Semester Hours: 16

## Winter Session

## Spring Semester

- PHIL 000 - Philosophy Gen Ed Requirement Credits: 3
- HIST 001 - History Gen Ed Requirement Credits: 3
- GHMN 000 - Humanities Gen Ed Requirement Credits: 3
- GLCA 001 - Global \& Cultural Awareness Gen Ed Requirement Credits: 3


## MUSC 215 - Musical Theater Performance I

Credits: 3
The course is an exploration of musical theatre in a studio setting. Emphasis is on vocal methods and music, including vocal production, vocal technique, music reading and sight-singing, Students will prepare and present as soloists as well as members of small groups and larger ensembles. Students will study the work of the actor/singer/dancer and use their gained knowledge to develop as performers. Theater history and repertoire materials will be prepared for class presentation and critique. Students will experience an audition process either to perform in the college musical when offered, or in a showcase performance at the end of the semester. Lab fee required.

# *Applied Music I \& II - Course number varies based on student's primary instrument or voice. See College catalog for choices. 

# Philosophy, Technology, Social Science, Global and Cultural Awareness, and Math and Science General Education Courses 

Choose from the list of approved courses in the College catalog.

## Humanities General Education Courses (Recommended)

Recommended courses listed below but student can also choose from the list of approved General Education courses in the College catalog.

## ENGL 208 - Theater History I

## Credits: 3

PERA208 This course is a survey of dramatic literature and theatrical history from ancient times through the Renaissance. Students will be introduced to all areas of the theater including: acting, directing, design, and theater architecture.

## Prerequisite: ENGL 101

OR

## THEA 208 - Theater History I

Credits: 3
This course is a survey of dramatic literature and theatrical history from ancient times through the Renaissance. Students will be introduced to all areas of the theater including: acting, directing, design, and theater architecture.

## ENGL 209 - Theater History II

## Credits: 3

PERA209 This course is a survey of dramatic literature and theatrical history from the Renaissance through modern times. Students will be introduced to all areas of the theater including: acting, directing, design, and theater architecture.

OR

- THEA 209 - Theater History II Credits: 3

History General Education Courses

Choose from the list of approved History General Education courses in the College catalog. Must choose a level I \& II sequence.

## Developmental Courses

Students may need to first take some developmental courses that are designed to prepare students for the college-level coursework in their academic plan. This may add to the students' completion time. The number of credits students take each semester will determine when the student will complete his/her program of study.

## New Media Communication, A.A.S.

This program is designed to prepare students for career entry in the fields of multimedia design and production and desktop/electronic publishing. The course of study is interdisciplinary in nature, integrating specialized knowledge and skills from three academic areas at Sussex County Community College: computer information systems, communications, and graphic design.

## The objectives of this program are to:

- Identify and analyze effective models of communication.
- Apply basic design and computer graphics concepts to create visually aesthetic multimedia presentations.
- Use vendor-supplied multimedia materials for the development of presentation documents.
- Design and produce original interactive multimedia presentations or courseware modules using advanced-level authoring tools and intermediate computer-based production software.
- Apply the presentation planning process, including audience assessment, identification of objectives, and determination of production budget and scheduling.
- Write scripts for multimedia presentations.
- Communicate effectively with both media specialists and non-technical clients.
- Work effectively as members of a design and production team.


## First Year

## Fall Semester

## COLL 101 - Foundations for Success

## Credits: 3

This is a student-centered course covering numerous strategies to encourage students to become active and empowered learners. A primary goal
of this course is to help students make the most out of their college experience. Students will obtain information about college life and culture and develop strategies and techniques to enhance success in their academic, personal and professional lives. The course is infused with opportunities to understand, practice and implement critical thinking. Students will also gain practical information to help prepare to transfer to a four-year university or enter the workforce directly. All topics will be presented in both theory and practice. This course is required of all degree-seeking candidates and must be taken within the initial 16 credits after entry.

## ENGL 101 - English Composition I

## Credits: 3

This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects which include personal, rhetorical, and expository models. Research skills are introduced.

## COMM 101 - Intro. to Mass Communications

## Credits: 3

This course examines the technical and socio-economic evolutions of print and electronic media with an emphasis on current ethical issues. Publishing, broadcasting and other emerging media are studied in terms of social and personal impact.

## COMM 130-Television Production I

## Credits: 3

This course introduces students to the equipment and process used to produce television programs. In SCCC's on- campus studio, students will learn basic skills and terminology utilized in the television industry.

## GRAD 105 - Vector Graphics \& Page Design

## Credits: 3

This course emphasizes techniques and applications used to produce published documents for both Internet and print media. Students will learn to design documents, publications, and related projects using industry standard software on both MAC and PC platforms. An emphasis is placed on basic computer graphic skills through practical experience with two-dimensional paint and draw programs, as well as layout programs for print and web. Projects covered include advertising design, page layout, computer illustrations, digital imaging, and the scanning and manipulation of images. Lab Fee Required.

Prerequisite: Any COMS course

Total Semester Hours: 15

Winter Session

Spring Semester

## ENGL 201 - Effective Speaking

Credits: 3
This is a course in public speaking which stresses speech organization, effective delivery and critical listening skills. A strong emphasis is placed on student performance to help the student gain speech practice and develop self-confidence in a variety of speaking situations.

Prerequisite: ENGL 015 and ENGL 031

## COMS 110-Computer Concepts \& Applications

## Credits: 3

This course is designed to provide the student with a level of knowledge necessary to function in today's technological society. Topics include computer and network terminology, hardware, software, and processing concepts. A large portion of the class time is dedicated to exercises performed using integrated software packages. Lab Fee Required.

## Corequisite: COMS 110S

## GRAD 128 - Digital Imagery \& Editing

## Credits: 3

This course provides students with the intensive exploration of advanced digital imaging as it applies to photography creating PDF documents, optimizing web graphics and complex layered images. Students will perfect their ability to creatively use digital imaging software to create sophisticated graphics for print and the web. Further study and practical application will be applied to creating documents for both the Internet and print mediums. An emphasis is placed on developing quality portfolio pieces. Lab Fee Required.

Prerequisite: GRAD 105

- GHMN 000 - Humanities Gen Ed Requirement Credits: $\mathbf{3}$


## GRAD 142 - Digital Typography and Color

## Credits: 3

This course is an introduction to the fundamentals of type. Topics covered will include letterforms, text layout and problem solving for print and digital media. The technology and history of typography will be covered as well as page layout and software programs utilizing type. Students will also learn about the nature of color on paper and on the computer, in the printing press and beyond. Color theory, history and preparation information about color for print and web will be covered. Lab Fee Required.

Prerequisite: GRAD 101 and GRAD 105

Total Semester Hours: 15

## Summer Session

- GHMN 000 - Humanities Gen Ed Requirement Credits: 3
- LSCI 000 - Science Gen Ed Requirement Credits: 3


## COMM 203 - Writing for the Media

## Credits: 3

This course introduces techniques for writing commercials, interviews, news and dramatic material to be broadcast. Theory and formatting of this specialized type of writing are practiced and analyzed.

## GRAD 109 - Intro. to Digital Marketing

Credits: 3
This course focuses on techniques for writing, editing and researching content for social media platforms, and students will publish their work on their own Websites and Blogs. An emphasis is placed on the skills needed for quality storytelling via social media communication. Students will explore blogging, podcasting and social software technology. Students will implement social media research campaigns, develop original web content, and discuss interactive writing, interactive publishing, and the role of the interactive writer. Copyright law, libel law, information ethics and culture will be explored.

## GRAD 119 - Website Management for Digital Marketing

Credits: 3
This course is designed to introduce students to WordPress Content Management System for either personal or business website use. The course covers the basics on how to use the WordPress platform including installation, content management, and configuration. Prior web publishing experience is not required. Familiarity with web browsers and email is highly recommended. Lab Fee Required.

Total Semester Hours: 15

## Winter Session

## Spring Semester

## ENGL 215 - Journalism I

## Credits: 3

This course is an introduction to print journalism. Skills to be developed include news reporting, interviewing, copy editing, fact checking, proofreading, as well as writing editorials and feature stories.

- GSOC 000 - Social Science Gen Ed Requirement Credits: 3


## COMM 220 - Photojournalism

## Credits: 3

This course will provide students with a basic understanding of visual communications media, with particular emphasis on digital still cameras. Students will be required to submit a variety of short-term (i.e., spot news) and long-term (i.e., photo essay) assignments using their own 35 mm and/or digital still cameras. The course will include a basic review of lighting, color and digital imaging, exposure, composition, and special effects. Throughout the semester students will be assigned to cover approximately a dozen photojournalism assignments. By the end of the semester, students will have a proficiency in producing professional quality photographic images for newspapers and magazines, as well as digital photographic images for electronic and Web publications.

Prerequisite: ENGL 215 or COMM 219

## GRAD 235 - Video and Motion Graphics

Credits: 3
This course introduces students to software products (editing suites and special effects) that are now widely used in the gaming and entertainment industries for editing and graphic manipulation. Students will learn to use specialized compositing tools to edit scenes, insert graphic effects, place sound effects and blend music to create a final professional product. Software packages used in this class include Adobe's After Effects® and Premiere®.

- GRAD 290 - Internship Portfolio: New Media Credits: 2
- GRAD 291 - Portfolio Preparation and Presentation Credits: 1

Total Semester Hours: 15

Summer Session

Total Program Hours: 60

## Science General Education Courses (Recommended)

Recommended courses listed below but student can also choose from the list of approved General Education courses in the College catalog.

## PHYS 107 - Introductory Meteorology

## Credits: 4

This introductory course consists of five areas of concentration-atmospheric components; weather systems; upper air dynamics; satellite and radar interpretation of severe and weather elements; a review of historical weather events and their social and geographical effects; systems examined

# Humanities or Social Science General Education Courses 

Choose from the list of approved General Education courses in the College catalog.

## Developmental Courses

Students may need to first take some developmental courses that are designed to prepare students for the college-level coursework in their academic plan. This may add to the students' completion time. The number of credits students take each semester will determine when the student will complete his/her program of study.

## Nurse Education, A.A.S.

SCCC has entered into a unique collaboration with Passaic County Community College to enable PCCC students to obtain an outstanding nursing education here in Sussex County. In this program, students take the pre-nursing courses with SCCC. Admission to the PCCC Nursing Program is competitive. The selection at the SCCC campus is limited to 20 students. Applicants must note that at the Sussex Campus, priority is given to the residents of Sussex County, NJ and Pike County, PA only. The Sussex Campus also gives preference to applicants who have completed a majority of the required general education credits at SCCC. The priority at the PCCC campus is given to Passaic County residents with others being considered on a space availability basis. The PCCC Nurse Education Program also offers an LPN-RN mobility option.

This option allows LPNs who wish to continue their education to become an RN to get credit for Nursing I after certain admission requirements are met. Nursing II, III, and IV must be completed with the PCCC Nurse Education Program at either the SCCC Campus or the PCCC campus. Acceptance is based on several criteria and the availability of a seat in Nursing II at either campus.

Qualified students who are admitted to the PCCC Nurse Education Program, offered in conjunction with SCCC, take the clinical nursing courses with PCCC here on the SCCC campus and in clinical sites throughout northern NJ. These clinical courses comprise a four-semester sequence which begins every year in January. General education courses from the sciences and liberal arts enhance the students' understanding of clients with acute and chronic health problems. The curriculum prepares students to practice in hospitals and healthcare agencies within the framework of the American Nurses Association's Standards of Practice and the New Jersey Nurse Practice Act. Applicants for admission to the Nurse Education Program must be high school graduates or have high school equivalency diplomas (GED). They also must meet admission criteria selected to ensure that accepted candidates have the potential to succeed in a rigorous academic program.

Admission criteria are minimum standards and, in most cases, applicants accepted into the program exceed these requirements. The following requirements must be met prior to admission.

## Meet PCCC Admission Criteria

- Achieve satisfactory scores on the Accuplacer Placement Test for placement in college-level mathematics/English courses, OR complete the required remediation with a grade of " C " or higher.
- Complete CHEM 100 - Introductory Chemistry with a grade of " C " or higher within the past five years. If you have not completed at least one high school laboratory science course within the past five years, it is recommended that you complete a general science laboratory course with a grade of " C " or higher.
- Achieve a passing score on the TEAS (entrance exam) with a minimum of $50 \%$ in three subject areas, Math, Reading, and English. A passing score is required but does not guarantee acceptance. Acceptance is based on a point score for three areas, GPA, Number of college credits, and results of the TEAS.
- Applicants are admitted in rank order of their point score along with other considerations listed in the program description.
- The TEAS test is offered several times each semester through the Testing Center.


## The objectives of this program are to:

- Integrate into practice knowledge and skills from the sciences, liberal arts, and nursing.
- Apply the nursing process when caring for clients to promote, restore, and maintain health.
- Individualize nursing care to accommodate cultural, ethnic, and economic differences in clients and families.
- Practice nursing is based on ethical considerations within the legal parameters of the Nurse Practice Act and the American Nurses Association Code of Ethics and Standards of Care.
- Communicate in an effective manner with clients, client's families, and the interprofessional health care team.
- Demonstrate accountability for personal and professional development.
- Integrate developmental principles when caring for clients of all ages.
- Implement evidence-based clinical judgement as an associate degree nurse as a provider of care, manager of care, and member of the interprofessional health care team.
- Collaborate with the interprofessional health care team to ensure continuity of care for clients and their families.


## General Education Requirements

GENERAL EDUCATION REQUIREMENTS (34 Credits) Taken through SCCC

Communication (6 cr.)

## ENGL 101 - English Composition I

## Credits: 3

This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects which include personal, rhetorical, and expository models. Research skills are introduced.

## ENGL 102 - English Composition II

Credits: 3
This course introduces students to short fiction, poetry, drama, and the novel. Written assignments are based on the readings. Writing skills learned in Composition I are further developed. Students will write a research paper which demonstrates understanding of literary criticism.

Prerequisite: ENGL 101 (Grade of C or better)

## Humanities (3 cr.)

Choose from the list of approved General Education courses in the College catalog

## BIOS 103 - Anatomy \& Physiology I

Credits: 4
This course is a systematic study of the structure and functions of the human body. Topics include general terminology, cells, tissues, integumentary, muscular, and nervous systems. Lab Fee Required.

Corequisite: BIOS 103L

## BIOS 104 - Anatomy \& Physiology II

## Credits: 4

This course is a continuation of Anatomy and Physiology I. Topics include the endocrine, circulatory, immune, respiratory, digestive, urinary, and reproductive systems. Lab Fee Required.

Corequisite: BIOS 104L
Prerequisite: BIOS 103 (Grade of C or better)

## BIOS 210 - Microbiology

## Credits: 4

This course involves a systematic study of microorganisms. Topics include the classification, structure, function, genetics, ecology, and control of microbes. Clinical aspects, infection and immunity, and industrial aspects of microbiology will also be covered. Lab Fee Required.

Corequisite: BIOS 210L
Prerequisite: One previous semester of science

## CHEM 100-Introductory Chemistry

## Credits: 4

This course includes the basics of inorganic, organic, and biochemistry. The emphasis is on environmental issues, and on energy production and utilization in living organisms. Lab experiments illustrate the concepts studied. Lab Fee Required.

Corequisite: CHEM 100L
Prerequisite: MATH 017 or MATH 023 or the approved score on the College Placement Test

Required Social Sciences (9 cr.)

## PSYC 101 - Introduction to Psychology

## Credits: 3

This course is an introduction to the science of human behavior and mental processes. Emphasis is placed on the relationship between the nervous system and behavior, learning, perception, development, motivation, personality, attitude formation and prejudice, psychopathology and psychotherapy.

Prerequisite: Proficient in all Developmental English Courses

Credits: 3
This course is the study of the development of the individual from prenatal life through adulthood including biological, mental, emotional, and social patterns of growth.

## SOCA 101 - Intro. to Sociology

## Credits: 3

This course is an introduction to the analysis and description of structures and dynamics of human society. Emphasis is placed on the application of scientific methods of observation and analysis of social groups, intergroup relations, social change, social stratification, and social institutions.

## Program Requirements

## NURSING CORE (34 Credits) Taught at SCCC Campus for PCCC

Applying for the nursing program is not automatic. Pre-Nursing students must formally submit an application for the nursing program. The application deadline for the nursing program is October 1 each year and the deadline for the LPN Mobility Program is February 1 each year.

## Required Courses (34 cr.)

- NUR 101/PCC 101 - Nursing I Credits: 7 Spring Only
- NUR 102/PCC 102 - Nursing II Credits: 8 Fall Only
- NUR 201/PCC 201 - Nursing III Credits: 9 Spring Only
- NUR 202/PCC 202 - Nursing IV Credits: 9 Fall Only
- NUR 203/PCC 203 - Nursing Transition Credits: 1 Fall Only


## Total Program Hours: 68

The A.A.S. in Nurse Education is conferred by Passaic County Community College. PCCC determines the criteria for successful completion of this program.

## Developmental Courses

Students may need to first take some developmental courses that are designed to prepare students for the college-level coursework in their academic plan. This may add to the students' completion time. The number of credits students take each semester will determine when the student will complete his/her program of study.

# Optics Technology Option, A.A.S. - Technical Studies 

The Optics Technology program gives students an opportunity to gain knowledge and skills in the field of optical manufacturing, and complete integrated general education courses needed for the industry. Students will develop advanced skills in the comprehension of technical drawings, material handling, conventional grinding and polishing, optomechanical assembly, metrology, and quality control. Additionally, students receive training in programming, setting up, and operating CNC grinding and polishing machines. Upon completing this A.A.S. degree program, students will have the necessary skills to become employed, as a technician, in the optics industry. Career opportunities also exist in quality control, optical coating, laser fabrication, fiber optics, and precision assemblies.

## The objectives of this program are to:

- Employ safety skills in an industrial setting.
- Demonstrate knowledge and skills in conventional and CNC manufacturing of optics.
- Produce parts to meet technical drawing requirements required in both conventional and computer numerical controlled machines.
- Apply skills in metrology for the purpose of first article inspection reports.
- Perform setup procedures on a computer numerical controlled (CNC) grinding and polishing systems.
- Exhibit professionalism and ethical work practices.
- Perform assembly of multiple optical elements.
- Apply proper handling and cleaning skills of various optical elements.
- Utilize Military and ISO specifications to execute an inspection plan.


## First Year

Fall Semester

## ENGL 101 - English Composition I

## Credits: 3

This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects which include personal, rhetorical, and expository models. Research skills are introduced.

## MATH 105-Technical Mathematics

## Credits: 3

This course is intended for students who have introductory algebra proficiency, and who need to apply mathematical concepts in a technical program. The purpose of the course is to prepare AAS students for the mathematical aspects of their work in the technical trades.

Prerequisite: Proficiency on the College Placement Examination or grade of C or better in MATH 017/MATH 023.

## OPTC 101 - Fundamentals of Optics I

Credits: 3
This course is an introduction to the optics and photonics industry with a focus on utilizing optical technology in devices and scientific research. Exploration into the history of optics provides context for how the study of light has reached the forefront of technological and scientific
discovery. Students study terminology and the physical concepts necessary to understand how light is created, manipulated, and measured with the goal of constructing a foundation from which to delve further into the optics industry.

## OPTC 107 - Standards of Optics

Credits: 3
This course is designed for students to learn military specification/ISO formats and how they are utilized in the industry. Students assess safety protocols relevant to the industry, future laboratories and how to properly format and complete inspection reports.

Prerequisite: Proficiency in Basic English writing, Basic Math, and Algebra.

## OPTC 112 - Measurement and Analysis I

## Credits: 3

This course introduces students to the fundamentals of metrology theory, error analysis and observation bias. Students analyze technical drawings and use basic metrology tools to evaluate a variety of optics in a lab setting. Lab fee required.

Prerequisite: Proficiency in Basic English writing, Basic Math, and Algebra.

Total Semester Hours: 15

## Winter Session

## Spring Semester

## ENGL 125 - Tech. Writing \& Communication I

Credits: 3
This course focuses on expository writing for business, industrial, and scientific fields, emphasizing the principles for organizing, writing, and revising clear, readable documents and reports. Students will practice written, oral, reading, and reasoning skills. Research skills will be advanced.

- GTEC 000 - Technology Gen Ed Requirement Credits: 3
- GNED 000 - General Education Requirement Credits: 3


## OPTC 121 - Ray Optics

Credits: 3
This course is an introduction to describing light and characterizing optical elements with an emphasis on the ray nature of light. Elements such as lenses, mirrors, and prisms are covered to enable planning, evaluation, and execution of optical setups. In a lab setting, ray tracing is used to analyze optical systems, leading to the discovery of where images are formed, determination of their magnification and orientation, as well as what types of aberrations can affect the image. Lab fee required.

- TSC 000 - Technical Studies Core Credits: $\mathbf{3}$

OR

- OPTC 000 - Program Option Elective Credits: 3

Total Semester Hours: 15

## Summer Session

## Second Year

## Fall Semester

- GHMN 000 - Humanities Credits: $\mathbf{3}$

OR

- GSOC 000 - Social Science Gen Ed Requirement Credits: 3
- TSC 000 - Technical Studies Core Credits: 3


## OPTC 140 - Conventional Optics Manufacturing I

## Credits: 3

This course provides students the opportunity to learn how to process glass from its raw state to finished precision optics using conventional methods. In a lab setting, students learn proper techniques to create optics using conventional technology. Lab fee required.

- TSC 000 - Technical Studies Core Credits: 3

OR

- OPTC 000 - Program Option Elective Credits: 3
- TSC 000 - Technical Studies Core Credits: 3

OR

- OPTC 000 - Program Option Elective Credits: 3

Total Semester Hours: 15

Winter Session

- GNED 000 - General Education Requirement Credits: 3
- TSC 000 - Technical Studies Core Credits: 3 OR
- OPTC 000 - Program Option Elective Credits: 3
- TSC 000 - Technical Studies Core Credits: $\mathbf{3}$ OR
- OPTC 000 - Program Option Elective Credits: 3
- TSC 000 - Technical Studies Core Credits: $\mathbf{3}$ OR
- OPTC 000 - Program Option Elective Credits: 3
- TSC 000 - Technical Studies Core Credits: 3 OR
- OPTC 000 - Program Option Elective Credits: 3

Total Semester Hours: 15

Summer Semester

Total Program Hours: 60

## Humanities/Social Science Gen Ed Requirement

Choose from the list of approved courses listed in the College catalog

## Technical Studies Core or Program Electives Courses (Recommended)

Technical Studies credits may be earned for corporate, industrial, or military training programs after review by a faculty assessor of related program. In addition to the recommended courses, individuals without sufficient technical training experience can select courses in one of the programs/options listed below to satisfy the Technical Studies and Program Elective credit requirements. All courses should be selected with assistance from a faculty advisor.

## OPTC 210 - Measurement and Analysis II

## Credits: 3

This course is a continuation of Measurement and Analysis I where the concepts will be applied to advanced systems in a lab setting. Students interpret and apply results from fizeau interferometers, white light interferometers, spectrophotometers, profilometers and digital spherometers. Students outline a comprehensive inspection plan based on technical drawings. Lab fee required.

Credits: 3
This course allows students to learn the fundamentals of optical materials, various techniques of optical coating deposition, and relevant metrology processes. Students analyze environmental conditions.

## OPTC 225 - CNC Optics Manufacturing I

## Credits: 3

This course allows students to work hands-on with the latest CNC technologies, tools, and methods. Students study the ways and means to create precision spherical elements in a lab setting using CNC machines. Lab fee required.

## OPTC 231 - Fundamentals of Optics II

## Credits: 3

This course is a continuation of Fundamentals of Optics I. Students explore the wave and quantum nature of light and how these concepts are utilized during design, manufacture, and measurement of optical elements and optical systems. In a lab setting, interference, diffraction, and polarization are covered through experimentation and demonstration, with the goal of providing a basic understanding of how various optical devices operate in order for students to critically examine measurement results. Progressively more complex optical elements such as polarizers, wave plates, diffraction gratings, and thin film coatings are also covered. Lab fee required.

## OPTC 240 - Conventional Optics Manufacturing II

## Credits: 3

This course allows students to learn how to transform unprocessed glass into a finished precision optic using planetary, continuous, and double sided polishers in a lab setting. Students build upon the learned skills from Conventional Optics Manufacturing I to manufacture optics to laser grade quality. Lab fee required.

## OPTC 247 - CNC Optics Manufacturing II

## Credits: 3

This course builds upon the concepts from CNC Optics Manufacturing I. Students explore how to correct optical surfaces using metrology data and advanced CNC software. Advanced optical CNC procedures are covered. Students practice precision aspheric lenses in a lab setting. Lab fee required.

## OPTC 255 - Advanced Optical Systems

## Credits: 3

This course combines applications, metrology, alignment, and optical assemblies. Students conduct practical laboratory experiments and advanced metrology in a lab setting with the goal of reinforcing knowledge gained from previous courses. Alignment of single- and multi-element optical systems are covered, as well as various techniques for cementing and mechanically mounting lenses. Throughout the course, real world problems and scenarios are presented, giving the student a true experience in what is expected of them when working in the optical industry. Lab fee required.

## Technology General Education Courses (Recommended)

Recommended courses listed below but student can also choose from the list of approved General Education courses in the College catalog.

## COMS 110 - Computer Concepts \& Applications


#### Abstract

Credits: 3 This course is designed to provide the student with a level of knowledge necessary to function in today's technological society. Topics include computer and network terminology, hardware, software, and processing concepts. A large portion of the class time is dedicated to exercises performed using integrated software packages. Lab Fee Required.


Corequisite: COMS 110S

## Developmental Courses

Students may need to first take some developmental courses that are designed to prepare students for the college-level coursework in their academic plan. This may add to the students' completion time. The number of credits students take each semester will determine when the student will complete his/her program of study.

## Optics Technology: CNC, C.O.A.

This program is designed to provide continuing students and professionals with theoretical and hands-on knowledge of the art and science of conventional manufacturing techniques. Students acquire skills for an entry-level position in the manufacturing sector of the photonics industry.

## First Year

## Fall Semester

## OPTC 107 - Standards of Optics

## Credits: 3

This course is designed for students to learn military specification/ISO formats and how they are utilized in the industry. Students assess safety protocols relevant to the industry, future laboratories and how to properly format and complete inspection reports.

Prerequisite: Proficiency in Basic English writing, Basic Math, and Algebra.

## Credits: 3

This course introduces students to the fundamentals of metrology theory, error analysis and observation bias. Students analyze technical drawings and use basic metrology tools to evaluate a variety of optics in a lab setting. Lab fee required.

Prerequisite: Proficiency in Basic English writing, Basic Math, and Algebra.

## OPTC 225 - CNC Optics Manufacturing I

## Credits: 3

This course allows students to work hands-on with the latest CNC technologies, tools, and methods. Students study the ways and means to create precision spherical elements in a lab setting using CNC machines. Lab fee required.

Total Semester Hours: 9

## Winter Session

## Spring Semester

## OPTC 210 - Measurement and Analysis II

## Credits: 3

This course is a continuation of Measurement and Analysis I where the concepts will be applied to advanced systems in a lab setting. Students interpret and apply results from fizeau interferometers, white light interferometers, spectrophotometers, profilometers and digital spherometers. Students outline a comprehensive inspection plan based on technical drawings. Lab fee required.

## OPTC 247 - CNC Optics Manufacturing II

Credits: 3
This course builds upon the concepts from CNC Optics Manufacturing I. Students explore how to correct optical surfaces using metrology data and advanced CNC software. Advanced optical CNC procedures are covered. Students practice precision aspheric lenses in a lab setting. Lab fee required.

Total Semester Hours: 6

## Optics Technology: CNC, Certificate

This program is designed to provide students with theoretical and hands-on knowledge of the art and science of conventional manufacturing techniques and training in Computer Numeral Control Programing. Students will have the rare opportunity to learn from industry professionals and acquire skills for an entry-level position in the manufacturing sector of the photonics industry.

## Program Outcomes:

- Examine technical drawings in ISO and military specification formats and relevant tolerances.
- Apply learned skills to manufacture optical elements based on technical drawings.
- Manufacture a spherical lens based on a technical drawing.
- Apply cumulative knowledge to polish optics to laser grade quality
- Demonstrate proper setup of grinding and polishing of aspheric lenses through discussions, problem0solving, and interactive demonstrations.


## First Year

Fall Semester

## ENGL 101 - English Composition I

## Credits: 3

This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects which include personal, rhetorical, and expository models. Research skills are introduced.

## OPTC 101 - Fundamentals of Optics I

## Credits: 3

This course is an introduction to the optics and photonics industry with a focus on utilizing optical technology in devices and scientific research. Exploration into the history of optics provides context for how the study of light has reached the forefront of technological and scientific discovery. Students study terminology and the physical concepts necessary to understand how light is created, manipulated, and measured with the goal of constructing a foundation from which to delve further into the optics industry.

## OPTC 107 - Standards of Optics

## Credits: 3

This course is designed for students to learn military specification/ISO formats and how they are utilized in the industry. Students assess safety protocols relevant to the industry, future laboratories and how to properly format and complete inspection reports.

Prerequisite: Proficiency in Basic English writing, Basic Math, and Algebra.

## OPTC 112 - Measurement and Analysis I

## Credits: 3

This course introduces students to the fundamentals of metrology theory, error analysis and observation bias. Students analyze technical drawings and use basic metrology tools to evaluate a variety of optics in a lab setting. Lab fee required.

Prerequisite: Proficiency in Basic English writing, Basic Math, and Algebra.

Credits: 3
This course allows students to work hands-on with the latest CNC technologies, tools, and methods. Students study the ways and means to create precision spherical elements in a lab setting using CNC machines. Lab fee required.

Total Semester Hours: 15

Winter Session

## Spring Semester

## MATH 105-Technical Mathematics

## Credits: 3

This course is intended for students who have introductory algebra proficiency, and who need to apply mathematical concepts in a technical program. The purpose of the course is to prepare AAS students for the mathematical aspects of their work in the technical trades.

Prerequisite: Proficiency on the College Placement Examination or grade of C or better in MATH 017/MATH 023.

## OPTC 121 - Ray Optics

## Credits: 3

This course is an introduction to describing light and characterizing optical elements with an emphasis on the ray nature of light. Elements such as lenses, mirrors, and prisms are covered to enable planning, evaluation, and execution of optical setups. In a lab setting, ray tracing is used to analyze optical systems, leading to the discovery of where images are formed, determination of their magnification and orientation, as well as what types of aberrations can affect the image. Lab fee required.

## OPTC 231 - Fundamentals of Optics II

## Credits: 3

This course is a continuation of Fundamentals of Optics I. Students explore the wave and quantum nature of light and how these concepts are utilized during design, manufacture, and measurement of optical elements and optical systems. In a lab setting, interference, diffraction, and polarization are covered through experimentation and demonstration, with the goal of providing a basic understanding of how various optical devices operate in order for students to critically examine measurement results. Progressively more complex optical elements such as polarizers, wave plates, diffraction gratings, and thin film coatings are also covered. Lab fee required.

Credits: 3
This course builds upon the concepts from CNC Optics Manufacturing I. Students explore how to correct optical surfaces using metrology data and advanced CNC software. Advanced optical CNC procedures are covered. Students practice precision aspheric lenses in a lab setting. Lab fee required.

- TECH 000 - Technical Elective Credits: 3

Total Semester Hours: 15

Summer Session

Total Program Hours: 30

## Technical Elective

Choose from any course with a COMS or OPTC designation.

## Developmental Courses

Students may need to first take some developmental courses that are designed to prepare students for the college-level coursework in their academic plan. This may add to the students' completion time. The number of credits students take each semester will determine when the student will complete his/her program of study.

## Optics Technology: Conventional, C.O.A.

This program is designed to provide continuing students and professionals with theoretical and hands-on knowledge of the art and science of conventional manufacturing techniques. Students acquire skills for an entry-level position in the manufacturing sector of the photonics industry.

## First Year

## Fall Semester

## OPTC 107 - Standards of Optics

## Credits: 3

This course is designed for students to learn military specification/ISO formats and how they are utilized in the industry. Students assess safety

Prerequisite: Proficiency in Basic English writing, Basic Math, and Algebra.

## OPTC 112 - Measurement and Analysis I

Credits: 3
This course introduces students to the fundamentals of metrology theory, error analysis and observation bias. Students analyze technical drawings and use basic metrology tools to evaluate a variety of optics in a lab setting. Lab fee required.

Prerequisite: Proficiency in Basic English writing, Basic Math, and Algebra.

## OPTC 140 - Conventional Optics Manufacturing I

## Credits: 3

This course provides students the opportunity to learn how to process glass from its raw state to finished precision optics using conventional methods. In a lab setting, students learn proper techniques to create optics using conventional technology. Lab fee required.

## Total Semester Hours: 9

## Winter Session

## Spring Semester

OPTC 210 - Measurement and Analysis II

## Credits: 3

This course is a continuation of Measurement and Analysis I where the concepts will be applied to advanced systems in a lab setting. Students interpret and apply results from fizeau interferometers, white light interferometers, spectrophotometers, profilometers and digital spherometers. Students outline a comprehensive inspection plan based on technical drawings. Lab fee required.

## OPTC 240 - Conventional Optics Manufacturing II

## Credits: 3

This course allows students to learn how to transform unprocessed glass into a finished precision optic using planetary, continuous, and double sided polishers in a lab setting. Students build upon the learned skills from Conventional Optics Manufacturing I to manufacture optics to laser grade quality. Lab fee required.

## Optics Technology: Conventional, Certificate

This program is designed to provide students with theoretical and hands-on knowledge of the art and science of conventional manufacturing techniques. Students will have the rare opportunity to learn from industry professionals and acquire skills for an entry-level position in the manufacturing sector of the photonics industry.

## Program Outcomes:

- Examine technical drawings in ISO and military specification formats and relevant tolerances.
- Apply learned skills to manufacture optical elements based on technical drawings.
- Manufacture a spherical lens based on a technical drawing.
- Apply cumulative knowledge to polish optics to laser grade quality
- Demonstrate proper setup of grinding and polishing of aspheric lenses through discussions, problem-solving, and interactive demonstrations.


## First Year

## Fall Semester

## ENGL 101 - English Composition I

Credits: 3
This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects which include personal, rhetorical, and expository models. Research skills are introduced.

## OPTC 101 - Fundamentals of Optics I

## Credits: 3

This course is an introduction to the optics and photonics industry with a focus on utilizing optical technology in devices and scientific research. Exploration into the history of optics provides context for how the study of light has reached the forefront of technological and scientific discovery. Students study terminology and the physical concepts necessary to understand how light is created, manipulated, and measured with the goal of constructing a foundation from which to delve further into the optics industry.

## OPTC 107 - Standards of Optics

## Credits: 3

This course is designed for students to learn military specification/ISO formats and how they are utilized in the industry. Students assess safety protocols relevant to the industry, future laboratories and how to properly format and complete inspection reports.

Prerequisite: Proficiency in Basic English writing, Basic Math, and Algebra.

## Credits: 3

This course introduces students to the fundamentals of metrology theory, error analysis and observation bias. Students analyze technical drawings and use basic metrology tools to evaluate a variety of optics in a lab setting. Lab fee required.

Prerequisite: Proficiency in Basic English writing, Basic Math, and Algebra.

## OPTC 140 - Conventional Optics Manufacturing I

## Credits: 3

This course provides students the opportunity to learn how to process glass from its raw state to finished precision optics using conventional methods. In a lab setting, students learn proper techniques to create optics using conventional technology. Lab fee required.

Total Semester Hours: 15

## Winter Session

## Spring Semester

## MATH 105 - Technical Mathematics

## Credits: 3

This course is intended for students who have introductory algebra proficiency, and who need to apply mathematical concepts in a technical program. The purpose of the course is to prepare AAS students for the mathematical aspects of their work in the technical trades.

Prerequisite: Proficiency on the College Placement Examination or grade of C or better in MATH 017/MATH 023.

## OPTC 121 - Ray Optics

## Credits: 3

This course is an introduction to describing light and characterizing optical elements with an emphasis on the ray nature of light. Elements such as lenses, mirrors, and prisms are covered to enable planning, evaluation, and execution of optical setups. In a lab setting, ray tracing is used to analyze optical systems, leading to the discovery of where images are formed, determination of their magnification and orientation, as well as what types of aberrations can affect the image. Lab fee required.

## OPTC 231 - Fundamentals of Optics II

## Credits: 3

This course is a continuation of Fundamentals of Optics I. Students explore the wave and quantum nature of light and how these concepts are utilized during design, manufacture, and measurement of optical elements and optical systems. In a lab setting, interference, diffraction, and
polarization are covered through experimentation and demonstration, with the goal of providing a basic understanding of how various optical devices operate in order for students to critically examine measurement results. Progressively more complex optical elements such as polarizers, wave plates, diffraction gratings, and thin film coatings are also covered. Lab fee required.

## OPTC 240 - Conventional Optics Manufacturing II

## Credits: 3

This course allows students to learn how to transform unprocessed glass into a finished precision optic using planetary, continuous, and double sided polishers in a lab setting. Students build upon the learned skills from Conventional Optics Manufacturing I to manufacture optics to laser grade quality. Lab fee required.

- TECH 000 - Technical Elective Credits: $\mathbf{3}$

Total Semester Hours: 15

Summer Session

## Total Program Hours: 30

## Technical Elective

Choose from any course with a COMS or OPTC designation.

## Developmental Courses

Students may need to first take some developmental courses that are designed to prepare students for the college-level coursework in their academic plan. This may add to the students' completion time. The number of credits students take each semester will determine when the student will complete his/her program of study.

## Optics Technology: Metrology, C.O.A.

This program is designed to provide continuing students and professionals with theoretical and hands-on knowledge of the science of optical metrology. Students acquire the necessary skills for a position in the quality assurance sector of photonics industry.

## First Year

Credits: 3
This course is an introduction to the optics and photonics industry with a focus on utilizing optical technology in devices and scientific research. Exploration into the history of optics provides context for how the study of light has reached the forefront of technological and scientific discovery. Students study terminology and the physical concepts necessary to understand how light is created, manipulated, and measured with the goal of constructing a foundation from which to delve further into the optics industry.

## OPTC 107 - Standards of Optics

Credits: 3
This course is designed for students to learn military specification/ISO formats and how they are utilized in the industry. Students assess safety protocols relevant to the industry, future laboratories and how to properly format and complete inspection reports.

Prerequisite: Proficiency in Basic English writing, Basic Math, and Algebra.

## OPTC 112 - Measurement and Analysis I

## Credits: 3

This course introduces students to the fundamentals of metrology theory, error analysis and observation bias. Students analyze technical drawings and use basic metrology tools to evaluate a variety of optics in a lab setting. Lab fee required.

Prerequisite: Proficiency in Basic English writing, Basic Math, and Algebra.

Total Semester Hours: 9

Winter Session

## Spring Semester

## OPTC 210 - Measurement and Analysis II

## Credits: 3

This course is a continuation of Measurement and Analysis I where the concepts will be applied to advanced systems in a lab setting. Students interpret and apply results from fizeau interferometers, white light interferometers, spectrophotometers, profilometers and digital spherometers. Students outline a comprehensive inspection plan based on technical drawings. Lab fee required.

OPTC 231 - Fundamentals of Optics II

## Credits: 3

This course is a continuation of Fundamentals of Optics I. Students explore the wave and quantum nature of light and how these concepts are utilized during design, manufacture, and measurement of optical elements and optical systems. In a lab setting, interference, diffraction, and polarization are covered through experimentation and demonstration, with the goal of providing a basic understanding of how various optical devices operate in order for students to critically examine measurement results. Progressively more complex optical elements such as polarizers, wave plates, diffraction gratings, and thin film coatings are also covered. Lab fee required.

Total Semester Hours: 6

## Optics Technology: Metrology, Certificate

This program is designed to provide students with theoretical and hands-on knowledge of the science of optical metrology. Students will acquire necessary skills for a position in the quality assurance sector of photonics industry.

## Program Outcomes:

- Demonstrate an understanding of technical drawings interpretation.
- Execute first article inspection reports for flat, curved, and prism optics.
- Describe fundamentals of metrology theory, error analysis, and observation bias.
- Examine technical drawings in ISO and military specification formats and relevant tolerances.
- Demonstrate an understanding of white light interferometry through discussion and problem-solving.


## First Year

## Fall Semester

## ENGL 101 - English Composition I

## Credits: 3

This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects which include personal, rhetorical, and expository models. Research skills are introduced.

## MATH 105 - Technical Mathematics

Credits: 3
This course is intended for students who have introductory algebra proficiency, and who need to apply mathematical concepts in a technical program. The purpose of the course is to prepare AAS students for the mathematical aspects of their work in the technical trades.

Prerequisite: Proficiency on the College Placement Examination or grade of C or better in MATH $017 / \mathrm{MATH} 023$.

Credits: 3
This course is an introduction to the optics and photonics industry with a focus on utilizing optical technology in devices and scientific research. Exploration into the history of optics provides context for how the study of light has reached the forefront of technological and scientific discovery. Students study terminology and the physical concepts necessary to understand how light is created, manipulated, and measured with the goal of constructing a foundation from which to delve further into the optics industry.

## OPTC 107 - Standards of Optics

## Credits: 3

This course is designed for students to learn military specification/ISO formats and how they are utilized in the industry. Students assess safety protocols relevant to the industry, future laboratories and how to properly format and complete inspection reports.

Prerequisite: Proficiency in Basic English writing, Basic Math, and Algebra.

## OPTC 112 - Measurement and Analysis I

## Credits: 3

This course introduces students to the fundamentals of metrology theory, error analysis and observation bias. Students analyze technical drawings and use basic metrology tools to evaluate a variety of optics in a lab setting. Lab fee required.

Prerequisite: Proficiency in Basic English writing, Basic Math, and Algebra.

Total Semester Hours: 15

Winter Session

Spring Semester

## OPTC 210 - Measurement and Analysis II

## Credits: 3

This course is a continuation of Measurement and Analysis I where the concepts will be applied to advanced systems in a lab setting. Students interpret and apply results from fizeau interferometers, white light interferometers, spectrophotometers, profilometers and digital spherometers. Students outline a comprehensive inspection plan based on technical drawings. Lab fee required.

## OPTC 231 - Fundamentals of Optics II

## Credits: 3

This course is a continuation of Fundamentals of Optics I. Students explore the wave and quantum nature of light and how these concepts are utilized during design, manufacture, and measurement of optical elements and optical systems. In a lab setting, interference, diffraction, and polarization are covered through experimentation and demonstration, with the goal of providing a basic understanding of how various optical
devices operate in order for students to critically examine measurement results. Progressively more complex optical elements such as polarizers, wave plates, diffraction gratings, and thin film coatings are also covered. Lab fee required.

- TECH 000 - Technical Elective Credits: 3
- TECH 000 - Technical Elective Credits: 3
- TECH 000 - Technical Elective Credits: 3

Total Semester Hours: 15

Summer Session

Total Program Hours: 30

## Technical Elective

Choose from any course with a COMS or OPTC designation.

## Developmental Courses

Students may need to first take some developmental courses that are designed to prepare students for the college-level coursework in their academic plan. This may add to the students' completion time. The number of credits students take each semester will determine when the student will complete his/her program of study.

## Paralegal Studies, A.A.S.

This program is structured to provide a fundamental knowledge of the law while training the student for practical application of the legal concepts learned. The program of study is career-oriented and is not designed specifically for students who plan to transfer to a four-year institution or attend law school.

## The objectives of this program are to:

- Seek entry-level positions in law offices, governmental entities (courts, regulatory agencies, and law enforcement agencies, etc.), businesses and non-profit organizations.
- Demonstrate a fundamental understanding of legal issues related to litigation, family law, criminal law, contracts, business entities, wills and probate, real estate transactions, and legal research and writing.
- Assist attorneys in the preparation of a wide variety of legal documents using word processing software while assisting with office management.


## First Year

## Credits: 3

This is a student-centered course covering numerous strategies to encourage students to become active and empowered learners. A primary goal of this course is to help students make the most out of their college experience. Students will obtain information about college life and culture and develop strategies and techniques to enhance success in their academic, personal and professional lives. The course is infused with opportunities to understand, practice and implement critical thinking. Students will also gain practical information to help prepare to transfer to a four-year university or enter the workforce directly. All topics will be presented in both theory and practice. This course is required of all degree-seeking candidates and must be taken within the initial 16 credits after entry.

## ENGL 101 - English Composition I

## Credits: 3

This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects which include personal, rhetorical, and expository models. Research skills are introduced.

## LEGA 100 - Intro. to the American Legal Sys

## Credits: 3

POLS 111 This course is an introduction to the fundamental principles of the American Legal System. Topics include the structure of the state and federal court systems, legal terminology, and constitutional law decisions affecting every citizen and how to work within the system. Students will visit the Superior Court.

## LEGA 105 - Legal Research \& Writing I

## Credits: 3

This course is an introduction to the legal research process and legal writing. Topics include use of a law library, research techniques, computerassisted legal research, writing office memoranda and case briefs.

Prerequisite: ENGL 101

Total Semester Hours: 12

## Winter Session

## Spring Semester

## ENGL 102 - English Composition II

Credits: 3
This course introduces students to short fiction, poetry, drama, and the novel. Written assignments are based on the readings. Writing skills learned in Composition I are further developed. Students will write a research paper which demonstrates understanding of literary criticism.

Prerequisite: ENGL 101 (Grade of C or better)

## LEGA 103 - New Jersey Practice

## Credits: 3

This course is an in-depth study of the Civil Court Rules for the New Jersey Court System. Each student will draft a summons, complaint, an answer, affirmative defenses, a counterclaim, a cross-claim, a third-party complaint, discovery requests and motions consistent with New Jersey Court Rules.

## COMS 110-Computer Concepts \& Applications

## Credits: 3

This course is designed to provide the student with a level of knowledge necessary to function in today's technological society. Topics include computer and network terminology, hardware, software, and processing concepts. A large portion of the class time is dedicated to exercises performed using integrated software packages. Lab Fee Required.

Corequisite: COMS 110S

## LEGA 210 - Legal Research and Writing II

Credits: 3
This course builds upon the knowledge gained in Legal Research and Writing I. Emphasis is placed on computer assisted legal research and advanced brief writing.

Prerequisite: LEGA 105

## BUSA 205 - Business Law I

## Credits: 3

This course is an introduction to the judicial process as it pertains to business law. Topics include the history of business law, contracts, business torts, white-collar crime, UCC sales, paper and securities. An in-depth study of rights and obligations as they apply to contract law is performed.

Total Semester Hours: 15

Summer Session

Credits: 3
This course is a study of New Jersey real estate legal practice and procedures. Topics include conveyancing, forms, and the theory and practice of real estate transactions. Sample cases are used to illustrate the legal assistant's role in real property conveyance. Landlord-tenant laws and eviction procedures are also discussed.

Prerequisite: LEGA 100

## BUSA 206-Business Law II

Credits: 3
This course is the continuation of the study of business law. Topics include insurance, the creation and operation of corporations, partnerships, and proprietorships, liabilities, indemnification of parties, and documents of incorporation.

Prerequisite: BUSA 205

Total Semester Hours: 6

## Second Year

## Fall Semester

## PSYC 101 - Introduction to Psychology

## Credits: 3

This course is an introduction to the science of human behavior and mental processes. Emphasis is placed on the relationship between the nervous system and behavior, learning, perception, development, motivation, personality, attitude formation and prejudice, psychopathology and psychotherapy.

Prerequisite: Proficient in all Developmental English Courses

## LEGA 110 - Estates and Trusts

## Credits: 3

This course is a study of basic estate planning and administration of decedents' estates. Topics include intestacy, wills, probate, federal and state taxes, accounting, and distribution of assets. Students learn to draft wills and prepare inheritance tax forms.

Prerequisite: LEGA 100

## Credits: 3

This course is an introduction to New Jersey family law. Topics include divorce, annulment, property distribution, child custody, alimony, and support and visitation of children. New Jersey forms and procedures are reviewed. Students examine case studies and prepare matrimonial pleadings, agreements, and pre-trial memoranda.

## Prerequisite: LEGA 100

- GHMN 000 - Humanities Gen Ed Requirement Credits: 3


## LEGA 106 - Civil Litigation

## Credits: 3

This course is an introduction to the principles of civil litigation. Topics include client interview, investigation and evidence, courts and jurisdiction, alternative dispute resolution, pleadings, discovery, motion practice, and trial. Special emphasis is given to the Canon of Ethics and the Code of Professional Responsibility in representing clients during the litigation process.

Total Semester Hours: 15

## Winter Session

## Spring Semester

## ENGL 201 - Effective Speaking

## Credits: 3

This is a course in public speaking which stresses speech organization, effective delivery and critical listening skills. A strong emphasis is placed on student performance to help the student gain speech practice and develop self-confidence in a variety of speaking situations.

Prerequisite: ENGL 015 and ENGL 031

## LEGA 281 - Paralegal Internship

Credits: 3
This course places the student in a supervised internship. Students will complete a minimum of 100 hours in the field. Classroom components of this course focus on legal ethics, portfolio development, interpersonal skills, resume preparation and interviewing techniques.

Prerequisite: LEGA 100, LEGA 103, LEGA 105, LEGA 106, 3 additional LEGA credits and Permission of Program Coordinator

- PALG 000 - Program Elective Credits: 3
- MASC 000 - Math/Science Gen Ed Requirement Credits: 3


## Total Program Hours: 60

## Math, Science, Humanities \& Social Science General Education Courses

Choose from the list of approved courses in the College catalogue.

Program Electives (Recommended)

Recommended courses listed below but student can also choose from any LEGA course designation.

## LEGA 215 - Bankruptcy

## Credits: 3

This course will provide an overview of the three most utilized Chapters of the Bankruptcy Code: Chapters 7, 11, and 13. Concepts covered will include Property of the Estate, Exemptions, Discharge of Debts, Claims and Business and Personal Reorganizations. Additionally, the roles of the parties in a Bankruptcy case will be identified and students will be familiarized with various research sources.

## LEGA 217 - Worker's Compensation

## Credits: 3

This course will provide an overview and practical application of the Workers Compensation statutory method of providing benefits to an employee or his dependent who suffers a personal injury or death by accident or occupational disease arising out of and in the course of employment.

## LEGA 218 - Torts

## Credits: 3

This course is an introduction to the Law of Torts. Topics include torts against the person, torts against property, torts against reputation, malpractice, torts against civil rights, defenses to tort claims, remedies for tort claims, and careers in tort law.

Prerequisite: LEGA 100

## LEGA 230 - Elder Law

## Credits: 3

This course is the study of elder law. Topics include: Elder law practice; health problems of the elderly; life planning, including drafting a last will
and testament and advance directives for healthcare; guardianship and conservatorship, estate planning, including the use of a variety of trusts; cohabitation, marriage and divorce from the elder law perspective; financial planning, including Social Security, Medicare and Medicaid, taxes, long-term care, viatical settlements and reverse mortgages; housing options, including nursing homes; age discrimination; elder abuse, including financial fraud; grandparents' rights; euthanasia and physician-assisted suicide; and legal aspects of funeral planning. Elder Law introduces the student to the roles attorneys, paralegals and geriatric professionals have within an elder law practice. Students will read case law from a varied selection of states. Student may prepare a variety of legal documents important in a typical elder law practice.

Corequisite: LEGA 100/POLS 111

## LEGA 250 - Spec. Topics in Paralegal Studies

## Credits: 4

This course focuses on special topics in Paralegal Studies. Since the topics may change each time the course is offered, students should consult the course-offering schedule each semester.

## Developmental Courses

Students may need to first take some developmental courses that are designed to prepare students for the college-level coursework in their academic plan. This may add to the students' completion time. The number of credits students take each semester will determine when the student will complete his/her program of study.

## Paralegal, Certificate

This program is structured to provide a fundamental knowledge of the law while training the student for practical application of the legal concepts learned. The program of study is career-oriented and is not designed specifically for students who plan to transfer to a four-year institution or attend law school.

## The objectives of this program are to:

- Seek entry-level positions in law offices, governmental entities (courts, regulatory agencies, and law enforcement agencies, etc.), businesses and non-profit organizations.
- Demonstrate a fundamental understanding of legal issues related to litigation, family law, criminal law, contracts, business entities, and legal research and writing.
- Assist attorneys in the preparation of a wide variety of legal documents using word processing software while providing office and organizational support.


## First Year

## Fall Semester

## ENGL 101 - English Composition I

Credits: 3

This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects which include personal, rhetorical, and expository models. Research skills are introduced.

## LEGA 100 - Intro. to the American Legal Sys

Credits: 3
POLS 111 This course is an introduction to the fundamental principles of the American Legal System. Topics include the structure of the state and federal court systems, legal terminology, and constitutional law decisions affecting every citizen and how to work within the system. Students will visit the Superior Court.

## LEGA 105 - Legal Research \& Writing I

## Credits: 3

This course is an introduction to the legal research process and legal writing. Topics include use of a law library, research techniques, computerassisted legal research, writing office memoranda and case briefs.

## Prerequisite: ENGL 101

## LEGA 106 - Civil Litigation

Credits: 3
This course is an introduction to the principles of civil litigation. Topics include client interview, investigation and evidence, courts and jurisdiction, alternative dispute resolution, pleadings, discovery, motion practice, and trial. Special emphasis is given to the Canon of Ethics and the Code of Professional Responsibility in representing clients during the litigation process.

## LEGA 120 - Family Law

## Credits: 3

This course is an introduction to New Jersey family law. Topics include divorce, annulment, property distribution, child custody, alimony, and support and visitation of children. New Jersey forms and procedures are reviewed. Students examine case studies and prepare matrimonial pleadings, agreements, and pre-trial memoranda.

Prerequisite: LEGA 100

Total Semester Hours: 15

## Winter Session

## Spring Semester

- CERT 000 - Certificate Elective Credits: 3


## BUSA 205 - Business Law I

## Credits: 3

This course is an introduction to the judicial process as it pertains to business law. Topics include the history of business law, contracts, business torts, white-collar crime, UCC sales, paper and securities. An in-depth study of rights and obligations as they apply to contract law is performed.

## PSYC 101 - Introduction to Psychology

## Credits: 3

This course is an introduction to the science of human behavior and mental processes. Emphasis is placed on the relationship between the nervous system and behavior, learning, perception, development, motivation, personality, attitude formation and prejudice, psychopathology and psychotherapy.

Prerequisite: Proficient in all Developmental English Courses

## LEGA 103 - New Jersey Practice

## Credits: 3

This course is an in-depth study of the Civil Court Rules for the New Jersey Court System. Each student will draft a summons, complaint, an answer, affirmative defenses, a counterclaim, a cross-claim, a third-party complaint, discovery requests and motions consistent with New Jersey Court Rules.

## LEGA 281 - Paralegal Internship

Credits: 3
This course places the student in a supervised internship. Students will complete a minimum of 100 hours in the field. Classroom components of this course focus on legal ethics, portfolio development, interpersonal skills, resume preparation and interviewing techniques.

Prerequisite: LEGA 100, LEGA 103, LEGA 105, LEGA 106, 3 additional LEGA credits and Permission of Program Coordinator

Total Semester Hours: 15

Summer Session

Total Program Hours: 30

Certificate Electives (Recommended)

Credits: 3
This course is the continuation of the study of business law. Topics include insurance, the creation and operation of corporations, partnerships, and proprietorships, liabilities, indemnification of parties, and documents of incorporation.

Prerequisite: BUSA 205

## LEGA 110 - Estates and Trusts

## Credits: 3

This course is a study of basic estate planning and administration of decedents' estates. Topics include intestacy, wills, probate, federal and state taxes, accounting, and distribution of assets. Students learn to draft wills and prepare inheritance tax forms.

Prerequisite: LEGA 100

## LEGA 215 - Bankruptcy

## Credits: 3

This course will provide an overview of the three most utilized Chapters of the Bankruptcy Code: Chapters 7, 11, and 13. Concepts covered will include Property of the Estate, Exemptions, Discharge of Debts, Claims and Business and Personal Reorganizations. Additionally, the roles of the parties in a Bankruptcy case will be identified and students will be familiarized with various research sources.

## LEGA 217 - Worker's Compensation

## Credits: 3

This course will provide an overview and practical application of the Workers Compensation statutory method of providing benefits to an employee or his dependent who suffers a personal injury or death by accident or occupational disease arising out of and in the course of employment.

## LEGA 218 - Torts

## Credits: 3

This course is an introduction to the Law of Torts. Topics include torts against the person, torts against property, torts against reputation, malpractice, torts against civil rights, defenses to tort claims, remedies for tort claims, and careers in tort law.

Prerequisite: LEGA 100

## LEGA 223 - Constitutional Law

## Credits: 3

This course will examine the U.S. Constitution as the framework for government. Leading decisions of the U.S. Supreme Court will be analyzed in the areas of Civil Rights and Civil Liberties with emphasis on the Bill of Rights, the 13th, 14th and 15th amendments.

## LEGA 230 - Elder Law

Credits: 3
This course is the study of elder law. Topics include: Elder law practice; health problems of the elderly; life planning, including drafting a last will and testament and advance directives for healthcare; guardianship and conservatorship, estate planning, including the use of a variety of trusts; cohabitation, marriage and divorce from the elder law perspective; financial planning, including Social Security, Medicare and Medicaid, taxes, long-term care, viatical settlements and reverse mortgages; housing options, including nursing homes; age discrimination; elder abuse, including financial fraud; grandparents' rights; euthanasia and physician-assisted suicide; and legal aspects of funeral planning. Elder Law introduces the student to the roles attorneys, paralegals and geriatric professionals have within an elder law practice. Students will read case law from a varied selection of states. Student may prepare a variety of legal documents important in a typical elder law practice.

Corequisite: LEGA 100/POLS 111

## LEGA 250 - Spec. Topics in Paralegal Studies

## Credits: 4

This course focuses on special topics in Paralegal Studies. Since the topics may change each time the course is offered, students should consult the course-offering schedule each semester.

- LEGA 215 - Bankruptcy Credits: 3
- LEGA 217 - Worker's Compensation Credits: 3


## Developmental Courses

Students may need to first take some developmental courses that are designed to prepare students for the college-level coursework in their academic plan. This may add to the students' completion time. The number of credits students take each semester will determine when the student will complete his/her program of study.

## Personal Trainer, C.O.A.

The Personal Trainer Certificate of Achievement program is designed to prepare the student to take a nationally recognized personal training certification exam, such as the ACSM - Certified Personal Trainer. This program covers the principles of personal training, aerobic and anaerobic conditioning, group fitness instruction, resistance training, nutrition fundamentals, and first aid and emergency care. Students in this program will experience hands-on training by working with a variety of fitness equipment utilized in the profession and will apply that training during a personal training internship. After completing this program and passing a certification exam, students will be prepared for immediate employment as a personal trainer.

## First Year

## Fall Semester

Credits: 3
This course is designed to acquaint students with nutritional research concepts, the role of nutrients in the human body, the relation of nutrition to human behavior, and the study of nutrition-related health problems. This course interweaves concepts related to the science of human metabolism and body composition.

## EXSC 112 - Prin. of Personal Training I

## Credits: 3

This course is designed to teach the student about the fundamental principles behind personal training. Career tracks, kinesiology principles, and health and fitness assessments will be considered. In addition, this course will assist in prepping the student to sit for a nationally recognized personal trainer certification exam. Lab fee required.

Corequisite: EXSC 112L

## EXSC 121 - Aerobic Conditioning

## Credits: 1

This course is designed to educate the student about the different training principles and modalities of aerobic exercise training. Students taking this course will participate in a variety of aerobic conditioning programs to understand the technique, effort, and safety involved in this training style. Lab fee required.

## EXSC 127 - Resistance Training

## Credits: 1

This course is designed to teach students proper resistance training techniques and programming for all major muscle groups of the body. Proper handling of the resistance equipment, weight room etiquette, training theory, and program design will also be discussed in this course. Students taking this course will be required to participate in weight training sessions to develop a better understanding of the exercises and training style.

Total Semester Hours: 8

## Winter Session

## Spring Semester

## EXSC 105 - First Aid and Emergency Care

## Credits: 3

This course in first aid is designed to acquaint students with information about prevention of accidents and injuries, and about emergency assessment, recognition and treatment of trauma, and sudden illnesses. Upon successful completion of the requirements, students will receive AAOS First Aid certification.

Prerequisite: EXSC 101

## EXSC 115 - Prin. of Personal Training II

## Credits: 3

This course is designed to teach the student about the fundamental principles behind personal training. Exercise training principles, program design, and business skills pertinent to personal trainers will be considered. In addition, this course will assist in prepping the student to sit for a nationally recognized personal trainer certification exam. Lab fee required.

Corequisite: EXSC 115L

## EXSC 123 - Anaerobic Conditioning

## Credits: 1

This course is designed to teach the student about the different training principles and modalities of anaerobic exercise training. Anaerobic training typically involves more explosive and rapid exercises to improve performance on the athletic field but has also shown to have many health benefits for those not training for sport. Students taking this course will participate in a variety of anaerobic conditioning programs to understand the technique, effort, and safety involved in this training style. Lab fee required.

## EXSC 125 - Group Fitness

## Credits: 1

This course is designed to educate the student on how to design and lead group exercise classes. Students are expected to conduct and participate in group exercise classes emphasizing a variety of training styles such as total body conditioning, stretching and strengthening, and boot camp. This course will also teach the importance of safety and monitoring of proper exercise technique during group exercise classes.

## EXSC 280 - Personal Trainer Internship

## Credits: 1

This course is designed as an internship to further the personal training student's skills and knowledge by shadowing a personal trainer in a health and fitness setting. Students will have the opportunity to observe different personal training job duties such as training clients, leading group exercise classes, fitness center supervision, and fitness management.

Total Semester Hours: 9

## Photography Option, A.F.A. - Studio Arts

The Photography Option within the AFA degree prepares students to transfer into a four-year Fine Arts/ Photography Degree Program and/or develop as professionals within the field of Fine Arts Photography. The option combines fine art foundational skills and aesthetics with a
contemporary approach to the photographic medium. Students in this program enjoy a unique photography experience that combines traditional chemistry, darkroom, and printing techniques with cutting-edge digital technology. Classes are conducted in SCCC's new photography facilities, in the Graphic Arts computer lab, and in the Fine Art Studios.

# Upon completion of this program, graduates will be able to: 

- Examine connections between theory and practice.
- Apply abstract relationships and elements to photographic expression.
- Apply black and white film photographic and/or digital technology to fine art photography.
- Develop qualitative decision-making based on current photographic trends and art historical concepts.
- Develop critical thinking using artistic principles drawn from contemporary social, political, or personal issues.
- Create a portfolio.


## First Year

## Fall Semester

## COLL 101 - Foundations for Success

## Credits: 3

This is a student-centered course covering numerous strategies to encourage students to become active and empowered learners. A primary goal of this course is to help students make the most out of their college experience. Students will obtain information about college life and culture and develop strategies and techniques to enhance success in their academic, personal and professional lives. The course is infused with opportunities to understand, practice and implement critical thinking. Students will also gain practical information to help prepare to transfer to a four-year university or enter the workforce directly. All topics will be presented in both theory and practice. This course is required of all degree-seeking candidates and must be taken within the initial 16 credits after entry.

## ENGL 101 - English Composition I

## Credits: 3

This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects which include personal, rhetorical, and expository models. Research skills are introduced.

## ARTA 103 - Art History I

Credits: 3
This course surveys visual artistic expression from the Neolithic period to the fourteenth century, including ancient, medieval and non-European art forms. The development of artistic concepts in the ancient world, gender, and non-western art are central topics in this general survey course.

Prerequisite: ENGL 021, ENGL 032 or Placement into ENGL 101

## Credits: 3

This course provides an introduction to the practical and theoretical applications of two-dimensional design. This is a lecture course where students explore methods for developing their intuitive responses to form and shape, line, color and value, space, and other basic elements of composition and design.

## PHOT 109 - Intro. to Digital Photography

## Credits: 3

This course introduces students to the basic concepts of photography through the use and understanding of their digital SLR camera and photo imaging software. Among topics to be covered are exposure control, composition, lighting, lenses, effects of color on photographs, depth of field, and perspective control. Post process topics include creating a contact sheet, cropping, adjusting print exposure, outputting to web or print media, and selective exposure control. Student must provide their own DSLR (Digital Single Lens Reflex) camera.

Total Semester Hours: 15

Winter Session

Spring Semester

## ENGL 102 - English Composition II

## Credits: 3

This course introduces students to short fiction, poetry, drama, and the novel. Written assignments are based on the readings. Writing skills learned in Composition I are further developed. Students will write a research paper which demonstrates understanding of literary criticism.

Prerequisite: ENGL 101 (Grade of C or better)

## ARTA 108 - Basic Drawing

## Credits: 3

This course introduces students to the basic foundations of drawing methods, including a broad-based survey of art history and appreciation. Students experiment with a variety of materials: pencil, charcoal, and conte-crayon practicing 1,2 and 3 point perspective, and elemental architectural drawing techniques within an historical context. Students explore various elements of personal expression while comparing their efforts to major works of art. The course also introduces the art of still life, landscape, portrait, life drawing, gesture and contour drawing and classical drawing techniques. Studio fee required.

## ARTA 110 - Intro to Color

## Credits: 3

This course develops an understanding of the expressive and compositional qualities of color and its role in the creation of art and design through
lectures and experiment. Various color theories and their applications are explored with reference to works of art. Students create compositions using color as the primary criteria for expression. Studio fee required.

## PHOT 240 - Digital Photography II

## Credits: 3

This course explores digital photography and the digital manipulation of original photographs by concentrating on specific projects in the studio. These projects include photo montages, high dynamic range (HDR) photographs, depth of field mapping, selective exposure control in post processing, and blending options to extend the range of traditional photographs. OFFERED IN SPRING ONLY Lab Fee Required.

## Prerequisite: PHOT 109

- GTEC 000 - Technology Gen Ed Requirement Credits: 3

Total Semester Hours: 15

Summer Session

Second Year

Fall Semester

## PHOT 120 - History of Photography

## Credits: 3

This course is an historical survey of fine art photography from the camera obscura to 21 st century digital techniques. The course will emphasize the aesthetics, applications, and social impact of photography on our culture; this course will include the relationship of photography to other visual art forms.

## SOCA 101 - Intro. to Sociology

Credits: 3
This course is an introduction to the analysis and description of structures and dynamics of human society. Emphasis is placed on the application of scientific methods of observation and analysis of social groups, intergroup relations, social change, social stratification, and social institutions.

## ARTA 115-Three Dimensional Design

## Credits: 3

This course introduces the basic concepts of three-dimensional design. In a workshop setting students examine three-dimensional relationships

## PHOT 110 - Film Photography I

## Credits: 3

This art course is designed for the beginning student of black and white photography. Students are introduced to the basic technical skills of operating a 35 mm camera, recording images on film, and using a darkroom to create photographic prints. Critiques, reference to digital technologies, to important photographers, and trips to museums and galleries guide students in understanding the aesthetic implications of their technical decisions in this medium. Students must provide a $35-\mathrm{mm}$ camera with manual settings and additional materials. Lab Fee Required.

- ARTA 002 - Studio Art Elective Credits: 3

Total Semester Hours: 15

Winter Session

## Spring Semester

## ARTA 185 - Digital Fine Art I

## Credits: 3

This fine art course serves as an introduction to the history, theory and software applications that are currently employed in the field of digital art. As a foundation for future creative endeavors, students will gain understanding of the aesthetic and creative possibilities inherent in the relationship between digital and traditional fine art mediums. Using digital tools, students will engage in drawing and painting. Lab Fee Required.

Prerequisite: ARTA 101 and ARTA 180

## PHOT 112 - Film Photography II

## Credits: 3

This course prepares students to graduate with a professional portfolio of work for gallery representation or transfer. Students select and sequence their work, remake photographs as necessary, and mat work for a public portfolio presentation to faculty and peers. Students create a concise artist's statement and a finished portfolio of fine art photography. Lab Fee Required.

## ARTA 104 - Art History II

## Credits: 3

This course surveys the history of art from the fourteenth through the twenty first centuries. The development of artistic concepts in the contemporary world, art and gender, and non-western art and architecture are central topics in this general survey course. Emphasis is place on viewing art forms in context of culture and gender and understanding the philosophical foundations and critical theories that support and influence them

- ARTA 002 - Studio Art Elective Credits: 3


## PHOT 260 - Portfolio Development/Capstone for Photography

## Credits: 3

This course prepares students to graduate with a professional portfolio of work for gallery representation or transfer. Students select and sequence their work, remake photographs as necessary, and mat work for a public portfolio presentation to faculty and peers. Students create a concise artist's statement and a finished portfolio of fine art photography. Studio fee required.

Total Semester Hours: 15

Summer Semester

## Total Program Hours: 60

## Studio Art Elective Courses (Recommended)

Recommended courses listed below but student can also choose from any ARTA, PHOT or ARTA/PHOT designations.

## PHOT 203 - Documentary/Photojournalism

## Credits: 3

This course explores the similarities of Documentary Photography and Photojournalism in two modules by combining emotional content with factual reportage. Balancing aesthetic content and form with information to produce meaningful documentary work, students learn to build coherent, intelligent, and emotive content relying on instinct and impulse to photograph events. Students learn to identify the consistencies of theme and structure in their work. Classes will include discussions on researching, shooting, editing and sequencing, critiques, and assignments. Students will be assigned approximately twelve documentary/photojournalism assignments. In a lab setting, students will gain proficiency in producing high quality photographic images for newspapers, magazines, and digital publications.

## PHOT 205 - Studio Photography

## Credits: 3

This course enables students to practice lighting and styling using a $4 \times 5$ format camera, achieving mastery of camera movements and control of perspective and sharpness with both $4 \times 5$ and digital imaging. Assignments relate to fine art photography, portraits, and still life as well as to commercial applications. Film and SLR digital cameras are required, $4 \times 5$ camera provided by the lab Lab Fee Required.

Prerequisite: PHOT 110

## Credits: 3

This studio course introduces the art and/or photography student to hand coated photographic processes that may include cyanotype, gum bichromate, vandyke printing as well as experimental methods allowing for artistic expression. Methods for production of enlarged duplicate negatives will be covered. Art and painting students will be challenged to explore the various expressive methods using film as a point of departure. Offered Spring Only. Studio Fee Required.

OR

## PHOT 135 - Alternative Processes in Photography

## Credits: 3

This studio course introduces the artist to hand coated photographic processes that include cyanotype, gum bichromate, platinum/palladium, vandyke and albumen printing. The fundamental theory and practices of color photography will also be discussed. Methods for the production of enlarged duplicate negatives will be covered. Offered Spring Only. Lab Fee Required.

## Technology General Education Courses

Choose from the list of approved General Education courses in the College catalog.

## Developmental Courses

Students may need to first take some developmental courses that are designed to prepare students for the college-level coursework in their academic plan. This may add to the students' completion time. The number of credits students take each semester will determine when the student will complete his/her program of study.

## Photography, C.O.A.

This certificate allows students to concentrate in either documentary photography or photojournalism. Documentary photography will focus on general digital and studio photography. Photojournalism emphasizes location and event photography. The goal of the certificate in photography is to provide the skills necessary for entry-level work as a freelance photographer. Should students wish to continue, credits can later be applied to a two-year AFA degree with a Photography Option.

## First Year

## Fall Semester

Credits: 3
This course introduces students to the basic concepts of photography through the use and understanding of their digital SLR camera and photo imaging software. Among topics to be covered are exposure control, composition, lighting, lenses, effects of color on photographs, depth of field, and perspective control. Post process topics include creating a contact sheet, cropping, adjusting print exposure, outputting to web or print media, and selective exposure control. Student must provide their own DSLR (Digital Single Lens Reflex) camera.

## PHOT 203 - Documentary/Photojournalism

## Credits: 3

This course explores the similarities of Documentary Photography and Photojournalism in two modules by combining emotional content with factual reportage. Balancing aesthetic content and form with information to produce meaningful documentary work, students learn to build coherent, intelligent, and emotive content relying on instinct and impulse to photograph events. Students learn to identify the consistencies of theme and structure in their work. Classes will include discussions on researching, shooting, editing and sequencing, critiques, and assignments. Students will be assigned approximately twelve documentary/photojournalism assignments. In a lab setting, students will gain proficiency in producing high quality photographic images for newspapers, magazines, and digital publications.

Total Semester Hours: 6

## Winter Session

## Spring Semester

## PHOT 205 - Studio Photography

## Credits: 3

This course enables students to practice lighting and styling using a $4 \times 5$ format camera, achieving mastery of camera movements and control of perspective and sharpness with both $4 \times 5$ and digital imaging. Assignments relate to fine art photography, portraits, and still life as well as to commercial applications. Film and SLR digital cameras are required, $4 \times 5$ camera provided by the lab Lab Fee Required.

Prerequisite: PHOT 110

## PHOT 240 - Digital Photography II

## Credits: 3

This course explores digital photography and the digital manipulation of original photographs by concentrating on specific projects in the studio. These projects include photo montages, high dynamic range (HDR) photographs, depth of field mapping, selective exposure control in post processing, and blending options to extend the range of traditional photographs. OFFERED IN SPRING ONLY Lab Fee Required.

Prerequisite: PHOT 109

Total Semester Hours: 6

## Political Science Option, A.A. - Liberal Arts

The Political Science Option is primarily designed to prepare students to transfer into the junior year of a baccalaureate degree program in political science. In addition, students seeking admission into pre-law or public administration programs would receive a solid academic foundation upon which to build a successful major.

## The objectives of this program are to:

- Demonstrate general knowledge of social science inquiry and research.
- Describe the interconnection between economics, history, society and culture and analyze the effects of these influences on political policies and events.
- Provide examples of the impact of both individual and collective action upon our political world.
- Demonstrate an understanding of political theories and their impact on our world.
- Apply classroom knowledge and engage the political process as active citizens.
- Communicate clearly in both oral and written form.
- Demonstrate critical thinking and problem-solving skills.


## First Year

## Fall Semester

## COLL 101 - Foundations for Success

## Credits: 3

This is a student-centered course covering numerous strategies to encourage students to become active and empowered learners. A primary goal of this course is to help students make the most out of their college experience. Students will obtain information about college life and culture and develop strategies and techniques to enhance success in their academic, personal and professional lives. The course is infused with opportunities to understand, practice and implement critical thinking. Students will also gain practical information to help prepare to transfer to a four-year university or enter the workforce directly. All topics will be presented in both theory and practice. This course is required of all degree-seeking candidates and must be taken within the initial 16 credits after entry.

## ENGL 101 - English Composition I

## Credits: 3

This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects which include personal, rhetorical, and expository models. Research skills are introduced.

## POLS 101 - Intro. to Political Science

Credits: 3
This course provides a general introduction to the discipline of political science. The course focuses on the major sub-disciplines of political science including practical theory, international relations, comparative politics, and identity politics. The course is designed to encourage active student participation in the political process.

- GHMN 000 - Humanities Gen Ed Requirement Credits: 3
- GTEC 000 - Technology Gen Ed Requirement Credits: 3


## Total Semester Hours: 15

## Winter Session

## Spring Semester

## ENGL 102 - English Composition II

## Credits: 3

This course introduces students to short fiction, poetry, drama, and the novel. Written assignments are based on the readings. Writing skills learned in Composition I are further developed. Students will write a research paper which demonstrates understanding of literary criticism.

Prerequisite: ENGL 101 (Grade of C or better)

## SOCA 101 - Intro. to Sociology

## Credits: 3

This course is an introduction to the analysis and description of structures and dynamics of human society. Emphasis is placed on the application of scientific methods of observation and analysis of social groups, intergroup relations, social change, social stratification, and social institutions.

## MATH 108 - Statistics

## Credits: 3

This course includes the following topics: organization of data, measures of central tendency and dispersion, probability, the normal and binomial distributions, confidence intervals, hypothesis testing, analysis of variance, and correlation.

Prerequisite: MATH 017 (Grade of C or betterI) or MATH 023 (Grade of C or betterI) or appropriate algebra placement score

- GHMN 000 - Humanities Gen Ed Requirement Credits: 3
- HIST 001 - History Gen Ed Requirement Credits: 3

Total Semester Hours: 15

Summer Session

## ENGL 201 - Effective Speaking

## Credits: 3

This is a course in public speaking which stresses speech organization, effective delivery and critical listening skills. A strong emphasis is placed on student performance to help the student gain speech practice and develop self-confidence in a variety of speaking situations.

Prerequisite: ENGL 015 and ENGL 031

- PHIL 000 - Philosophy Gen Ed Requirement Credits: 3
- HIST 001 - History Gen Ed Requirement Credits: 3
- LSCI 000 - Science Gen Ed Requirement Credits: 4
- POLS 000 - Political Science Option Elective Credits: 3

Total Semester Hours: 16

## Winter Session

## Spring Semester

- GSOC 000 Social Science Gen Ed Requirement Credits: 3


## ANTH 115 - Biological Anthropology

## Credits: 4

This course examines how Homo sapiens evolved. It starts with a core understanding of scientific methodology, evolutionary theory, and the genetic code. The paleontological record and methodologies for dating fossils and artifacts are studied. Anatomy, behavior, and classification of non-human primates with emphasis on the common ancestry Homo sapiens share with them are studied. Comparison and contrasting primate and hominin fossil records over the last 8 million years are also studied. Students will examine Paleolithic artifacts that highlight critical periods of human evolution. The course surveys human phenotypic diversity across clinical gradations. The interplay between anatomically modern human biology and cultural behavior is shown to be a key to understanding human evolution.

Prerequisite: Proficiency in Reading, Writing \& Math on College Placement Test or equivalency.

- LSCI 000 - Science Gen Ed Requirement Credits: 4
- POLS 000 - Political Science Option Elective Credits: 3

Total Semester Hours: 14

## Philosophy, Science, Technology, and Social Science General Education Courses

Choose from the list of approved courses in the College catalog.

## Humanities General Education Courses (Recommended)

Recommended courses listed below but student can also choose from the list of approved Humanities General Education courses in the College catalog.

## AMSL 101 - American Sign Language I

## Credits: 3

This course is designed to develop basic communicative skills in American Sign Language. This course will emphasize grammatical structures, sign vocabulary, fingerspelling, numbers, expressive and receptive skills, facial grammar and non-manual communication, and the anatomy and physiology of the human hearing system and hearing loss. Additionally, this course provides an introduction to the culture of the Deaf community.

Corequisite: ENGL 021 and ENGL 032

## AMSL 102 - American Sign Language II

## Credits: 3

This course strengthens students' expressive and receptive skills in American Sign Language, broadens their understanding of the Deaf community, culture and language, and provides an additional vocabulary base of several hundred signs from American Sign Language. This course instructs the student in the use of classifiers as well as providing them with an introduction to the idiomatic vocabulary of American Sign Language.

Prerequisite: AMSL 101

## SPAN 101 - Elementary Spanish I

## Credits: 3

This is an introductory course in Spanish emphasizing the fundamentals of speaking, reading, writing, and listening. The course focuses on building basic vocabulary and introducing students to the Hispanic culture. It is designed for students with no Spanish experience.

- SPAN 101 - Elementary Spanish I Credits: 3


## History General Education Courses

Choose from the list of approved History General Education courses in the College catalog. Must choose a level I \& II sequence.

## Political Science Option Electives

(Choose 2 courses)

## POLS 105 - American Government

Credits: 3
This course provides a general introduction to the study of the American Political System. This course focuses on the U.S. Constitutional System, the institutions of government, and means of popular participation. The course is designed to encourage active student participation in the political process.

## POLS 106 - State \& Local Government

## Credits: 3

This course provides a general introduction to the study of sub-national governments within the American political system. The course is designed to encourage active student participation in the political process.

## POLS 109 - Modern Political Ideologies

Credits: 3
This course provides a general introduction to the study of political ideologies. Students will compare and contrast various forms of political thinking over the past five centuries. In addition, the material covered in this course will be placed into historical context by discussing the political, economic and social and social impact of the actual practice of these various theories.

## POLS 110 - International Relations

## Credits: 3

This course is a study of world politics: the nation-state system, patterns of conflict and cooperation in the international arena and the theories that try to explain these behaviors. International organizations (e.g. monetary fund, the United Nations, etc.), international business and selected foreign policies of particular nation-states will be among the topics included.

## POLS 223 - Constitutional Law

Credits: 3
This course will examine the U.S. Constitution as the framework for government. Leading decisions of the U.S. Supreme Court will be analyzed in the areas of Civil Rights and Civil Liberties with emphasis on the Bill of Rights, the 13th, 14th and 15th amendments.

Students may need to first take some developmental courses that are designed to prepare students for the college-level coursework in their academic plan. This may add to the students' completion time. The number of credits students take each semester will determine when the student will complete his/her program of study.

## Pre Medical/Dental Option, A.S. - Science/Mathematics

This option under the Associate in Science prepares students for transfer to four-year colleges with a major in pre-medicine or pre-dentistry programs.

## According to the National Research Council, students should be able to demonstrate that:

- Science is an evidence-based way of thinking about the natural world and understanding how it operates.
- Science is a process with rules of operation that allow our understanding of the natural world to evolve.
- Science is based on reproducible evidence and observations that contain uncertainties.
- The sciences are related to each other, mathematics, and everyday life.
- Science is driven by globalization, technology, and new instrumentation and measurement tools.
- Scientific meanings of theory and law are different than popular meanings.


## First Year

Fall Semester

## COLL 101 - Foundations for Success

## Credits: 3

This is a student-centered course covering numerous strategies to encourage students to become active and empowered learners. A primary goal of this course is to help students make the most out of their college experience. Students will obtain information about college life and culture and develop strategies and techniques to enhance success in their academic, personal and professional lives. The course is infused with opportunities to understand, practice and implement critical thinking. Students will also gain practical information to help prepare to transfer to a four-year university or enter the workforce directly. All topics will be presented in both theory and practice. This course is required of all degree-seeking candidates and must be taken within the initial 16 credits after entry.

## ENGL 101 - English Composition I

## Credits: 3

This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects which include personal, rhetorical, and expository models. Research skills are introduced.

Credits: 4
This course is designed to familiarize the student with the general principles and unifying concepts of biological science. Topics include scientific investigations, the physical and chemical properties of living matter, cell structure and function, energy transformations, genetics, evolution and diversity. Lab Fee Required.

Corequisite: BIOS 110L
Prerequisite: MATH 040 or the approved score on the College Level Math Placement Test

## CHEM 110 - College Chemistry I

## Credits: 4

This course covers general chemical principles and their applications in research and industry. Topics include matter and measurement; math in chemistry; atoms; molecules, and ions; elemental periodicity; stoichiometry; formulas and, equations; the mole; intramolecular and intermolecular bonds; reaction types including redox and acid/base; properties and reactions of solutions, gases, and the solid state; industrial processes. The lab component covers materials separation, analytical methods and instruments, qualitative and quantitative analysis; and lab report writing skills. This course is scheduled during the day in the fall semester, and during the evening in the spring semester. Lab Fee Required.

Corequisite: MATH 110, CHEM 110L

Total Semester Hours: 14

## Winter Session

## Spring Semester

## ENGL 102 - English Composition II

## Credits: 3

This course introduces students to short fiction, poetry, drama, and the novel. Written assignments are based on the readings. Writing skills learned in Composition I are further developed. Students will write a research paper which demonstrates understanding of literary criticism.

Prerequisite: ENGL 101 (Grade of C or better)

## MATH 113 - Calculus I

## Credits: 4

This course includes a review of algebraic and transcendental functions and their graphs; study of the concepts of limits and continuity, the derivative and its applications; indeterminate forms; introduction to integration and its applications.

Prerequisite: MATH 110 and MATH 112 (Grades of C or better) or appropriate pre-calculus placement score

Credits: 4
This course is a continuation of Biology I and maintains its emphasis on major biological concepts and connections. Topics include plant and animal structure and function, reproduction, development, and ecology. Lab Fee Required.

Corequisite: BIOS 112L
Prerequisite: BIOS 110 (Grade of C or better)

## CHEM 112 - College Chemistry II

## Credits: 4

This course is a continuation of CHEM 110, College Chemistry I. Topics include chemical kinetics; chemical equilibrium; chemical thermodynamics, electrochemistry, nuclear chemistry, main-group element chemistry, metals and metallurgy, transition metals and coordination chemistry, environmental chemistry; introduction to organic and biological chemistry. The lab component covers kinetics, electrochemistry, and coordination compounds. The course is scheduled during the day in the spring semester, and during the evening in the fall semester. Lab Fee Required.

Corequisite: CHEM 112L
Prerequisite: CHEM 110 (Grade of C or better)

Total Semester Hours: 15

Summer Session

## Second Year

## Fall Semester

## CHEM 210-Organic Chemistry

## Credits: 5

Lecture includes naming, drawing, stereochemistry, physical properties, NMR, IR, GC/MS, UV/VIS, reactions, and mechanisms of alkanes, alcohols, and ethers. Mechanisms include free radical, nucleophilic substitution, elimination, and addition. Laboratory topics are chemical hygiene and safety, as well as microscale and macroscale techniques for identification and purification of organic compounds. Lab Fee Required.

Corequisite: CHEM 210L
Prerequisite: CHEM 112 with grade of C or better

## PHYS 110 - Physics I

Credits: 4
This course is designed to introduce students to problem-solving techniques in physics. Topics include forces, energy, mechanics, momentum, heat, and kinetic theory. Includes applications to the life sciences and everyday life. Lab Fee Required.

## MATH 114 - Calculus II

## Credits: 4

This course is the second semester of a three semester sequence of introductory calculus. Topics include integration techniques, applications of integration, delete in.... forms infinite series, parametric equations, and polar coordinates.

Prerequisite: MATH 113 (Grade of C or better)

- GSOC 000 - Social Science Gen Ed Requirement Credits: 3

Total Semester Hours: 16

## Winter Session

## Spring Semester

## CHEM 212 - Organic Chemistry II

## Credits: 5

This course is a continuation of Organic Chemistry I. Lecture includes naming, drawing, stereochemistry, physical properties, reactions, and mechanisms of alkenes, alkynes, conjugated systems, aromatic compounds, aldehydes, ketones, enols, enolates, carboxylic acids, carboxcyclic acid derivatives, amines, amine derivatives, and ester enolates. Mechanisms include electrophilic aromatic substitution, ipso substitution, electrocylic, nucleophilic addition, and nucleophilic addition/elimination. Lab Fee Required.

Corequisite: CHEM 212L
Prerequisite: CHEM 210 with grade of C or better

## PHYS 112 - Physics II

## Credits: $\mathbf{4}$

This course is a continuation of Physics I. Emphasis is placed on showing the connections found in electromagnetism, optics, and modern physics. Includes applications to the life sciences and everyday life. Lab Fee Required.

Corequisite: PHYS 112L
Prerequisite: PHYS 110 (Grade of C or better)

- GHMN 000 - Humanities Gen Ed Requirement Credits: 3
- GSOC 000 - Social Science Gen Ed Requirement Credits: 3

Total Semester Hours: 15

## Total Program Hours: 60

## Humanities General Education Courses (Recommended)

Recommended courses listed below but student can also choose from the list of approved General Education courses in the College catalog.

## AMSL 101 - American Sign Language I

## Credits: 3

This course is designed to develop basic communicative skills in American Sign Language. This course will emphasize grammatical structures, sign vocabulary, fingerspelling, numbers, expressive and receptive skills, facial grammar and non-manual communication, and the anatomy and physiology of the human hearing system and hearing loss. Additionally, this course provides an introduction to the culture of the Deaf community.

Corequisite: ENGL 021 and ENGL 032

## HUMN 101 - Survey of World Culture I

## Credits: 3

This survey course explores the evolution of western and non-western key ideas in art, music, and literature from prehistoric times to the 14th century. Emphasis is placed on the comparison of social, economic, religious, and political forces in the arts in a variety of cultures and diverse people.

## PHIL 205 - Contemporary Ethical Issues

Credits: 3
This course is an introduction to the study of moral theories and their justification, including an examination of contemporary moral concerns as test cases.

## SPAN 101 - Elementary Spanish I

## Credits: 3

This is an introductory course in Spanish emphasizing the fundamentals of speaking, reading, writing, and listening. The course focuses on building basic vocabulary and introducing students to the Hispanic culture. It is designed for students with no Spanish experience.

## ANTH 101 - Introduction to Anthropology

Credits: 3
This course is an integrated overview of the four fields of anthropology. Physical anthropology, cultural anthropology, linguistics, and archeology are explored as subfields and together as an integrated whole. Emphasis is placed on the study of the social and biological origins of human culture, religious diversity, linguistic diversity, and patterns of social inequalities.

## PSYC 101 - Introduction to Psychology

## Credits: 3

This course is an introduction to the science of human behavior and mental processes. Emphasis is placed on the relationship between the nervous system and behavior, learning, perception, development, motivation, personality, attitude formation and prejudice, psychopathology and psychotherapy.

Prerequisite: Proficient in all Developmental English Courses

## SOCA 101 - Intro. to Sociology

## Credits: 3

This course is an introduction to the analysis and description of structures and dynamics of human society. Emphasis is placed on the application of scientific methods of observation and analysis of social groups, intergroup relations, social change, social stratification, and social institutions.

## Developmental Courses

Students may need to first take some developmental courses that are designed to prepare students for the college-level coursework in their academic plan. This may add to the students' completion time. The number of credits students take each semester will determine when the student will complete his/her program of study.

## Pre Nutrition/Dietetic Option, A.S. - Science/Mathematics

This option under the AS in Science prepares students for transfer to four-year colleges with a major in pre-nutrition or pre-dietetic programs.

## According to the National Research Council, students should be able to demonstrate that:

- Science is an evidence-based way of thinking about the natural world and understanding how it operates.
- Science is a process with rules of operation that allow our understanding of the natural world to evolve.
- Science is based on reproducible evidence and observations that contain uncertainties.
- The sciences are related to each other, mathematics, and everyday life.
- Science is driven by globalization, technology, and new instrumentation and measurement tools.
- Scientific meanings of theory and law are different than popular meanings.


## First Year

## Fall Semester

## COLL 101 - Foundations for Success

## Credits: 3

This is a student-centered course covering numerous strategies to encourage students to become active and empowered learners. A primary goal of this course is to help students make the most out of their college experience. Students will obtain information about college life and culture and develop strategies and techniques to enhance success in their academic, personal and professional lives. The course is infused with opportunities to understand, practice and implement critical thinking. Students will also gain practical information to help prepare to transfer to a four-year university or enter the workforce directly. All topics will be presented in both theory and practice. This course is required of all degree-seeking candidates and must be taken within the initial 16 credits after entry.

## ENGL 101 - English Composition I

## Credits: 3

This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects which include personal, rhetorical, and expository models. Research skills are introduced.

## MATH 110 - Pre-Calculus I

## Credits: 3

This course is designed to strengthen algebraic skills and give students the math confidence to proceed with calculus and other higher forms of mathematics. Topics include the study of functions, graphing techniques, polynomial, rational, exponential and logarithmic functions and systems of equations and inequalities.

Prerequisite: MATH 040 (Grade of C or betterI) or appropriate pre-calculus placement score

## CHEM 110 - College Chemistry I

## Credits: 4

This course covers general chemical principles and their applications in research and industry. Topics include matter and measurement; math in chemistry; atoms; molecules, and ions; elemental periodicity; stoichiometry; formulas and, equations; the mole; intramolecular and intermolecular bonds; reaction types including redox and acid/base; properties and reactions of solutions, gases, and the solid state; industrial processes. The lab component covers materials separation, analytical methods and instruments, qualitative and quantitative analysis; and lab report writing skills. This course is scheduled during the day in the fall semester, and during the evening in the spring semester. Lab Fee Required.

Corequisite: MATH 110, CHEM 110L

Credits: 4
This course is designed to familiarize the student with the general principles and unifying concepts of biological science. Topics include scientific investigations, the physical and chemical properties of living matter, cell structure and function, energy transformations, genetics, evolution and diversity. Lab Fee Required.

Corequisite: BIOS 110L
Prerequisite: MATH 040 or the approved score on the College Level Math Placement Test

Total Semester Hours: 17

Winter Session

## Spring Semester

## ENGL 102 - English Composition II

## Credits: 3

This course introduces students to short fiction, poetry, drama, and the novel. Written assignments are based on the readings. Writing skills learned in Composition I are further developed. Students will write a research paper which demonstrates understanding of literary criticism.

Prerequisite: ENGL 101 (Grade of C or better)

## MATH 108 - Statistics

## Credits: 3

This course includes the following topics: organization of data, measures of central tendency and dispersion, probability, the normal and binomial distributions, confidence intervals, hypothesis testing, analysis of variance, and correlation.

Prerequisite: MATH 017 (Grade of C or betterI) or MATH 023 (Grade of C or betterI) or appropriate algebra placement score

## CHEM 112-College Chemistry II

## Credits: 4

This course is a continuation of CHEM 110, College Chemistry I. Topics include chemical kinetics; chemical equilibrium; chemical thermodynamics, electrochemistry, nuclear chemistry, main-group element chemistry, metals and metallurgy, transition metals and coordination chemistry, environmental chemistry; introduction to organic and biological chemistry. The lab component covers kinetics, electrochemistry, and coordination compounds. The course is scheduled during the day in the spring semester, and during the evening in the fall semester. Lab Fee Required.

## Corequisite: CHEM 112L

Prerequisite: CHEM 110 (Grade of C or better)

## BIOS 112 - Biology II

Credits: 4
This course is a continuation of Biology I and maintains its emphasis on major biological concepts and connections. Topics include plant and animal structure and function, reproduction, development, and ecology. Lab Fee Required.

Corequisite: BIOS 112L
Prerequisite: BIOS 110 (Grade of C or better)

## BIOS 107 - Nutrition Fundamentals

## Credits: 3

This course is designed to acquaint students with nutritional research concepts, the role of nutrients in the human body, the relation of nutrition to human behavior, and the study of nutrition-related health problems. This course interweaves concepts related to the science of human metabolism and body composition.

Total Semester Hours: 17

Summer Session

## Second Year

## Fall Semester

## CHEM 210-Organic Chemistry

## Credits: 5

Lecture includes naming, drawing, stereochemistry, physical properties, NMR, IR, GC/MS, UV/VIS, reactions, and mechanisms of alkanes, alcohols, and ethers. Mechanisms include free radical, nucleophilic substitution, elimination, and addition. Laboratory topics are chemical hygiene and safety, as well as microscale and macroscale techniques for identification and purification of organic compounds. Lab Fee Required.

Corequisite: CHEM 210L
Prerequisite: CHEM 112 with grade of C or better

## BIOS 150 - Nutrition, Fitness \& Wellness

## Credits: 3

This course covers topics in sports nutrition and basic exercise science. The primary goal of this course is to develop the student's understanding of how food fuels the body and affects optimal fitness and sports performance. Students will gain an in-depth understanding of the roles of carbohydrate, protein, and fat in the diets of active people as well as the role that nutrition plays in disease prevention. Consideration is also given to the ways in which food, fluids, and nutritional supplements support optimal health and training, performance, and recovery.

Credits: 3
This course is designed to provide the student with a level of knowledge necessary to function in today's technological society. Topics include computer and network terminology, hardware, software, and processing concepts. A large portion of the class time is dedicated to exercises performed using integrated software packages. Lab Fee Required.

Corequisite: COMS 110S

- GSOC 000 - Social Science Gen Ed Requirement Credits: 3

Total Semester Hours: 14

## Winter Session

## Spring Semester

## CHEM 212-Organic Chemistry II

## Credits: 5

This course is a continuation of Organic Chemistry I. Lecture includes naming, drawing, stereochemistry, physical properties, reactions, and mechanisms of alkenes, alkynes, conjugated systems, aromatic compounds, aldehydes, ketones, enols, enolates, carboxylic acids, carboxcyclic acid derivatives, amines, amine derivatives, and ester enolates. Mechanisms include electrophilic aromatic substitution, ipso substitution, electrocylic, nucleophilic addition, and nucleophilic addition/elimination. Lab Fee Required.

Corequisite: CHEM 212L
Prerequisite: CHEM 210 with grade of C or better

- GHMN 000 - Humanities Gen Ed Requirement Credits: 3
- GSOC 000 - Social Science Gen Ed Requirement Credits: 3


## COLL 210 - Capstone for Biological and Clinical Sciences

## Credits: 1

This capstone course is designed to assist students in the transition from the community college experience to a four year educational institution. Students are required to creatively analyze, synthesize, and evaluate knowledge gained during previous semesters. Students will read several papers from the current research literature in their area of interest and will write a review paper on that topic. Additional assignments are designed to involve students in critical thinking and problem-solving. Throughout the semester students will engage in self-reflection activities related to their major and overall community college experience.

Prerequisite: Must have completed 45 credits

Total Semester Hours: 12

Summer Session

## Humanities General Education Courses (Recommended)

Recommended courses listed below but student can also choose from the list of approved General Education courses in the College catalog.

## AMSL 101 - American Sign Language I

## Credits: 3

This course is designed to develop basic communicative skills in American Sign Language. This course will emphasize grammatical structures, sign vocabulary, fingerspelling, numbers, expressive and receptive skills, facial grammar and non-manual communication, and the anatomy and physiology of the human hearing system and hearing loss. Additionally, this course provides an introduction to the culture of the Deaf community.

Corequisite: ENGL 021 and ENGL 032

## HUMN 101 - Survey of World Culture I

## Credits: 3

This survey course explores the evolution of western and non-western key ideas in art, music, and literature from prehistoric times to the 14th century. Emphasis is placed on the comparison of social, economic, religious, and political forces in the arts in a variety of cultures and diverse people.

## PHIL 205 - Contemporary Ethical Issues

## Credits: 3

This course is an introduction to the study of moral theories and their justification, including an examination of contemporary moral concerns as test cases.

## SPAN 101 - Elementary Spanish I

Credits: 3
This is an introductory course in Spanish emphasizing the fundamentals of speaking, reading, writing, and listening. The course focuses on building basic vocabulary and introducing students to the Hispanic culture. It is designed for students with no Spanish experience.

## Social Science General Education Courses (Recommended)

Recommended courses listed below but student can also choose from the list of approved General Education courses in the College catalog.

Credits: 3
This course is an integrated overview of the four fields of anthropology. Physical anthropology, cultural anthropology, linguistics, and archeology are explored as subfields and together as an integrated whole. Emphasis is placed on the study of the social and biological origins of human culture, religious diversity, linguistic diversity, and patterns of social inequalities.

## PSYC 101 - Introduction to Psychology

## Credits: 3

This course is an introduction to the science of human behavior and mental processes. Emphasis is placed on the relationship between the nervous system and behavior, learning, perception, development, motivation, personality, attitude formation and prejudice, psychopathology and psychotherapy.

Prerequisite: Proficient in all Developmental English Courses

## SOCA 101 - Intro. to Sociology

## Credits: 3

This course is an introduction to the analysis and description of structures and dynamics of human society. Emphasis is placed on the application of scientific methods of observation and analysis of social groups, intergroup relations, social change, social stratification, and social institutions.

## Developmental Courses

Students may need to first take some developmental courses that are designed to prepare students for the college-level coursework in their academic plan. This may add to the students' completion time. The number of credits students take each semester will determine when the student will complete his/her program of study.

## Pre-Law Option, A.A. - Liberal Arts

Program Goals for Sussex County Community College's Pre-Law Liberal Arts Option: Prepare students seeking admission to law school for rigorous graduate-level academic curriculum by developing those skills particularly important to the study and practice of law. Utilize an interdisciplinary approach emphasizing development of critical thinking, writing and analytical skills. Provide students a curriculum in legal theory that will provide a stimulating, thought-provoking educational experience while providing a foundation upon which to facilitate and promote student success in law school.

## The objectives of this program are to:

- Develop critical thinking, writing and analytical skills essential to the study and practice of law.
- Know the fundamental concepts of the American Legal System which will facilitate success in the rigorous study of law.
- Acquire an interdisciplinary education necessary for success in the rigorous study of law.
- Gain insight into and familiarity with the practice of law.

Fall Semester

## COLL 101 - Foundations for Success

## Credits: 3

This is a student-centered course covering numerous strategies to encourage students to become active and empowered learners. A primary goal of this course is to help students make the most out of their college experience. Students will obtain information about college life and culture and develop strategies and techniques to enhance success in their academic, personal and professional lives. The course is infused with opportunities to understand, practice and implement critical thinking. Students will also gain practical information to help prepare to transfer to a four-year university or enter the workforce directly. All topics will be presented in both theory and practice. This course is required of all degree-seeking candidates and must be taken within the initial 16 credits after entry.

## ENGL 101 - English Composition I

## Credits: 3

This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects which include personal, rhetorical, and expository models. Research skills are introduced.

## MATH 106 - Mathematical Concepts

## Credits: 3

This course surveys several basic concepts of mathematics designed to give non-scientific/non-technical majors an understanding of the breadth of mathematics in areas other than computational application. Topics include: problem solving, the real number system, linear and quadratic equations, exponents and logarithms, graphs and functions, and graph theory.

Prerequisite: Proficiency on the College Placement Examination or Grade of C or Better in MATH 017/MATH 023

- GSOC 000 - Social Science Gen Ed Requirement Credits: 3


## POLS 111 - Intro. to the American Legal Sys

## Credits: 3

This course is an introduction to the fundamental principles of the American Legal System. Topics include the structure of the state and federal court systems, legal terminology, constitutional law decisions affecting every citizen and how to work within the system. Students will visit the Superior Court.

OR

Credits: 3
POLS 111 This course is an introduction to the fundamental principles of the American Legal System. Topics include the structure of the state and federal court systems, legal terminology, and constitutional law decisions affecting every citizen and how to work within the system. Students will visit the Superior Court.

Total Semester Hours: 15

## Winter Session

## Spring Semester

## ENGL 102 - English Composition II

## Credits: 3

This course introduces students to short fiction, poetry, drama, and the novel. Written assignments are based on the readings. Writing skills learned in Composition I are further developed. Students will write a research paper which demonstrates understanding of literary criticism.

Prerequisite: ENGL 101 (Grade of C or better)

## ENGL 201 - Effective Speaking

## Credits: 3

This is a course in public speaking which stresses speech organization, effective delivery and critical listening skills. A strong emphasis is placed on student performance to help the student gain speech practice and develop self-confidence in a variety of speaking situations.

Prerequisite: ENGL 015 and ENGL 031

- GTEC 000 - Technology Gen Ed Requirement Credits: 3
- GSOC 000 - Social Science Gen Ed Requirement Credits: 3
- GHMN 000 - Humanities Gen Ed Requirement Credits: 3

Total Semester Hours: 15

Summer Session

Second Year

## Fall Semester

## POLS 223 - Constitutional Law

## Credits: 3

This course will examine the U.S. Constitution as the framework for government. Leading decisions of the U.S. Supreme Court will be analyzed in the areas of Civil Rights and Civil Liberties with emphasis on the Bill of Rights, the 13th, 14th and 15th amendments.

OR

## LEGA 223 - Constitutional Law

## Credits: 3

This course will examine the U.S. Constitution as the framework for government. Leading decisions of the U.S. Supreme Court will be analyzed in the areas of Civil Rights and Civil Liberties with emphasis on the Bill of Rights, the 13th, 14th and 15th amendments.

- GHMN 000 - Humanities Gen Ed Requirement Credits: 3
- HIST 001 - History Gen Ed Requirement Credits: 3


## LEGA 105 - Legal Research \& Writing I

## Credits: 3

This course is an introduction to the legal research process and legal writing. Topics include use of a law library, research techniques, computerassisted legal research, writing office memoranda and case briefs.

Prerequisite: ENGL 101

Total Semester Hours: 15

## Winter Session

## Spring Semester

- GMSC 000 - Math/Science Gen Ed Requirement Credits: 3
- PHIL 000 - Philosophy Gen Ed Requirement Credits: 3
- PRLW 000 - Option Elective Credits: 3
- GLCA 001 - Global \& Cultural Awareness Gen Ed Requirement Credits: 3
- HIST 001 - History Gen Ed Requirement Credits: 3


## Program Option Electives

## Math and Science General Education Courses

Choose from the list of approved Math and Science General Education courses in the College catalog.

## Developmental Courses

Students may need to first take some developmental courses that are designed to prepare students for the college-level coursework in their academic plan. This may add to the students' completion time. The number of credits students take each semester will determine when the student will complete his/her program of study.

## Psychology Option, A.A. - Liberal Arts

The Psychology Option is primarily designed to prepare students to transfer into the junior year of a baccalaureate degree program in psychology. In addition, students seeking admission into pre-law or public administration.

## The objectives of this program are to:

- Demonstrate problem-solving skills in the study of social science processes.
- Apply classroom knowledge to real-world situations.
- Demonstrate an understanding of social science issues on local, national and global levels.

Fall Semester

## COLL 101 - Foundations for Success

## Credits: 3

This is a student-centered course covering numerous strategies to encourage students to become active and empowered learners. A primary goal of this course is to help students make the most out of their college experience. Students will obtain information about college life and culture and develop strategies and techniques to enhance success in their academic, personal and professional lives. The course is infused with opportunities to understand, practice and implement critical thinking. Students will also gain practical information to help prepare to transfer to a four-year university or enter the workforce directly. All topics will be presented in both theory and practice. This course is required of all degree-seeking candidates and must be taken within the initial 16 credits after entry.

## ENGL 101 - English Composition I

## Credits: 3

This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects which include personal, rhetorical, and expository models. Research skills are introduced.

## PSYC 101 - Introduction to Psychology

## Credits: 3

This course is an introduction to the science of human behavior and mental processes. Emphasis is placed on the relationship between the nervous system and behavior, learning, perception, development, motivation, personality, attitude formation and prejudice, psychopathology and psychotherapy.

Prerequisite: Proficient in all Developmental English Courses

## MATH 108 - Statistics

## Credits: 3

This course includes the following topics: organization of data, measures of central tendency and dispersion, probability, the normal and binomial distributions, confidence intervals, hypothesis testing, analysis of variance, and correlation.

Prerequisite: MATH 017 (Grade of C or betterI) or MATH 023 (Grade of C or betterI) or appropriate algebra placement score

- GHMN 000 - Humanities Gen Ed Requirement Credits: 3

Total Semester Hours: 15

## Spring Semester

## ENGL 102 - English Composition II

## Credits: 3

This course introduces students to short fiction, poetry, drama, and the novel. Written assignments are based on the readings. Writing skills learned in Composition I are further developed. Students will write a research paper which demonstrates understanding of literary criticism.

Prerequisite: ENGL 101 (Grade of C or better)

- LSCI 000 - Science Gen Ed Requirement Credits: 4
- GTEC 000 - Technology Gen Ed Requirement Credits: 3
- GHMN 000 - Humanities Gen Ed Requirement Credits: 3
- PSYC 001 - Psychology Option Required Course Credits: 3

Total Semester Hours: 16

Summer Session

## Second Year

## Winter Session

## Fall Semester

- PSYC 001 - Psychology Option Required Course Credits: 3


## COLL 207 - Capstone for Psychology

## Credits: 1

The course is designed to assist students in the transition from the community college to a four-year educational institution with a concentration in Psychology. Students engage in projects that require them to think critically about themselves and reflect on the knowledge gained during their community college experience. Students also explore future academic and career-related paths and develop skills to enhance their success in a psychology-related field.

- HIST 001 - History Gen Ed Requirement Credits: 3
- GSOC 000 - Social Science Gen Ed Requirement Credits: 3
- LSCI 000 - Science Gen Ed Requirement Credits: 4


## Spring Semester

## ENGL 201 - Effective Speaking

## Credits: 3

This is a course in public speaking which stresses speech organization, effective delivery and critical listening skills. A strong emphasis is placed on student performance to help the student gain speech practice and develop self-confidence in a variety of speaking situations.

Prerequisite: ENGL 015 and ENGL 031

## PSYC 237 - Multicultural Psychology

## Credits: 3

This course introduces students to major theoretical perspectives on the experience and social construction of cultural difference. Drawing on theories from social, clinical, developmental and cognitive psychology, the course provides students with a foundation for understanding the origins and maintenance of various cultures within the United States, while also including global cultural comparisons.

## Prerequisite: PSYC 101

- GSOC 000 - Social Science Gen Ed Requirement Credits: 3
- HIST 001 - History Gen Ed Requirement Credits: 3
- PHIL 000 - Philosophy Gen Ed Requirement Credits: 3

Total Semester Hours: 15

Summer Session

## Total Program Hours: 60

## Philosophy and Technology General Education Courses

Choose from the list of approved courses in the College catalog.

## Humanities General Education Courses (Recommended)

## AMSL 101 - American Sign Language I

Credits: 3
This course is designed to develop basic communicative skills in American Sign Language. This course will emphasize grammatical structures, sign vocabulary, fingerspelling, numbers, expressive and receptive skills, facial grammar and non-manual communication, and the anatomy and physiology of the human hearing system and hearing loss. Additionally, this course provides an introduction to the culture of the Deaf community.

Corequisite: ENGL 021 and ENGL 032

## AMSL 102 - American Sign Language II

Credits: 3
This course strengthens students' expressive and receptive skills in American Sign Language, broadens their understanding of the Deaf community, culture and language, and provides an additional vocabulary base of several hundred signs from American Sign Language. This course instructs the student in the use of classifiers as well as providing them with an introduction to the idiomatic vocabulary of American Sign Language.

Prerequisite: AMSL 101

## SPAN 101 - Elementary Spanish I

Credits: 3
This is an introductory course in Spanish emphasizing the fundamentals of speaking, reading, writing, and listening. The course focuses on building basic vocabulary and introducing students to the Hispanic culture. It is designed for students with no Spanish experience.

## SPAN 102 - Elementary Spanish II

## Credits: 3

This course is a continuation of SPAN 101 with an emphasis on the fundamentals of reading, speaking, writing, and listening. The course focuses on building basic vocabulary and continuing the study of Hispanic culture.

Prerequisite: SPAN 101 (Grade of C or better) or two years of high school Spanish (Grade of C or better)

## Psychology Option Required Courses

## (choose two)

## PSYC 109 - Psychology of the Human Lifespan

## Credits: 3

This course is the study of the development of the individual from prenatal life through adulthood including biological, mental, emotional, and social patterns of growth.

## PSYC 111 - Child Psychology

Credits: 3
This course studies human behavior from prenatal development to puberty. Emphasis is placed upon physical, social, intellectual and personality development during childhood.

Prerequisite: PSYC 101

## PSYC 201 - Abnormal Psychology

## Credits: 3

This course is an introduction to the study of symptoms' etiologies and treatments of mental disorders. Emphasis is placed on understanding psychopathology from the psychoanalytic, behavioristic and humanistic viewpoints.

Prerequisite: PSYC 101

## PSYC 203 - Theories of Personality

## Credits: 3

This course is a survey of the major theoretical viewpoints concerning the development and maintenance of personality. Psychoanalytic, trait, behavioristic, and humanistic theories will be covered. Emphasis is placed on current research on personality factors.

Prerequisite: PSYC 101

## PSYC 205 - Psychology of Gender

## Credits: 3

This course examines issues of gender in human development, psychopathology, family structure and social structure. The construction and maintenance of gender is explored from varied theoretical perspectives, including psychoanalytic, ecological, behavioral and object relations theory.

Prerequisite: PSYC 101

## PSYC 210 - Social Psychology

Credits: 3
This course provides an introduction to social psychological theory, research and application. Topics covered include attitude formation and change, social influences/processes, social cognition, moral development, interpersonal attraction, aggression, prejudice, and political psychology.

Prerequisite: PSYC 101

## PSYC 212 - Adolescent Psychology

## Credits: 3

This course studies human behavior from puberty to early adulthood. Emphasis is placed on various theoretical approaches to understanding
adolescence.
Prerequisite: PSYC 101, PSYC 111 or Permission of Instructor

## PSYC 215 - Psychology of Adult Dev. \& Aging

Credits: 3
This course involves an investigation of the theory and research involved in the study of the psychology of aging. Particular attention is focused on role and identity changes, personality changes, intelligence, sexuality, the psychosocial aspects of retirement, and death and dying.

Prerequisite: PSYC 101

## PSYC 280 - Educational Psychology

## Credits: 3

This course explores the application of psychological principles to the educational environment. Theories of learning, memory, cognition, and behavior management are used to help the student who is a prospective teacher find an optimal instructional approach.

## Prerequisite: PSYC 101

## History General Education Courses

Choose from the list of approved History General Education courses in the College catalog. Must choose a level I \& II sequence.

## Social Science General Education Courses (Recommended)

Recommended courses listed below but student can also choose from the list of approved General Education courses in the College catalog.

## ANTH 101 - Introduction to Anthropology

## Credits: 3

This course is an integrated overview of the four fields of anthropology. Physical anthropology, cultural anthropology, linguistics, and archeology are explored as subfields and together as an integrated whole. Emphasis is placed on the study of the social and biological origins of human culture, religious diversity, linguistic diversity, and patterns of social inequalities.

## PSYC 109 - Psychology of the Human Lifespan

Credits: 3
This course is the study of the development of the individual from prenatal life through adulthood including biological, mental, emotional, and social patterns of growth.

Credits: 3
This course studies human behavior from prenatal development to puberty. Emphasis is placed upon physical, social, intellectual and personality development during childhood.

Prerequisite: PSYC 101

## PSYC 212 - Adolescent Psychology

## Credits: 3

This course studies human behavior from puberty to early adulthood. Emphasis is placed on various theoretical approaches to understanding adolescence.

Prerequisite: PSYC 101, PSYC 111 or Permission of Instructor

## PSYC 215 - Psychology of Adult Dev. \& Aging

## Credits: 3

This course involves an investigation of the theory and research involved in the study of the psychology of aging. Particular attention is focused on role and identity changes, personality changes, intelligence, sexuality, the psychosocial aspects of retirement, and death and dying.

Prerequisite: PSYC 101

## SOCA 101 - Intro. to Sociology

## Credits: 3

This course is an introduction to the analysis and description of structures and dynamics of human society. Emphasis is placed on the application of scientific methods of observation and analysis of social groups, intergroup relations, social change, social stratification, and social institutions.

## Science General Education Courses

Recommended courses listed below but student can also choose from the list of approved General Education courses in the College catalog.

## BIOS 102 - Intro. to Human Biology

## Credits: 4

This course is an introduction to human anatomy and physiology for the non-biology major. It is designed to develop an appreciation for the structure and functions of the human body; to point out the relationship of body systems to health and disease; and to emphasize human biology as it relates to everyday living experiences. Lab Fee Required.

Corequisite: BIOS 102L

Students may need to first take some developmental courses that are designed to prepare students for the college-level coursework in their academic plan. This may add to the students' completion time. The number of credits students take each semester will determine when the student will complete his/her program of study.

## Psychosocial Rehabilitation (Rutgers), A.S.

## Robotics Technology Option, A.A.S. - Technical Studies

Robotics Technology is a cross-disciplinary program that prepares the student for employment in all sectors of industry in which robotic devices and systems are utilized. All aspects of robotic systems are presented with emphasis on digital and microprocessor electronics, sensor operation and interfacing, high and low-level programming, mechanical design/solid modeling, and autonomous robotic operation. The program is designed to prepare graduates for immediate employment as electronic engineering technicians or manufacturing technicians in robotics and roboticsrelated industries such as manufacturing, aerospace, and defense.

Upon completion of this program, graduates will be able to:

- Analyze Direct Current (DC) and Alternating Current (AC) circuits using various circuit simplification and analysis techniques.
- Apply theoretical principles to physically design electric circuits to solve technical problems.
- Identify common electronic components, devices, and symbols.
- Write a program to use a microcontroller to control the speed of a DC motor.
- Create an autonomous robotic vehicle.


## First Year

Fall Semester

## ENGL 101 - English Composition I

## Credits: 3

This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects which include personal, rhetorical, and expository models. Research skills are introduced.

## MATH 105 - Technical Mathematics

## Credits: 3

This course is intended for students who have introductory algebra proficiency, and who need to apply mathematical concepts in a technical program. The purpose of the course is to prepare AAS students for the mathematical aspects of their work in the technical trades.

Prerequisite: Proficiency on the College Placement Examination or grade of C or better in MATH 017/MATH 023.

- GTEC 000 - Technology Gen Ed Requirement Credits: 3
- TSC 000 - Technical Studies Core or Program Electives Credits: 3
- RBOT 000 - Technical Studies Core or Program Electives Credits: 3
- TSC 000 - Technical Studies Core or Program Electives Credits: 4

OR

- ROBT 000-Technical Studies Core or Program Elective Credits: 4

Total Semester Hours: 16

## Winter Session

## Spring Semester

## COMS 142 - Programming in C++

## Credits: 3

This course is an introduction to programming in $\mathrm{C}++$. The topics covered include data storage types, formatted input/output, logical and mathematical operators, user written functions, and one dimensional arrays. Students are required to write short programs to gain proficiency in the techniques taught. Lab Fee Required.

- GNED 000 - General Education Requirement Credits: 3
- GHMN 000 - Humanities Gen Ed Requirement Credits: 3

OR

- GSOC 000 - Social Science Gen Ed Requirement Credits: 3


## ENGL 125 - Tech. Writing \& Communication I

## Credits: 3

This course focuses on expository writing for business, industrial, and scientific fields, emphasizing the principles for organizing, writing, and revising clear, readable documents and reports. Students will practice written, oral, reading, and reasoning skills. Research skills will be advanced.

## ELET 105 - Electronic Circuits I

## Credits: 4

This introductory course in circuit analysis defines fundamental electrical quantities and examines their relationship to various circuit components. Circuits comprised of resistance, capacitance, and inductance which are energized by both DC and AC sources are considered. In the laboratory the students perform experiments that confirm/demonstrate their grasp of the theory.

Corequisite: ELET 105L
Prerequisite: MATH 112

Summer Session

Second Year

## Fall Semester

## ELET 106 - Electronic Circuits II

## Credits: 4

This course in circuit analysis defines fundamental electrical quantities and examines their relationship to various circuit components. Circuits comprised of resistance, capacitance, and inductance which are energized by AC sources are considered. In the lab, the students perform experiments that confirm/demonstrate their grasp of the theory. Lab Fee Required.

## ROBT 215 - Robotics Enabling Technologies

## Credits: 3

This course covers the theory of operation of transducers, sensors, and data acquisition devices and techniques. Microprocessor-based control of actuators such as stepper motors, dc motors, hydraulic actuators and "muscle wire" as applied to robotics applications is presented. Physical operation of sensors, computer/transducer interfacing techniques, and processing of acquired data is analyzed, as well as the use of that data in the control of external actuators. Lab Fee Required.

- TSC 000 - Technical Studies Core Credits: $\mathbf{4}$

OR

- ROBT 000 - Program Elective Credits: 4
- TSC 000 - Technical Studies Core Credits: 3

OR

- ROBT 000 - Program Elective Credits: $\mathbf{3}$

Total Semester Credits: 14

## Winter Session

## Spring Semester

Credits: 4
This course integrates the student's understanding of electro-mechanical systems. The student will design, build, and program a robot to perform a designated task agreed to by both the instructor and the student. Lab Fee Required.

- GNED 000 - General Education Requirement Credits: 3
- TSC 000 - Technical Studies Core Credits: 3

OR

- ROBT 000 - Program Elective Credits: 3
- TSC 000 - Technical Studies Core Credits: 4

OR

- ROBT 000 - Program Elective Credits: 4

Total Semester Credits: 15

Summer Session

## Social Media, C.O.A.

This program is structured for students seeking to acquire hands-on experience in Internet marketing, web design, journalism, graphic and media design. Students will develop the skills necessary to create written and visual content for social media sites and focus on using relationshipbuilding social media platforms as a way to communicate with a variety of audiences. Students will be prepared for entry-level positions in social networking, social media strategy, social media copywriting, advertising, public relations, graphic design, and web journalism.

First Year

Fall Semester

## COMS 155 - Web Site Development I

## Credits: 3

This course is an introduction to Web Site Development. Students will receive intensive hands-on experience in coding web pages, including linking, layout and design, forms, graphics, security concerns, and maintaining a Web Site. Lab Fee Required.

Prerequisite: COMS 110 or any course above COMS 110

## Credits: 3

This course emphasizes techniques and applications used to produce published documents for both Internet and print media. Students will learn to design documents, publications, and related projects using industry standard software on both MAC and PC platforms. An emphasis is placed on basic computer graphic skills through practical experience with two-dimensional paint and draw programs, as well as layout programs for print and web. Projects covered include advertising design, page layout, computer illustrations, digital imaging, and the scanning and manipulation of images. Lab Fee Required.

Prerequisite: Any COMS course

## GRAD 128 - Digital Imagery \& Editing

## Credits: 3

This course provides students with the intensive exploration of advanced digital imaging as it applies to photography creating PDF documents, optimizing web graphics and complex layered images. Students will perfect their ability to creatively use digital imaging software to create sophisticated graphics for print and the web. Further study and practical application will be applied to creating documents for both the Internet and print mediums. An emphasis is placed on developing quality portfolio pieces. Lab Fee Required.

Prerequisite: GRAD 105

## GRAD 109 - Intro. to Digital Marketing

## Credits: 3

This course focuses on techniques for writing, editing and researching content for social media platforms, and students will publish their work on their own Websites and Blogs. An emphasis is placed on the skills needed for quality storytelling via social media communication. Students will explore blogging, podcasting and social software technology. Students will implement social media research campaigns, develop original web content, and discuss interactive writing, interactive publishing, and the role of the interactive writer. Copyright law, libel law, information ethics and culture will be explored.

Total Semester Hours: 12

## Winter Session

## Spring Semester

## GRAD 119 - Website Management for Digital Marketing

## Credits: 3

This course is designed to introduce students to WordPress Content Management System for either personal or business website use. The course covers the basics on how to use the WordPress platform including installation, content management, and configuration. Prior web publishing experience is not required. Familiarity with web browsers and email is highly recommended. Lab Fee Required.

Credits: 3
This course is designed to focus on how businesses are using Social Media as advertising tools as well as how to create and organize a welldesigned social media campaign. The use of social media platforms, such as, Facebook, YouTube, Twitter, etc., will be examined in depth. Students explore the importance of growing a social media audience and keeping their organization or clients relevant by tackling socially relevant projects, as well as the advantages of sharing social content, and ethical concerns. Social Media Marketing, Blogging, Search Engine Optimization, Email Marketing and PPC (Pay-per-click) Advertising are reviewed to create Viral Advertising campaigns. Lab Fee Required.

## GRAD 235 - Video and Motion Graphics

## Credits: 3

This course introduces students to software products (editing suites and special effects) that are now widely used in the gaming and entertainment industries for editing and graphic manipulation. Students will learn to use specialized compositing tools to edit scenes, insert graphic effects, place sound effects and blend music to create a final professional product. Software packages used in this class include Adobe's After Effects ${ }^{\circledR}$ and Premiere®.

Total Semester Hours: 9

## Sociology Option, A.A. - Liberal Arts

The Sociology Option is primarily designed to prepare students to transfer into the junior year of a baccalaureate degree program in sociology. In addition, students seeking admission into criminology, criminal justice, pre-law, or public administration programs would receive a solid academic foundation on which to build.

## The objectives of this program are to:

- Form hypotheses and execute research methodologies.
- Identify ethical and methodological issues in sociological research.
- Demonstrate an understanding of core sociological theories and basic sociological concepts.
- Apply classroom knowledge to social issues such as crime, racism, poverty, family formation, and religion.
- View society from alternative perspectives.


## First Year

## Fall Semester

## COLL 101 - Foundations for Success

## Credits: 3

This is a student-centered course covering numerous strategies to encourage students to become active and empowered learners. A primary goal of this course is to help students make the most out of their college experience. Students will obtain information about college life and culture and develop strategies and techniques to enhance success in their academic, personal and professional lives. The course is infused with opportunities to understand, practice and implement critical thinking. Students will also gain practical information to help prepare to transfer to a four-year university or enter the workforce directly. All topics will be presented in both theory and practice. This course is required of all degree-seeking

## ENGL 101 - English Composition I

## Credits: 3

This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects which include personal, rhetorical, and expository models. Research skills are introduced.

## SOCA 101 - Intro. to Sociology

## Credits: 3

This course is an introduction to the analysis and description of structures and dynamics of human society. Emphasis is placed on the application of scientific methods of observation and analysis of social groups, intergroup relations, social change, social stratification, and social institutions.

- GHMN 000 - Humanities Gen Ed Requirement Credits: 3
- GTEC 000 - Technology Gen Ed Requirement Credits: 3

Total Semester Hours: 15

## Winter Session

## Spring Semester

## ENGL 102 - English Composition II

## Credits: 3

This course introduces students to short fiction, poetry, drama, and the novel. Written assignments are based on the readings. Writing skills learned in Composition I are further developed. Students will write a research paper which demonstrates understanding of literary criticism.

Prerequisite: ENGL 101 (Grade of C or better)

## SOCA 215 - Perspectives On Race, Gender, Class and Culture

Credits: 3
This course explores the effects of social structure and of dominant and sub-cultural norms and values on individuals, families and groups. Racism, sexism, homophobia, ageism, class bias and rigid gender roles are examined in depth with focus on the effects of advanced industrial capitalism on these phenomena.

Prerequisite: SOCA 101

- GHMN 000 - Humanities Gen Ed Requirement Credits: 3
- HIST 001 - History Gen Ed Requirement Credits: 3


## MATH 108 - Statistics

Credits: 3
This course includes the following topics: organization of data, measures of central tendency and dispersion, probability, the normal and binomial distributions, confidence intervals, hypothesis testing, analysis of variance, and correlation.

Prerequisite: MATH 017 (Grade of C or betterI) or MATH 023 (Grade of C or betterI) or appropriate algebra placement score

Total Semester Hours: 15

Summer Session

Second Year

## Fall Semester

## ENGL 201 - Effective Speaking

## Credits: 3

This is a course in public speaking which stresses speech organization, effective delivery and critical listening skills. A strong emphasis is placed on student performance to help the student gain speech practice and develop self-confidence in a variety of speaking situations.

Prerequisite: ENGL 015 and ENGL 031

- SOCA 000 - Program Elective Credits: 3
- LSCI 000 - Science Gen Ed Requirement Credits: 4
- PHIL 000 - Philosophy Gen Ed Requirement Credits: 3
- GSOC 000 - Social Science Gen Ed Requirement Credits: 3

Total Semester Hours: 16

Winter Session

Spring Semester

## Credits: 4

This course examines how Homo sapiens evolved. It starts with a core understanding of scientific methodology, evolutionary theory, and the genetic code. The paleontological record and methodologies for dating fossils and artifacts are studied. Anatomy, behavior, and classification of non-human primates with emphasis on the common ancestry Homo sapiens share with them are studied. Comparison and contrasting primate and hominin fossil records over the last 8 million years are also studied. Students will examine Paleolithic artifacts that highlight critical periods of human evolution. The course surveys human phenotypic diversity across clinical gradations. The interplay between anatomically modern human biology and cultural behavior is shown to be a key to understanding human evolution.

Prerequisite: Proficiency in Reading, Writing \& Math on College Placement Test or equivalency.

- HIST 001 - History Gen Ed Requirement Credits: 3
- GSOC 000 - Social Science Gen Ed Requirement Credits: 3
- LSCI 000 - Science Gen Ed Requirement Credits: 4

Total Semester Hours: 14

Summer Session

Total Program Hours: 60

## Philosophy, Science, and Technology General Education Courses

Choose from the list of approved courses in the College catalog.

## Humanities General Education Courses (Recommended)

Recommended courses listed below but student can also choose from the list of approved Humanities General Education courses in the College catalog.

## AMSL 101 - American Sign Language I

## Credits: 3

This course is designed to develop basic communicative skills in American Sign Language. This course will emphasize grammatical structures, sign vocabulary, fingerspelling, numbers, expressive and receptive skills, facial grammar and non-manual communication, and the anatomy and physiology of the human hearing system and hearing loss. Additionally, this course provides an introduction to the culture of the Deaf community.

Corequisite: ENGL 021 and ENGL 032

Credits: 3
This course strengthens students' expressive and receptive skills in American Sign Language, broadens their understanding of the Deaf community, culture and language, and provides an additional vocabulary base of several hundred signs from American Sign Language. This course instructs the student in the use of classifiers as well as providing them with an introduction to the idiomatic vocabulary of American Sign Language.

Prerequisite: AMSL 101

## SPAN 101 - Elementary Spanish I

## Credits: 3

This is an introductory course in Spanish emphasizing the fundamentals of speaking, reading, writing, and listening. The course focuses on building basic vocabulary and introducing students to the Hispanic culture. It is designed for students with no Spanish experience.

- SPAN 101 - Elementary Spanish I Credits: 3


## Science General Education Courses (Recommended)

Recommended courses listed below but student can also choose from the list of approved Science General Education courses in the College catalog.

## BIOS 102 - Intro. to Human Biology

## Credits: 4

This course is an introduction to human anatomy and physiology for the non-biology major. It is designed to develop an appreciation for the structure and functions of the human body; to point out the relationship of body systems to health and disease; and to emphasize human biology as it relates to everyday living experiences. Lab Fee Required.

Corequisite: BIOS 102L

## BIOS 122 - Intro. to Environmental Science

## Credits: 4

This course is designed to explore the factors influencing the environment and to increase awareness of environmental problems. Topics include air, land, and water resources, ecology, waste management, and the human effects on the environment. Lab exercises and field trips will supplement the theory presented. Lab Fee Required.

Corequisite: BIOS 122L

## History General Education Courses

Choose from the list of approved History General Education courses in the College catalog. Must choose a level I \& II sequence.

## ECON 101 - Macroeconomics

## Credits: 3

This course is an analysis of major economic concepts. Topics include the elements of national income; the economic roles of government and labor; classical economics; monetary institutions and policies; the Keynesian model and modern fiscal policy; the macroeconomic aspects of world trade.

## SOCA 201 - Deviant Behavior

## Credits: 3

This course is the study of how social structures deal with deviants and the adaptive behavior of those identified as deviant. The course emphasizes the importance of the role which persons in political power or those who enforce the law play in the labeling of acts and actors as deviant.

Prerequisite: SOCA 101

## SOCA 202 - The Sociology of Sports

## Credits: 3

Students will analyze the impact of sports on society. Students will focus specifically on how the social institution of sports reinforces race, class, and gender arrangements in the United States and how sports act as a key socializing agent of children.

Prerequisite: SOCA 101 or SOCA 150

## SOCA 203-Social Research Methods

## Credits: 3

This course will teach students to apply the scientific method to the social world. Students will focus on the most widely used methods including ethnography, survey, and experimental designs and carry-out their own research projects. Students will also examine a number of ethical issues in conducting social research.

Prerequisite: SOCA 101 or SOCA 150 or SOCA 115 or ANTH 101 or ANTH 120 ANTH 131 or POLS 101 or POLS 105 or POLS 106 or POLS 109 or PSYC 101 or PSYC 105 PSYC 106 or PSYC 109 or PSYC 110 or PSYC 111 or PSYC 112 or PSYC 215

## SOCA 207 - Sociology of Religion

## Credits: 3

The aim of this course is to critically analyze the relationship between religion and other social institutions such as the family, school, polity, and economy. Emphasis will be placed on how society uses the conceptualization of the sacred and profane to organize everyday life. Attention will also be given to current debates regarding religion's place in modern American society and international relations.

Prerequisite: SOCA 101 or SOCA 150

Credits: 3
Analysis of families in various cultures, with in-depth study of the contemporary United States including historical development and future trends. Topics discussed are romantic love, courtship, marital interaction, divorce, gender roles, and the feminist movement. Special attention is given to the post-modern family.

Prerequisite: SOCA 101

## Developmental Courses

Students may need to first take some developmental courses that are designed to prepare students for the college-level coursework in their academic plan. This may add to the students' completion time. The number of credits students take each semester will determine when the student will complete his/her program of study.

## Strength Coach, C.O.A.

The Strength Coach Certificate of Achievement program is designed to prepare the student for certification as a Strength Coach by the National Council on Strength \& Fitness (NCSF). This program will teach the student about advanced strength and conditioning concepts used in training programs for athletes of all ages competing in a variety of sports. Students can expect to get hands-on learning in the topics of sports analysis, performance assessment, program development, sports nutrition, and injury prevention. Upon the completion of this program and passing the NCSF-Certified Strength Coach (NCSF-CSC) certification exam, students will be prepared for immediate employment as a strength coach. As per NCSF guidelines, a minimum of an Associate's Degree or NCCA accredited personal trainer certification is required to register for the NCSFCSC examination.

## First Year

## Fall Semester

## BIOS 107 - Nutrition Fundamentals

## Credits: 3

This course is designed to acquaint students with nutritional research concepts, the role of nutrients in the human body, the relation of nutrition to human behavior, and the study of nutrition-related health problems. This course interweaves concepts related to the science of human metabolism and body composition.

## EXSC 105 - First Aid and Emergency Care

## Credits: 3

This course in first aid is designed to acquaint students with information about prevention of accidents and injuries, and about emergency assessment, recognition and treatment of trauma, and sudden illnesses. Upon successful completion of the requirements, students will receive AAOS First Aid certification.

## EXSC 121 - Aerobic Conditioning

## Credits: 1

This course is designed to educate the student about the different training principles and modalities of aerobic exercise training. Students taking this course will participate in a variety of aerobic conditioning programs to understand the technique, effort, and safety involved in this training style. Lab fee required.

## EXSC 127 - Resistance Training

## Credits: 1

This course is designed to teach students proper resistance training techniques and programming for all major muscle groups of the body. Proper handling of the resistance equipment, weight room etiquette, training theory, and program design will also be discussed in this course. Students taking this course will be required to participate in weight training sessions to develop a better understanding of the exercises and training style.

## EXSC 131 - Principles of Strength \& Conditioning I

## Credits: 3

This course is designed to develop the student's knowledge and skills of advanced strength and conditioning concepts to prepare the student to work with athletes as strength coaches. The topics covered in this course include career opportunities, sports analysis, corrective exercise, performance preparation, and Olympic weightlifting techniques. Lab fee required.

Corequisite: EXSC 131L

Total Semester Hours: 11

Winter Session

Spring Semester

## EXSC 123 - Anaerobic Conditioning

## Credits: 1

This course is designed to teach the student about the different training principles and modalities of anaerobic exercise training. Anaerobic training typically involves more explosive and rapid exercises to improve performance on the athletic field but has also shown to have many health benefits for those not training for sport. Students taking this course will participate in a variety of anaerobic conditioning programs to understand the technique, effort, and safety involved in this training style. Lab fee required.

## Credits: 3

This course is designed to develop the student's knowledge and skills of advanced strength and conditioning concepts to prepare the student to work with athletes as strength coaches. The topics covered in this course include techniques and instruction for speed, agility, and quickness training, sport performance programming, conditioning for intermittent and endurance sports, and sports nutrition. Lab fee required.

## EXSC 135 - Sports Injuries and Prevention

## Credits: 3

This course is designed to develop the student's knowledge about common sports injuries and the preventive measures fitness professionals can take to minimize injury risk. The topics covered in this course include injury risk profiling, injury prevention, managing the injured athlete, and training considerations for special athletic populations. Students enrolled in this course are required to complete an independent research project including ten hours of observation with a licensed Athletic Trainer.

## EXSC 137 - Sports Testing \& Interpretation

## Credits: 1

This course is designed to educate the student on common sports tests utilized in the field of strength and conditioning. Students taking this course will participate in a variety of sports performance assessments evaluating both health-related and performance-related components of fitness.
Topics covered in this course include testing of functional movement, cardiorespiratory endurance, anaerobic endurance, strength, agility, speed, power, and more.

## EXSC 285 - Strength Coach Internship

## Credits: 1

This course is designed as an internship to further the strength coach student's skills and knowledge of the field by shadowing a certified strength and conditioning professional. Students will have the opportunity to observe different strength and conditioning job duties such as testing and training athletes, program development for different sports, injury prevention techniques, training schedule management, and strength coach leadership.

## Total Semester Hours: 9

## Studio Arts, A.F.A.

This program seeks to assist students in becoming professionals in the field of art and nurtures a sense of artistic freedom and creativity while developing a strong sense of artistic discipline. Students will be encouraged to be inventive but proficient within the framework of a traditional approach to drawing. To become tomorrow's visionary means understanding the significance and uniqueness of one's own time and space defined by the limitless possibilities of personal expression within the boundaries of a universal language. Commitment to a balanced learning process combining fine art fundamentals (drawing/painting/ seeing) with life experience and aesthetic theory will prepare students for a four-year institution or a career in fine art. The primary objective is to provide an environment in which students can achieve a degree of professionalism as technically competent and creative individuals. A sequential course of study will be required.

Students in the Associate of Fine Arts Degree Program at Sussex County Community College are given the opportunity to present their work at the student art exhibit and in the Idiom \& Image as well as other College publications.

## The objectives of this program are to:

- Display an understanding of abstract relationships and elements, and their expressive potential.
- Exhibit an understanding of form and composition in drawing from the human figure.
- Demonstrate an ability to make connections between theory and practice.
- Demonstrate qualitative decision-making based on current art trends and art historical concepts.
- Demonstrate critical thinking using artistic principles drawn from contemporary social, political, or personal issues.
- Develop a portfolio of artwork.
- Students are expected to provide their own materials and textbooks. Lab fees provide studio time and assistance for art students. See list of "Open Studio Hours" posted in each art studio during the first week of the semester.


## First Year

Fall Semester

## COLL 101 - Foundations for Success

## Credits: 3

This is a student-centered course covering numerous strategies to encourage students to become active and empowered learners. A primary goal of this course is to help students make the most out of their college experience. Students will obtain information about college life and culture and develop strategies and techniques to enhance success in their academic, personal and professional lives. The course is infused with opportunities to understand, practice and implement critical thinking. Students will also gain practical information to help prepare to transfer to a four-year university or enter the workforce directly. All topics will be presented in both theory and practice. This course is required of all degree-seeking candidates and must be taken within the initial 16 credits after entry.

## ENGL 101 - English Composition I

Credits: 3
This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects which include personal, rhetorical, and expository models. Research skills are introduced.

## ARTA 103 - Art History I

## Credits: 3

This course surveys visual artistic expression from the Neolithic period to the fourteenth century, including ancient, medieval and non-European art forms. The development of artistic concepts in the ancient world, gender, and non-western art are central topics in this general survey course.

Prerequisite: ENGL 021, ENGL 032 or Placement into ENGL 101

This course provides an introduction to the practical and theoretical applications of two-dimensional design. This is a lecture course where students explore methods for developing their intuitive responses to form and shape, line, color and value, space, and other basic elements of composition and design.

- GTEC 000 - Technology Gen Ed Requirement Credits: 3

Total Semester Hours: 15

Winter Session

## Spring Semester

## ARTA 104 - Art History II

## Credits: 3

This course surveys the history of art from the fourteenth through the twenty first centuries. The development of artistic concepts in the contemporary world, art and gender, and non-western art and architecture are central topics in this general survey course. Emphasis is place on viewing art forms in context of culture and gender and understanding the philosophical foundations and critical theories that support and influence them

Prerequisite: ENGL 021, ENGL 032 or Placement into ENGL 101

## ARTA 108 - Basic Drawing

## Credits: 3

This course introduces students to the basic foundations of drawing methods, including a broad-based survey of art history and appreciation. Students experiment with a variety of materials: pencil, charcoal, and conte-crayon practicing 1,2 and 3 point perspective, and elemental architectural drawing techniques within an historical context. Students explore various elements of personal expression while comparing their efforts to major works of art. The course also introduces the art of still life, landscape, portrait, life drawing, gesture and contour drawing and classical drawing techniques. Studio fee required.

## ENGL 102 - English Composition II

## Credits: 3

This course introduces students to short fiction, poetry, drama, and the novel. Written assignments are based on the readings. Writing skills learned in Composition I are further developed. Students will write a research paper which demonstrates understanding of literary criticism.

Prerequisite: ENGL 101 (Grade of C or better)

## ARTA 110 - Intro to Color

Credits: 3
This course develops an understanding of the expressive and compositional qualities of color and its role in the creation of art and design through
lectures and experiment. Various color theories and their applications are explored with reference to works of art. Students create compositions using color as the primary criteria for expression. Studio fee required.

## SOCA 101 - Intro. to Sociology

## Credits: 3

This course is an introduction to the analysis and description of structures and dynamics of human society. Emphasis is placed on the application of scientific methods of observation and analysis of social groups, intergroup relations, social change, social stratification, and social institutions.

Total Semester Hours: 15

Summer Session

Second Year

Fall Semester

## ARTA 115 - Three Dimensional Design

Credits: 3
This course introduces the basic concepts of three-dimensional design. In a workshop setting students examine three-dimensional relationships and explore methods of shaping and structuring space. Lab Fee Required.

## ARTA 150 - Life Drawing I

## Credits: 3

This course establishes the basic vocabulary necessary to begin drawing the human form. It defines the concepts of the "nude" as an art form and as a point of departure for all other forms of drawing. Emphasis is placed on gesture and contour drawings, use of drawing materials, anatomy studies, and drawing the human form in traditional ways. Studio Fee Required.

## ARTA 180 - Painting I

## Credits: 3

This course is an introduction to the basic materials and techniques of the oil/acrylic medium. Still life, models, and landscape subjects are explored, and historical and contemporary masterworks are used as references. The emphasis is upon composition, color, and experimentation with paint as a foundation for developing a personal visual language. Lab Fee Required.

- ARTA 002 - Studio Arts Elective Credits: 3
- ARTA 002 - Studio Arts Elective Credits: 3


## Total Semester Hours: 15

## Winter Session

## Spring Semester

## ARTA 107 - History of Contemporary Art

## Credits: 3

This course surveys the history of Contemporary Art, beginning with its roots in the Modernism of Europe at the beginning of the twentieth century and developing comparisons and historical connections to Contemporary Art in today's world art market. Emphasis is placed on viewing art forms in context of their history and intention and understanding the philosophical foundations and critical theories that support and influence them.

## ARTA 201 - Painting II

## Credits: 3

Students learn to articulate a language of form and color with greater emphasis upon experimentation and developing personal expression in the work. Reference to traditional and contemporary masterworks is provided. Lab Fee Required.

Prerequisite: ARTA 180 or Permission of Instructor

- ARTA 002 - Studio Arts Elective Credits: 3
- ARTA 002 - Studio Arts Elective Credits: 3


## ARTA 260 - Portfolio Development

## Credits: 3

This course prepares students to graduate with the professional skills necessary for gallery representation or transfer to a four-year fine art institution, as reflected in a prepared portfolio. Each student creates an articulate "artist's statement" and a finished professional portfolio of original artwork. Studio Fee Required.

Total Semester Hours: 15

Summer Session

## Technology General Education Courses

Choose from the list of approved General Education courses in the College catalog.

## Studio Arts Electives (Recommended)

Recommended courses listed below but student can also choose from any ARTA course designations.

## ARTA 175-Ceramics I

## Credits: 3

This beginning studio course introduces the basic principles and techniques of form making in ceramic media, as well as fundamentals of idea research and transformation. A variety of processes, such as hand building and wheelthrowing, are covered; slipping, glazing and firing techniques are also introduced. The history of ceramics complements studio practice. Students also learn safe use of appropriate equipment and studio organization. Offered through the SCCC/PVCC Alliance, this course will utilize the PVCC Ceramics Studio. Lab Fee Required.

## ARTA 185 - Digital Fine Art I

## Credits: 3

This fine art course serves as an introduction to the history, theory and software applications that are currently employed in the field of digital art. As a foundation for future creative endeavors, students will gain understanding of the aesthetic and creative possibilities inherent in the relationship between digital and traditional fine art mediums. Using digital tools, students will engage in drawing and painting. Lab Fee Required.

Prerequisite: ARTA 101 and ARTA 180

## ARTA 156 - Life Drawing II

## Credits: 3

This studio course further develops the range and quality of a student's drawing. The life model is used and personal interpretation is stressed. Studio Fee Required.

## ARTA 200 - Watercolor

## Credits: 3

This course offers an opportunity to explore the watercolor medium and its expressive range. A contemporary approach provides for experimentation with various techniques. Lab Fee Required.

Students may need to first take some developmental courses that are designed to prepare students for the college-level coursework in their academic plan. This may add to the students' completion time. The number of credits students take each semester will determine when the student will complete his/her program of study.

## Supply Chain Management, A.A.S. - Technical Studies

This program is designed to prepare students for immediate entry into the workforce. The program provides students with fundamental business knowledge, logistics and transportation, skills in inventory control, warehouse management, and supervision for careers in the Supply Chain Management Industry.

# Upon completion of this program, graduates will be able to: 

- Apply knowledge of business and management with a focus on the function of Supply Chain Management.
- Execute the functions and activities of a Supply Chain Management professional.
- Demonstrate technical competence associated with the Supply Chain Management Industry.
- Utilize leadership skills and employment success strategies in an organizational culture.
- Collaborate in teams where there are diverse populations connecting supply chains and logistics networks
- Communicate industry functions in a professional written and oral manner.
- Interpret basic financial statements and managerial reports.
- Exhibit strong business practices and work ethic appropriate to the Supply Chain Management Industry.

First Year

Fall Semester

## COLL 101 - Foundations for Success

## Credits: 3

This is a student-centered course covering numerous strategies to encourage students to become active and empowered learners. A primary goal of this course is to help students make the most out of their college experience. Students will obtain information about college life and culture and develop strategies and techniques to enhance success in their academic, personal and professional lives. The course is infused with opportunities to understand, practice and implement critical thinking. Students will also gain practical information to help prepare to transfer to a four-year university or enter the workforce directly. All topics will be presented in both theory and practice. This course is required of all degree-seeking candidates and must be taken within the initial 16 credits after entry.

## ENGL 101 - English Composition I

## Credits: 3

This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects which include personal, rhetorical, and expository models. Research skills are introduced.

Credits: 3
This course is designed to provide the student with an overview of all critical business functions. Topics include forms of business ownership, legal aspects of business, human resource management, finance, marketing, accounting, management information systems, international business and contemporary business issues. Students taking this course are prepared for more advanced courses in business.

## SCMG 101 - Principles of Supply Chain Mgmt.

## Credits: 3

The course surveys the basic concepts of Supply Chain to give students an understanding of the breadth and scope of Supply Chain in the overall business climate. Students explore a comprehensive overview of business and the inter-relationships/inter-dependence of the various business elements.

Corequisite: BUSA 101 Introduction to Business

## SCMG 105 - Purchasing Mgmt. \& Principles

## Credits: 3

This course is designed to cover relevant issues including: sourcing, planning, supplier selection, auditing suppliers, bid packages, and competitive bidding. Students are encouraged to develop critical skills required to identify, implement, and manage in order to reduce the total cost of materials (total cost of ownership). Student will explore alternatives to inventory ownership such as supplier consigned, vendor managed inventories and how to articulate these alternatives to senior management.

Corequisite/Prerequisite: BUSA 101 Introduction to Business/SCMG 101 Principles of Supply Chain Management

Total Semester Hours: 15

## Winter Session

## Spring Semester

## ENGL 102 - English Composition II

## Credits: 3

This course introduces students to short fiction, poetry, drama, and the novel. Written assignments are based on the readings. Writing skills learned in Composition I are further developed. Students will write a research paper which demonstrates understanding of literary criticism.

Prerequisite: ENGL 101 (Grade of C or better)

Credits: 3
This course is a study of accounting principles and procedures. The accounting cycle is covered for a service industry. Additional topics include accounting for merchandising operations; cash and short-term investments; inventory; the acquisition, allocation, and disposal of tangible and intangible assets; and current liabilities.

## COMS 110-Computer Concepts \& Applications

Credits: 3
This course is designed to provide the student with a level of knowledge necessary to function in today's technological society. Topics include computer and network terminology, hardware, software, and processing concepts. A large portion of the class time is dedicated to exercises performed using integrated software packages. Lab Fee Required.

Corequisite: COMS 110S

## SCMG 110 - Inventory Management

## Credits: 3

This course provides an overview of managing inventory within the constantly evolving supply chain environment. Students will explore essentials and strategies for successful inventory management including planning, storing, moving, and accounting for inventory.

## SCMG 215 - Warehousing Distribution

## Credits: 3

The course content surveys the concepts and theories that drive the effective management of an organization's warehousing and distribution systems. Student will explore functions of a warehouse including design, layout and flow. Particular attention is paid to stock location methodology, inventory record accuracy, problem resolution, and inventory reconciliation.

Total Semester Hours: 15

Summer Session

Second Year

Fall Semester

## MATH 108 - Statistics

Credits: 3

This course includes the following topics: organization of data, measures of central tendency and dispersion, probability, the normal and binomial distributions, confidence intervals, hypothesis testing, analysis of variance, and correlation.

Prerequisite: MATH 017 (Grade of C or betterI) or MATH 023 (Grade of C or betterI) or appropriate algebra placement score

## ACCT 102 - Accounting Princ. II Managerial

## Credits: 3

This course addresses managerial accounting concepts which are necessary for decision-making, performance evaluation, planning, and control. Emphasis is placed on using accounting data as a tool to enhance the information's usefulness to the firm's management. The course deals with corporate equity, the management cycle, product costing methods and standards, responsibility accounting and segment analysis, budgeting, costbehaviors, activity-based systems, statement analysis, and preparation of the statement of cash flow. Quantitative methods necessary for managerial accounting will be emphasized.

Prerequisite: ACCT 101 (Grade of C or better)

## ECON 101 - Macroeconomics

## Credits: 3

This course is an analysis of major economic concepts. Topics include the elements of national income; the economic roles of government and labor; classical economics; monetary institutions and policies; the Keynesian model and modern fiscal policy; the macroeconomic aspects of world trade.

- GNED 000 - General Education Requirement Credits: 3


## BUSA 205 - Business Law I

Credits: 3
This course is an introduction to the judicial process as it pertains to business law. Topics include the history of business law, contracts, business torts, white-collar crime, UCC sales, paper and securities. An in-depth study of rights and obligations as they apply to contract law is performed.

Total Semester Hours: 15

Winter Session

## Spring Semester

## BUSA 120 - Small Business Management

## Credits: 3

This course is designed to introduce the student to the principles and practices of successful small business operations. Topics include new product planning, product management, sales forecasting, consumer behavior, promotion and pricing, finance, staffing, international markets and contemporary business issues. Students acquire an overview of essential small business management skills.

## BUSA 125 - Principles of Supervision

Credits: 3
This course covers the functions of first and middle-level supervisory positions. Topics include leadership, problem- solving, motivation, human relations, communications, employee discipline, conflict resolution, teamwork, and stress management. This course is not recommended for students planning to transfer to a four-year institution.

Prerequisite: BUSA 101

- GHMN 000 - Humanities Gen Ed Requirement Credits: 3


## SCMG 115 - Shipping, Receiving \& Logistics

Credits: 3
The course introduces students to best practices in the shipping and receiving function. Topics include: contracting carriers, damaged claims handling, brokers, software, and basic legal procedures.

## SCMG 225 - Performance Indicators and Benchmarking

## Credits: 3

The course examines the best practices in the use Key Performance Indicators, Benchmarks, and Dashboards in various industries. The course surveys the need for these functions as well as how to select the functions to be monitored and measured.

Total Semester Hours: 15

Summer Session

## Total Program Hours: 60

## Humanities \& General Education Courses

Choose from the list of approved courses in the College catalog.

## Developmental Courses

academic plan. This may add to the students' completion time. The number of credits students take each semester will determine when the student will complete his/her program of study.

## Supply Chain Management, Certificate

This certificate provides students with knowledge of logistics and transportation, skills in inventory control, warehouse management, and supervision for careers in the Supply Chain Management Industry.

## The objectives of this program are to:

- Apply knowledge of the major Supply Chain Management functions and activities.
- Demonstrate technical competence associated with the Supply Chain Management Industry.
- Collaborate in an organizational culture where there are diverse populations connecting supply chains and logistics networks.
- Communicate professionally in a written and oral manner.
- Interpret basic financial statements and managerial reports.
- Exhibit strong business practices and work ethic appropriate to the Supply Chain Management Industry.


## First Year

## Fall Semester

## ENGL 101 - English Composition I

## Credits: 3

This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects which include personal, rhetorical, and expository models. Research skills are introduced.

## BUSA 101 - Intro. to Business

## Credits: 3

This course is designed to provide the student with an overview of all critical business functions. Topics include forms of business ownership, legal aspects of business, human resource management, finance, marketing, accounting, management information systems, international business and contemporary business issues. Students taking this course are prepared for more advanced courses in business.

## ACCT 101 - Accounting Princ. I Financial

## Credits: 3

This course is a study of accounting principles and procedures. The accounting cycle is covered for a service industry. Additional topics include accounting for merchandising operations; cash and short-term investments; inventory; the acquisition, allocation, and disposal of tangible and intangible assets; and current liabilities.

## SCMG 101 - Principles of Supply Chain Mgmt.

Credits: 3
The course surveys the basic concepts of Supply Chain to give students an understanding of the breadth and scope of Supply Chain in the overall business climate. Students explore a comprehensive overview of business and the inter-relationships/inter-dependence of the various business elements.

Corequisite: BUSA 101 Introduction to Business

## SCMG 105 - Purchasing Mgmt. \& Principles

Credits: 3
This course is designed to cover relevant issues including: sourcing, planning, supplier selection, auditing suppliers, bid packages, and competitive bidding. Students are encouraged to develop critical skills required to identify, implement, and manage in order to reduce the total cost of materials (total cost of ownership). Student will explore alternatives to inventory ownership such as supplier consigned, vendor managed inventories and how to articulate these alternatives to senior management.

Corequisite/Prerequisite: BUSA 101 Introduction to Business/SCMG 101 Principles of Supply Chain Management

Total Semester Hours: 15

Winter Session

## COMS 110 - Computer Concepts \& Applications

## Credits: 3

This course is designed to provide the student with a level of knowledge necessary to function in today's technological society. Topics include computer and network terminology, hardware, software, and processing concepts. A large portion of the class time is dedicated to exercises performed using integrated software packages. Lab Fee Required.

Corequisite: COMS 110S

## Total Semester Hours: 3

## Spring Semester

## BUSA 120 - Small Business Management

## Credits: 3

This course is designed to introduce the student to the principles and practices of successful small business operations. Topics include new product planning, product management, sales forecasting, consumer behavior, promotion and pricing, finance, staffing, international markets and contemporary business issues. Students acquire an overview of essential small business management skills.

Credits: 3
This course is an introduction to the judicial process as it pertains to business law. Topics include the history of business law, contracts, business torts, white-collar crime, UCC sales, paper and securities. An in-depth study of rights and obligations as they apply to contract law is performed.

## SCMG 110 - Inventory Management

## Credits: 3

This course provides an overview of managing inventory within the constantly evolving supply chain environment. Students will explore essentials and strategies for successful inventory management including planning, storing, moving, and accounting for inventory.

## SCMG 115 - Shipping, Receiving \& Logistics

## Credits: 3

The course introduces students to best practices in the shipping and receiving function. Topics include: contracting carriers, damaged claims handling, brokers, software, and basic legal procedures.

## SCMG 215 - Warehousing Distribution

Credits: 3
The course content surveys the concepts and theories that drive the effective management of an organization's warehousing and distribution systems. Student will explore functions of a warehouse including design, layout and flow. Particular attention is paid to stock location methodology, inventory record accuracy, problem resolution, and inventory reconciliation.

## SCMG 225 - Performance Indicators and Benchmarking

## Credits: 3

The course examines the best practices in the use Key Performance Indicators, Benchmarks, and Dashboards in various industries. The course surveys the need for these functions as well as how to select the functions to be monitored and measured.

Total Semester Hours: 18

Summer Session

Total Program Hours: 36

## Developmental Courses

Students may need to first take some developmental courses that are designed to prepare students for the college-level coursework in their academic plan. This may add to the students' completion time. The number of credits students take each semester will determine when the student will complete his/her program of study.

## Sustainable Gardening, C.O.A.

This Sustainable Gardening Certificate program is designed for students who are interested in learning how to design, implement and maintain a home garden or landscape. This program prepares students to design and manage sustainable gardens and landscapes. Students will learn important aspects of sustainable gardening. The curriculum will cover sustainable garden design, site selection, soil biology, and plant health, plant pest management, organic farming, and ecological landscape management.

## First Year

## Fall Semester

## AGSC 107 - Agriculture Pest Control \& Mgmt.

## Credits: 4

This course is designed to introduce the student to the fundamental theories, principles, and practices of pest control for agriculture and ornamental horticulture crops. Diagnostic skills for insect, disease, and weed identification are presented.

Corequisite: AGSC 107L

## HORT 201 - Introduction to Soil Science

Credits: 4
This course acquaints the student, through in class lectures and hands on labs, with soil concepts, plant nutrients, and their influence on plant growth. Emphasis will be placed on soil testing, nutrient deficiency symptoms, and fertilizer requirements.

Corequisite: HORT 201L

Total Semester Hours: 8

Winter Session

Spring Semester

## Credits: 3

This course prepares students with the knowledge and skills to design basic gardens and landscape areas. Students will learn about sustainable garden design elements such as rain gardens, rainwater harvesting and green roofs as well as integrating herb gardens, edible landscapes, native plants and areas of the garden for bees and other pollinators.

Total Semester Hours: 7

## Technical Studies, A.A.S.

Provide recognition for work and experience while assisting individuals in their preparation for career advancement or change. This program is designed to provide skills for personal, professional, and community improvement. The program is highly individualized and flexible. Technical Studies credits may be earned for corporate, industrial, or military training programs after review processes. Graduates will be awarded an associate in applied science degree upon successful completion of this program.

## The objectives of this program are to:

- Formulate an educational plan designed to accomplish a personal/professional goal.
- Demonstrate an attitude of responsibility to self, employer, and community.
- Advance in career, building on already acquired skills and competencies
- Display increased technical knowledge and skills.
- Demonstrate the comprehensive mathematical, scientific, social, and psychological skills necessary for personal career growth.
- Present technical information in effective oral, written, and technical form.


## First Year

## Fall Semester

## ENGL 101 - English Composition I

## Credits: 3

This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects which include personal, rhetorical, and expository models. Research skills are introduced.

## MATH 105 - Technical Mathematics

## Credits: 3

This course is intended for students who have introductory algebra proficiency, and who need to apply mathematical concepts in a technical program. The purpose of the course is to prepare AAS students for the mathematical aspects of their work in the technical trades.

Prerequisite: Proficiency on the College Placement Examination or grade of C or better in MATH 017/MATH 023.

- TSC 000 - Technical Studies Core Credits: $\mathbf{3}$

OR

- TSRQ 000 - Required Course Credits: 3
- TSC 000 - Technical Studies Core Credits: 3

OR

- TSRQ 000 - Required Course Credits: 3
- TSC 000 - Technical Studies Core Credits: $\mathbf{3}$

OR

- TSRQ 000 - Required Course Credits: 3

Total Semester Hours: 15

## Winter Session

## Spring Semester

- GTEC 000 - Technology Gen Ed Requirement Credits: 3
- TSC 000 - Technical Studies Core Credits: 3 OR
- TSRQ 000 - Required Course Credits: $\mathbf{3}$
- TSC 000 - Technical Studies Core Credits: 3 OR
- TSRQ 000 - Required Course Credits: 3
- TSC 000 - Technical Studies Core Credits: 3 OR
- TSRQ 000 - Required Course Credits: 3
- TSC 000 - Technical Studies Core Credits: $\mathbf{3}$ OR
- TSRQ 000 - Required Course Credits: 3

Total Semester Hours: 15

Summer Session

## Second Year

Fall Semester

## ENGL 125 - Tech. Writing \& Communication I

Credits: 3
This course focuses on expository writing for business, industrial, and scientific fields, emphasizing the principles for organizing, writing, and revising clear, readable documents and reports. Students will practice written, oral, reading, and reasoning skills. Research skills will be advanced.

- TSC 000 - Technical Studies Core Credits: 3

OR

- TSRQ 000 - Required Course Credits: 3
- TSC 000 - Technical Studies Core Credits: 3

OR

- TSRQ 000 - Required Course Credits: 3
- TSC 000 - Technical Studies Core Credits: 3

OR

- TSRQ 000 - Required Course Credits: 3
- GHMN 000 - Humanities Credits: 3

OR

- GSOC 000 - Social Science Gen Ed Requirement Credits: 3

Total Semester Hours: 15

## Winter Session

## Spring Semester

- TSC 000 - Technical Studies Core Credits: 3

OR

- TSRQ 000 - Required Course Credits: 3
- TSC 000 - Technical Studies Core Credits: 3

OR

- TSRQ 000 - Required Course Credits: 3
- TSC 000 - Technical Studies Core Credits: 3

OR

- TSRQ 000 - Required Course Credits: 3
- GNED 000 - General Education Requirement Credits: 3
- GNED 000 - General Education Requirement Credits: 3

Total Semester Hours: 15

# Humanities or Social Science General Education Requirements 

Choose from the list of approved Humanities or Social Science courses listed in the College catalog

## Technical Studies Core or Technical Studies Required Courses

Technical Studies credits may be earned for corporate, industrial, or military training programs after review by a faculty assessor of related program. Individuals without sufficient technical training experience must select courses in one of the programs/options listed below to satisfy the Technical Studies credit requirements. All courses should be selected with assistance from a faculty advisor.

## Technology General Education Courses (Recommended)

Recommended courses listed below but student can also choose from the list of approved General Education courses in the College catalog.

## COMS 110-Computer Concepts \& Applications

## Credits: 3

This course is designed to provide the student with a level of knowledge necessary to function in today's technological society. Topics include computer and network terminology, hardware, software, and processing concepts. A large portion of the class time is dedicated to exercises performed using integrated software packages. Lab Fee Required.

Corequisite: COMS 110S

## Select Courses from One of the Following Programs(P)/Options(O)

(Courses must be approved by appropriate faculty advisor):
Agricultural Business (P)
Automotive Service Technology (P)
Building Construction Technology (O)
Business Management (P)
Cosmetology (O)
Computer Information Systems ( P )
Diesel Service Technology (O)

## Developmental Courses

Students may need to first take some developmental courses that are designed to prepare students for the college-level coursework in their academic plan. This may add to the students' completion time. The number of credits students take each semester will determine when the student will complete his/her program of study.

## Technical Support, C.O.A.

This certificate will prepare students for a career in supporting the information technology needs of business. The program will focus on industrystandard applications, networking, network security, web design, business programming and operating systems tools. Students will be prepared for careers as computer technicians, technical support and help desk specialists, web designers and programmers, software testers and quality assurance specialists.

## First Year

## Fall Semester

## Total Semester Hours: 15

## COMS 113 - Intro. to Information Systems

## Credits: 3

This course is concerned with how organizations utilize information technology. The course deals with the operational activities involved in gathering, processing, storing, distributing and the use of information and its associated changing technologies. The case studies present students with managerial decision-making activities. Software platforms are used for the analysis. Lab Fee Required.

## COMS 114 - Intro. to Computer Science I

## Credits: 3

This course introduces the student to the fundamentals of computer science using an emphasis on programming methodology and problem
solving. Topics include introductory concepts of computer systems, algorithm design, programming languages, software engineering, and data abstraction with related applications. A high level programming language is completely discussed and is used as a means to demonstrate concepts. Lab Fee Required.

- CERT 000 - Certificate Electives Credits: 9


## Technical Theater Option, A.A.S. - Technical Studies

The Technical Theater degree provides hands-on practical training and experimental learning in several areas of technical theatre production. Emphasis is on developing skills in modern production technology including constructing and rigging scenery, hanging and focusing of lighting, design and procurement of costumes, make-up, stage management, audio engineering, and procurement of props. Students will have the opportunity to participate in live productions.

## The objectives of this program are to:

- Demonstrate well-developed personal skills in the workplace and as part of the crew.
- Investigate and problem solves as an individual and in a collaborative team setting.
- Integrate the techniques of the creative process into the production area.
- Employ the tools, technology, and skills required to problem solve for production.
- Understand and interpret the design areas into a realized form for performance.


## First Year

Fall Semester

## ENGL 101 - English Composition I

## Credits: 3

This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects which include personal, rhetorical, and expository models. Research skills are introduced.

## GRAD 101 - Design I

## Credits: 3

This course is an exploration of the fundamental principles of design through a series of weekly lectures, discussions, and short readings reinforced by studio assignments and critiques. This class focuses on developing the ability to skillfully use and combine core design elements and utilize design principles while mastering the craft of materials to convey meaning. Assignments are organized and designed to engage students with optimal learning opportunities in developing critical thinking skills and professional vocabulary allowing for further study. Although this course is not a software-oriented course student will be introduced to the computer utilizing Adobe Illustrator and Photoshop to gain very basic skills.

## Credits: 3

This is a studio course where students will observe and create in the physical world away from the computer. This course suggests that real-world observation is invaluable in the planning of traditional illustration, digital illustration, 2D graphics, and 3D generated images. Areas of instruction will include graphic design drawing elements (such as line, value, texture, color, and composition), perspective, architecture, and environments. The course will also emphasize basic drawing techniques, anatomy for the artist, life drawing, lighting, texturing, and storyboarding. Students will learn how to efficiently work with pencil, charcoal, ink, markers, and mixed media. Lab Fee Required.

- TSC 000 - Technical Studies Core Credits: 3

OR

- TCTH 000 - Program Elective Credits: 3
- TSC 000 - Technical Studies Core Credits: 3

OR

- TCTH 000 - Program Elective Credits: $\mathbf{3}$

Total Semester Hours: 15

Winter Session

## Spring Semester

## MATH 105 - Technical Mathematics

## Credits: 3

This course is intended for students who have introductory algebra proficiency, and who need to apply mathematical concepts in a technical program. The purpose of the course is to prepare AAS students for the mathematical aspects of their work in the technical trades.

Prerequisite: Proficiency on the College Placement Examination or grade of C or better in MATH 017/MATH 023.

- GTEC 000 - Technology Gen Ed Requirement Credits: 3
- TSC 000 - Technical Studies Core Credits: 3

OR

- TCTH 000 - Program Elective Credits: 3
- TSC 000 - Technical Studies Core Credits: 3

OR

- TCTH 000 - Program Elective Credits: 3
- TSC 000 - Technical Studies Core Credits: $\mathbf{3}$

OR

- TCTH 000 - Program Elective Credits: 3


## Second Year

## Fall Semester

## ENGL 125 - Tech. Writing \& Communication I

## Credits: 3

This course focuses on expository writing for business, industrial, and scientific fields, emphasizing the principles for organizing, writing, and revising clear, readable documents and reports. Students will practice written, oral, reading, and reasoning skills. Research skills will be advanced.

- GNED 000 - General Education Requirement Credits: 3


## ARTA 115 - Three Dimensional Design

## Credits: 3

This course introduces the basic concepts of three-dimensional design. In a workshop setting students examine three-dimensional relationships and explore methods of shaping and structuring space. Lab Fee Required.

- TSC 000 - Technical Studies Core Credits: 3

OR

- TCTH 000 - Program Elective Credits: 3
- TSC 000 - Technical Studies Core Credits: 3

OR

- TCTH 000 - Program Elective Credits: 3

Total Semester Hours: 15

## Winter Session

## Spring Semester

## MUSC 155 - Live Sound Production

## Credits: 3

This course is designed to allow students an opportunity train in live sound support for public address set up and operations, live sound mixing for musical performances such as concerts, theatrical performances and special presentations requiring public address systems. Emphasis is on the theory and physical workings of a mixing console. Lab Fee Required.

- GNED 000 - General Education Requirement Credits: 3
- TSC 000 - Technical Studies Core Credits: 3

OR

- TCTH 000 - Program Elective Credits: $\mathbf{3}$


## THEA 240 - Set Design and Construction

## Credits: 3

This course is designed to introduce students to the principles and practices of set design. Students explore script analysis, research to design conceptualization and process transformed into working sketches, material selections, and translated into construction. Student will be able to apply the design process and the skills learned in the use of equipment and tools to complete a scenic design for a production. Lab Fee Required.

- GHMN 000 - Humanities Credits: 3

OR

- GSOC 000 - Social Science Gen Ed Requirement Credits: 3

Total Semester Hours: 15

Summer Session

## Total Program Hours: 60

## Technical Studies Core or Program Elective Courses (Recommended)

Technical Studies credits may be earned for corporate, industrial, or military training programs after review by a faculty assessor of related program. Individuals without sufficient technical training experience must select courses in one of the programs/options listed below to satisfy the Technical Studies credit requirements. All courses should be selected with assistance from a faculty advisor.

## ARTA 108 - Basic Drawing

## Credits: 3

This course introduces students to the basic foundations of drawing methods, including a broad-based survey of art history and appreciation. Students experiment with a variety of materials: pencil, charcoal, and conte-crayon practicing 1,2 and 3 point perspective, and elemental architectural drawing techniques within an historical context. Students explore various elements of personal expression while comparing their efforts to major works of art. The course also introduces the art of still life, landscape, portrait, life drawing, gesture and contour drawing and classical drawing techniques. Studio fee required.

Credits: 3
This course develops an understanding of the expressive and compositional qualities of color and its role in the creation of art and design through lectures and experiment. Various color theories and their applications are explored with reference to works of art. Students create compositions using color as the primary criteria for expression. Studio fee required.

## THEA 102 - Acting I

## Credits: 3

This is a course that offers an in depth study of character portrayal and scene development with a focus on improving the skills required to perform a role from a script or from improvisation. This course requires student collaboration and attendance at local professional theater productions at an additional cost to the student.

## THEA 130 - Stage and Theater Make-up

## Credits: 3

This course is designed for exploration of the history, theory and practice of stage makeup. Students will gain hands-on experience with materials, techniques and application procedures allowing for the development, planning, and execution of character makeup designs for the performing arts. Emphasis is on the requirements of dramatic character, facial anatomy, and period styles. Lab Fee Required.

## THEA 135 - Properties \& Set Augmentation

## Credits: 3

This course is designed to introduce students to materials and techniques in theatrical properties and craft. Students will learn the many facets of being a property master for theatrical productions while focusing on research techniques, problem solving and technical skills applied to a variety of projects. Emphasis will be placed on expanding resource locating and procurement and organizational skills. Lab fee required.

## THEA 230 - Theater and Event Lighting

## Credits: 3

This course is designed to explore the artistic, conceptual and collaborative aspects of Lighting Design. Emphasis is on technical knowledge of the tools of the trade with application of the final lighting designs. Students will gain hands-on experience with a good portion of class time spent in a theater and on performing arts events. Lab fee required.

## THEA 235 - Costume Technology

## Credits: 3

This course is designed to introduce the student to costume technology. Students will discover how to properly research and recognize historical costumes as well as costumes for a variety of genres in successful preparation and completion of a custom design. Drawings techniques, design

## THEA 245 - Stage Management

## Credits: 3

This course provides an introduction to the elements of play production and direction. Students explore planning, management, and technical aspects of production. The directing process will also be covered through script analysis, readings and scene work. Emphasis will be on the process of direction and management in play and character analysis, conceptualizing, casting, rehearsing, preforming, and precisely communicating with actors, designers and all members of a production. Students will gain practical experience working in a production. Lab fee is required.

Prerequisite: THEA 102, THEA 130, THEA 135, THEA 230, THEA 235, and THEA 240

## Technology General Education Courses (Recommended)

Recommended courses listed below but student can also choose from the list of approved General Education courses in the College catalog.

## COMS 110-Computer Concepts \& Applications

## Credits: 3

This course is designed to provide the student with a level of knowledge necessary to function in today's technological society. Topics include computer and network terminology, hardware, software, and processing concepts. A large portion of the class time is dedicated to exercises performed using integrated software packages. Lab Fee Required.

Corequisite: COMS 110S

## Humanities General Education Courses

Choose from the list of approved courses in the College catalog.

General Education Courses (Recommended)

Recommended courses listed below but student can also choose from the list of approved General Education courses in the College catalog.

## THEA 208 - Theater History I

## Credits: 3

This course is a survey of dramatic literature and theatrical history from ancient times through the Renaissance. Students will be introduced to all areas of the theater including: acting, directing, design, and theater architecture.

Students may need to first take some developmental courses that are designed to prepare students for the college-level coursework in their academic plan. This may add to the students' completion time. The number of credits students take each semester will determine when the student will complete his/her program of study.

## Theater Arts Option, A.A. - Liberal Arts

This option prepares students for transfer to a four-year college with a major in Theater and Educational Theater. This option serves as a basis for careers in television, motion pictures, stage, and commercial or educational dramatic endeavors. Students are given the opportunity to contribute to and work on SCCC productions and workshops. In addition, the students are given the opportunity to attend professional productions offcampus.

## The objectives of this program are to:

- Stage a scene or monologue.
- Develop and perform on stage a character from a script or from improvisation.
- Work as part of an ensemble to perform in and/or to do the technical preparations to produce a play.
- Identify critical aspects of dramatic literature and theater history.
- Examine and critique theatre performances.


## First Year

## Fall Semester

## COLL 101 - Foundations for Success

## Credits: 3

This is a student-centered course covering numerous strategies to encourage students to become active and empowered learners. A primary goal of this course is to help students make the most out of their college experience. Students will obtain information about college life and culture and develop strategies and techniques to enhance success in their academic, personal and professional lives. The course is infused with opportunities to understand, practice and implement critical thinking. Students will also gain practical information to help prepare to transfer to a four-year university or enter the workforce directly. All topics will be presented in both theory and practice. This course is required of all degree-seeking candidates and must be taken within the initial 16 credits after entry.

## ENGL 101 - English Composition I

## Credits: 3

This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects which include personal, rhetorical, and expository models. Research skills are introduced.

- MATH 900 - Math Gen Ed Requirement Credits: 3
- GHMN 000 - Humanities Gen Ed Requirement Credits: 3

Credits: 3
This is a course that offers an in depth study of character portrayal and scene development with a focus on improving the skills required to perform a role from a script or from improvisation. This course requires student collaboration and attendance at local professional theater productions at an additional cost to the student.

Total Semester Hours: 15

## Winter Session

## Spring Semester

## ENGL 102 - English Composition II

## Credits: 3

This course introduces students to short fiction, poetry, drama, and the novel. Written assignments are based on the readings. Writing skills learned in Composition I are further developed. Students will write a research paper which demonstrates understanding of literary criticism.

Prerequisite: ENGL 101 (Grade of C or better)

## THEA 208 - Theater History I

## Credits: 3

This course is a survey of dramatic literature and theatrical history from ancient times through the Renaissance. Students will be introduced to all areas of the theater including: acting, directing, design, and theater architecture.

OR

## ENGL 208 - Theater History I

## Credits: 3

PERA208 This course is a survey of dramatic literature and theatrical history from ancient times through the Renaissance. Students will be introduced to all areas of the theater including: acting, directing, design, and theater architecture.

Prerequisite: ENGL 101

- GSOC 000 - Social Science Gen Ed Requirement Credits: 3


## COMS 110-Computer Concepts \& Applications

## Credits: 3

This course is designed to provide the student with a level of knowledge necessary to function in today's technological society. Topics include computer and network terminology, hardware, software, and processing concepts. A large portion of the class time is dedicated to exercises performed using integrated software packages. Lab Fee Required.

Corequisite: COMS 110S

## THEA 103 - Acting II

## Credits: 3

This course is a continuation of Acting I with an emphasis on theory and practice, including class and public performance. Student collaboration and attendance at local theater productions are required. A fee will be collected in each class for ticket cost.

Total Semester Hours: 15

Summer Session

Second Year

## Fall Semester

## ENGL 201 - Effective Speaking

## Credits: 3

This is a course in public speaking which stresses speech organization, effective delivery and critical listening skills. A strong emphasis is placed on student performance to help the student gain speech practice and develop self-confidence in a variety of speaking situations.

Prerequisite: ENGL 015 and ENGL 031

## MATH 106 - Mathematical Concepts

## Credits: 3

This course surveys several basic concepts of mathematics designed to give non-scientific/non-technical majors an understanding of the breadth of mathematics in areas other than computational application. Topics include: problem solving, the real number system, linear and quadratic equations, exponents and logarithms, graphs and functions, and graph theory.

Prerequisite: Proficiency on the College Placement Examination or Grade of C or Better in MATH 017/MATH 023

- HIST 000 - History Gen Ed Requirement Credits: 3
- PHIL 000 - Philosophy Gen Ed Requirement Credits: 3

Credits: 3
This course is a hands-on experience for those accepted for the College's theatre productions, either as a performer or production support personnel. The course content includes, but is not limited to: acting, stage designing, lighting, sound, costumes, makeup, stage management, assistant directing, and understudying.

Total Semester Hours: 15

## Winter Session

## Spring Semester

- HIST 000 - History Gen Ed Requirement Credits: $\mathbf{3}$
- LSCI 000 - Science Gen Ed Requirement Credits: 3
- GSOC 000 - Social Science Gen Ed Requirement Credits: 3


## SOCA 215 - Perspectives On Race, Gender, Class and Culture

## Credits: 3

This course explores the effects of social structure and of dominant and sub-cultural norms and values on individuals, families and groups. Racism, sexism, homophobia, ageism, class bias and rigid gender roles are examined in depth with focus on the effects of advanced industrial capitalism on these phenomena.

Prerequisite: SOCA 101

## THEA 110 - Theater Workshop I

## Credits: 3

This course is a practical study of theatrical production by intensive script study and supervised technical projects which culminate in performances for live audiences. Students work as cast or production staff and receive periodic evaluation. This course requires student collaboration and attendance at professional theater productions at an additional cost to the student.

Total Semester Hours: 15

Summer Session

## Philosophy General Education Courses

Recommended courses listed below but student can also choose from the list of approved General Education courses in the College catalog.

## PHIL 110 - Philosophy \& the Meaning of Life

## Credits: 3

This course is an introduction to philosophical analysis through an examination of the recurring issue of philosophy and the meaning of life. Topics of discussion will include: nature and methodology of philosophy, reality, existence of God, human freedom, and the value of existence.

## History General Education Courses

Choose from the list of approved History General Education courses in the College catalog. Must choose a level I \& II sequence.

## Social Science General Education Courses (Recommended)

Recommended courses listed below but student can also choose from the list of approved Social Science General Education courses in the College catalog.

## PSYC 101 - Introduction to Psychology

## Credits: 3

This course is an introduction to the science of human behavior and mental processes. Emphasis is placed on the relationship between the nervous system and behavior, learning, perception, development, motivation, personality, attitude formation and prejudice, psychopathology and psychotherapy.

Prerequisite: Proficient in all Developmental English Courses

## SOCA 101 - Intro. to Sociology

## Credits: 3

This course is an introduction to the analysis and description of structures and dynamics of human society. Emphasis is placed on the application of scientific methods of observation and analysis of social groups, intergroup relations, social change, social stratification, and social institutions.

## Humanities, Global and Cultural Awareness, Technology, and Math and Science General Education Courses

## Developmental Courses

Students may need to first take some developmental courses that are designed to prepare students for the college-level coursework in their academic plan. This may add to the students' completion time. The number of credits students take each semester will determine when the student will complete his/her program of study.

## Web Design, Certificate

This one-year certificate program is designed to prepare students for entry-level positions in various careers requiring commercial art and/or communication design production skills. The program's courses include the rapidly advancing technology of computer graphics and hands-on training in typography, layout production, and design fundamentals. The credits acquired in this program are applicable toward the A.A.S. in Graphic Design.

## The objectives of this program are to:

- Demonstrate entry-level professional Photoshop skills including selecting, editing, retouching, and com positing images.
- Exhibit a refined use of color appropriate for each client and project.
- Research and select appropriate typefaces and design typography to support the branding or communication goal of a particular client or project.
- Utilize a professional design process including research, concept development to create professional level Web page designs.
- Create a consistent, visually appealing web page layouts utilizing Web Editors, hand-coding using HTML and CSS.
- Utilize a computer as a production tool.


## First Year

## Fall Semester

## ARTA 104 - Art History II

## Credits: 3

This course surveys the history of art from the fourteenth through the twenty first centuries. The development of artistic concepts in the contemporary world, art and gender, and non-western art and architecture are central topics in this general survey course. Emphasis is place on viewing art forms in context of culture and gender and understanding the philosophical foundations and critical theories that support and influence them

Prerequisite: ENGL 021, ENGL 032 or Placement into ENGL 101

## ENGL 101 - English Composition I

## Credits: 3

This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects which include personal, rhetorical, and expository models. Research skills are introduced.

## COMS 155 - Web Site Development I

## Credits: 3

This course is an introduction to Web Site Development. Students will receive intensive hands-on experience in coding web pages, including linking, layout and design, forms, graphics, security concerns, and maintaining a Web Site. Lab Fee Required.

Prerequisite: COMS 110 or any course above COMS 110

## GRAD 105 - Vector Graphics \& Page Design

## Credits: 3

This course emphasizes techniques and applications used to produce published documents for both Internet and print media. Students will learn to design documents, publications, and related projects using industry standard software on both MAC and PC platforms. An emphasis is placed on basic computer graphic skills through practical experience with two-dimensional paint and draw programs, as well as layout programs for print and web. Projects covered include advertising design, page layout, computer illustrations, digital imaging, and the scanning and manipulation of images. Lab Fee Required.

Prerequisite: Any COMS course

## GRAD 109 - Intro. to Digital Marketing

## Credits: 3

This course focuses on techniques for writing, editing and researching content for social media platforms, and students will publish their work on their own Websites and Blogs. An emphasis is placed on the skills needed for quality storytelling via social media communication. Students will explore blogging, podcasting and social software technology. Students will implement social media research campaigns, develop original web content, and discuss interactive writing, interactive publishing, and the role of the interactive writer. Copyright law, libel law, information ethics and culture will be explored.

Total Semester Hours: 15

## Winter Session

## Spring Semester

## COMS 114 - Intro. to Computer Science I

## Credits: 3

This course introduces the student to the fundamentals of computer science using an emphasis on programming methodology and problem solving. Topics include introductory concepts of computer systems, algorithm design, programming languages, software engineering, and data abstraction with related applications. A high level programming language is completely discussed and is used as a means to demonstrate concepts. Lab Fee Required.

## COMS 156 - Web Site Development II

Credits: 3
This course is a continuation of Web Site Development I. Students will move into more complex techniques that may include, but are not limited to, Cascading Style Sheets, an introduction to scripting and CGI/Server-side scripting, and XML. Lab Fee Required.

Prerequisite: COMS 155 (Grade of C or better or better)

## GRAD 119 - Website Management for Digital Marketing

Credits: 3
This course is designed to introduce students to WordPress Content Management System for either personal or business website use. The course covers the basics on how to use the WordPress platform including installation, content management, and configuration. Prior web publishing experience is not required. Familiarity with web browsers and email is highly recommended. Lab Fee Required.

## GRAD 128 - Digital Imagery \& Editing

## Credits: 3

This course provides students with the intensive exploration of advanced digital imaging as it applies to photography creating PDF documents, optimizing web graphics and complex layered images. Students will perfect their ability to creatively use digital imaging software to create sophisticated graphics for print and the web. Further study and practical application will be applied to creating documents for both the Internet and print mediums. An emphasis is placed on developing quality portfolio pieces. Lab Fee Required.

Prerequisite: GRAD 105

## GRAD 142 - Digital Typography and Color

## Credits: 3

This course is an introduction to the fundamentals of type. Topics covered will include letterforms, text layout and problem solving for print and digital media. The technology and history of typography will be covered as well as page layout and software programs utilizing type. Students will also learn about the nature of color on paper and on the computer, in the printing press and beyond. Color theory, history and preparation information about color for print and web will be covered. Lab Fee Required.

Prerequisite: GRAD 101 and GRAD 105

Total Semester Hours: 15

Summer Session

Students may need to first take some developmental courses that are designed to prepare students for the college-level coursework in their academic plan. This may add to the students' completion time. The number of credits students take each semester will determine when the student will complete his/her program of study.

## Welding Technology Option, A.A.S. - Technical Studies

The Welding Technology Program provides students with a comprehensive understanding of the science, technology, and applications essential for successful employment in the welding and metal industry. In addition to gaining an overall understanding of welding machines, weld processes, and hands-on proficiency, students develop skills in the areas of print reading, welding symbols, metallurgy, weld inspection, destructive and non-destructive testing. Students gain important knowledge and skills necessary to prepare them for weld qualification to code specifications. Students perform quality welds and cuts, evaluate welds to industry standards, operate metal fabricating equipment, and apply communication skills in the work environment.

Successful graduates of the Welding Technology curriculum may be employed as entry-level technicians in the welding and metalworking industries. Career opportunities also exist in construction, manufacturing, fabrication, sales, quality control, supervision, and welding-related selfemployment.

## Upon completion of this program, graduates will be able to:

- Demonstrate basic concepts and practices of technical drawing and blueprint reading in accordance with industry standards
- Articulate safety guidelines and proper use of tools
- Articulate industrial quality control procedures
- Perform quality welds and cuts to industry standards.
- Apply principles of welding theory to welding practice
- Demonstrate proper use of welding-related terms
- Demonstrate critical thinking and communication skills.


## First Year

## Fall Semester

## ENGL 101 - English Composition I

## Credits: 3

This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects which include personal, rhetorical, and expository models. Research skills are introduced.

## MATH 105-Technical Mathematics

## Credits: 3

This course is intended for students who have introductory algebra proficiency, and who need to apply mathematical concepts in a technical program. The purpose of the course is to prepare AAS students for the mathematical aspects of their work in the technical trades.

## WELD 101 - Welding Safety

## Credits: 1

This course will familiarize students with the knowledge on welding safety procedures, normal operating procedures; while also covering safe operation and hazards associated with welding.

## WELD 110 - Thermal Cutting and Oxyfuel Welding

## Credits: 3

This course acts as an introduction on various types of thermal cutting and oxyfuel welding and brazing procedures currently used in the industry. Training in the course follows the American Welding Society (AWS) standards of acceptance. Lab Fee Required.

Prerequisite: Proficiency on the English and Basic Math portion of the Placement Test

## WELD 115 - Shielded Metal Arc Welding I

Credits: 3
This course covers equipment and proper setup of said equipment; while introducing students to electrodes, and electrode selection used in shielded metal arc welding (SMAW). Instruction in this course follows the American Welding Society (AWS) standards of acceptability and teaches student to develop hands on skills necessary to generate quality single and multiple pass welds in all positions while utilizing commonly used filler materials including low hydrogen, non-low hydrogen, and iron powder electrodes. Lab Fee Required.

Prerequisite: Proficiency on the English and Basic Math portion of the Placement Test

- GHMN 000 - Humanities Credits: 3

OR

- GSOC 000 - Social Science Gen Ed Requirement Credits: 3

Total Semester Hours: 16

Winter Session

Spring Semester

## ENGL 125 - Tech. Writing \& Communication I

## Credits: 3

This course focuses on expository writing for business, industrial, and scientific fields, emphasizing the principles for organizing, writing, and revising clear, readable documents and reports. Students will practice written, oral, reading, and reasoning skills. Research skills will be advanced.

## COMS 110 - Computer Concepts \& Applications

Credits: 3
This course is designed to provide the student with a level of knowledge necessary to function in today's technological society. Topics include computer and network terminology, hardware, software, and processing concepts. A large portion of the class time is dedicated to exercises performed using integrated software packages. Lab Fee Required.

Corequisite: COMS 110S

## WELD 120 - Welding Metallurgy

## Credits: 2

In this course students will gain the knowledge of basic metallurgical principles in relation to fusion welding. Welding Metallurgy will also include the process, both the physical and mechanical properties, metal type, carbon equivalency, choice of filler metal, heat input (Joules), and the byproduct of heat on the weld zone (HAZ) along with the effects of heat and stress relieving applications within the welding field. Lab Fee Required.

Prerequisite: WELD 101, WELD 105, WELD 110, WELD 115

- TSC 000 - Technical Studies Core Credits: 3

OR

- WELD 000 - Program Elective Credits: 3
- TSC 000 - Technical Studies Core Credits: 3

OR

- WELD 000 - Program Elective Credits: 3

Total Semester Hours: 14

Summer Session

Second Year

## Fall Semester

- TSC 000 - Technical Studies Core Credits: 3

OR

- WELD 000 - Program Elective Credits: 3
- TSC 000 - Technical Studies Core Credits: 3

OR

- WELD 000 - Program Elective Credits: 3
- TSC 000 - Technical Studies Core Credits: 3

OR

- WELD 000 - Program Elective Credits: 3


## WELD 135 - Gas Metal Arc Welding

Credits: 3
This course includes proper equipment selection and setup, electrode selection, gas selection and techniques used in the gas metal arc welding (GMAW) processes on steel, stainless steel and aluminum. Instruction in this course follows the American Welding Society (AWS) standards of acceptability to develop the hands on skills necessary to generate quality single and multiple pass welds in all positions on all thicknesses of metal plate. Lab Fee Required.

Prerequisite: WELD 120, WELD 125, WELD 130

- GNED 000 - General Education Requirement Credits: 3

Total Semester Hours: 15

## Winter Session

## Spring Semester

- TSC 000 - Technical Studies Core Credits: $\mathbf{3}$ OR
- WELD 000 - Program Elective Credits: 3
- TSC 000 - Technical Studies Core Credits: 3 OR
- WELD 000 - Program Elective Credits: 3
- TSC 000 - Technical Studies Core Credits: 3 OR
- WELD 000 - Program Elective Credits: 3
- TSC 000 - Technical Studies Core Credits: 3

OR

- WELD 000 - Program Elective Credits: 3
- GNED 000 - General Education Requirement Credits: 3

Total Semester Hours: 15

Summer Session

## Technical Studies Core or Program Electives Courses (Recommended)

Technical Studies credits may be earned for corporate, industrial, or military training programs after review by a faculty assessor of related program. Individuals without sufficient technical training experience must select courses in one of the programs/options listed below to satisfy the Technical Studies credit requirements. All courses should be selected with assistance from a faculty advisor.

## WELD 105 - Print Reading \& Welding Symbols

## Credits: 3

This course covers weld print reading commonly utilized in the welding industry. Print reading to be covered includes at least: the American Welding Society (AWS) welding symbols, sketching, view representation, orthographic projection, measurement, structural steel materials, weld joint configuration and detailing, basic layout, and pipe system design. Lab Fee Required.

Prerequisite: Proficiency on the English and Basic Math portion of the Placement Test

## WELD 125 - Shielded Metal Arc Welding II

## Credits: 3

This course covers equipment and proper setup of said equipment; while going more in depth on electrodes and electrode selection used in shielded metal arc welding (SMAW). Instruction in this course follows the American Welding Society (AWS) standards of acceptability and teaches students to develop the hands on skills necessary to generate quality single and multiple pass welds, in all positions, utilizing increasing diameter electrodes of the low hydrogen and non-low hydrogen filler metals frequently used in the field following the structural steel welding code. Students will weld joints to replicate butt-beam to beam, beam to column splicing, heavy plate and heavy equipment welding. Students learn the skills in the AWS D1.1 Structural Steel Welding Code with low hydrogen electrodes, unlimited plate thickness, and with or without backing in all positions. Lab Fee Required.

Prerequisite: WELD 101, WELD 105, WELD 110, WELD 115

## WELD 130 - Flux Cored Arc Welding

## Credits: 3

This course includes proper equipment selection, setup, proper choice of electrodes, and gas selection used in flux cored arc welding (FCAW) and submerged arc welding (SAW). Instruction in the course follows the American Welding Society (AWS) standards of acceptability and teaches students to develop the hands on skills necessary to generate quality single and multiple pass welds in all positions utilizing flux cored electrode wires with and without the presence of shielding gases on medium to heavy plate. Lab Fee Required.

Prerequisite: WELD 101, WELD 105, WELD 110, WELD 115

WELD 140 - Welding Fabrication

Credits: 3

This course provides instruction on both the creation of schematics and construction of welding projects. The creation of schematics and planning of the project will include blueprints and estimated cost of time, labor and supplies needed. Testing of projects will be used to check correctness and soundness of the created welds. Methods for testing will include both visual and non-destructive methods. Lab Fee Required.

Prerequisite: WELD 130

## WELD 201 - Basic Pipe Welding

## Credits: 3

Instruction in this course will cover the welding of both light and heavy walled pipe. Welding will be completed in all positions using shielded metal arc welding (SMAW) and methods used for fit-up and layout. All welding in this course will follow practices that are permitted by the American Society of Mechanical Engineers (ASME) Section IX and the American Petroleum Institute (API) 1104 and the American Welding Society (AWS) Lab Fee Required.

Prerequisite: WELD 135, WELD 140, WELD 201

## WELD 225 - Ornamental Ironwork

## Credits: 3

Instruction in this course concentrates on welding skills necessary to fashion and manufacture an assortment of ornamental iron forms utilizing tools and equipment that include: forge, anvil, hammers, bending and shaping equipment, oxyfuel welding and cutting, plasma cutting, shielded metal arc welding (stick), and gas metal arc welding (wire). Students are instructed in safe work practices, which are followed. Individual instruction is also encouraged to help critique and improve skills to help meet the student's creative ends. Lab Fee Required.

Prerequisite: WELD 135, WELD 140, WELD 201

## WELD 230 - Creative Welding

## Credits: 3

Instruction in this course emphasizes techniques necessary to produce and manufacture a plethora of forms, utilizing oxyfuel welding and cutting, plasma cutting, shielded metal arc welding (stick), and gas metal arc welding (wire). Students are instructed in safe work practices, which are followed. Individual instruction is also encouraged to help critique and improve skills to help meet the student's creative ends. Lab Fee Required.

Prerequisite: WELD 135, WELD 140, WELD 201

## WELD 205 - Gas Tungsten Arc Welding

Credits: 3
Instruction in this course will cover welding of both light and heavy walled pipe in all positions using shielded metal arc welding (SMAW) while also utilizing methods needed for fit-up and layout, and following steps approved by the American Society of Mechanical Engineers (ASME) Section IX and the American Petroleum Institute (API) 1104 and the American Welding Society (AWS). Lab Fee Required.

Prerequisite: WELD 135, WELD 140, WELD 201

## WELD 280 - Welding Technology Internship

Credits: 3

This course is formatted to offer students hands on experience in careers found in the field of welding. Students will have the opportunity work in either paid or non-paid positions under the supervision of an approved supervisor. Lab Fee Required.

Prerequisite: WELD 135, WELD 140, WELD 201

## Select Courses from One of the Following Programs (P)/Options (O)

(Courses must be approved by appropriate faculty advisor):
Automotive Service Technology (P)
Building Construction Technology (O)
Business Management (P)
Computer Information Systems (P)
Diesel Service Technology (O)
Engineering Science (O)
Graphic Design (P)
Machine Tool Technology (O)

Technology General Education Courses (Recommended)

Recommended courses listed below but student can also choose from the list of approved General Education courses in the College catalog.

## COMS 110 - Computer Concepts \& Applications

## Credits: 3

This course is designed to provide the student with a level of knowledge necessary to function in today's technological society. Topics include computer and network terminology, hardware, software, and processing concepts. A large portion of the class time is dedicated to exercises performed using integrated software packages. Lab Fee Required.

Corequisite: COMS 110S

## Developmental Courses

Students may need to first take some developmental courses that are designed to prepare students for the college-level coursework in their academic plan. This may add to the students' completion time. The number of credits students take each semester will determine when the student will complete his/her program of study.

## Welding Technology, C.O.A.

The Welding Technology Program provides students with a comprehensive understanding of the science, technology, and applications essential for successful employment in the welding and metal industry. In addition to gaining an overall understanding of welding machines, weld processes, and hands-on proficiency, students develop skills in the areas of print reading, welding symbols, metallurgy, weld inspection, destructive and non-destructive testing. Students gain important knowledge and skills necessary to prepare them for weld qualification to code
specifications. Students perform quality welds and cuts, evaluate welds to industry standards, operate metal fabricating equipment, and apply communication skills in the work environment.

## First Year

## Fall Semester

## WELD 101 - Welding Safety

## Credits: 1

This course will familiarize students with the knowledge on welding safety procedures, normal operating procedures; while also covering safe operation and hazards associated with welding.

## WELD 110 - Thermal Cutting and Oxyfuel Welding

## Credits: 3

This course acts as an introduction on various types of thermal cutting and oxyfuel welding and brazing procedures currently used in the industry. Training in the course follows the American Welding Society (AWS) standards of acceptance. Lab Fee Required.

Prerequisite: Proficiency on the English and Basic Math portion of the Placement Test

## WELD 115 - Shielded Metal Arc Welding I

## Credits: 3

This course covers equipment and proper setup of said equipment; while introducing students to electrodes, and electrode selection used in shielded metal arc welding (SMAW). Instruction in this course follows the American Welding Society (AWS) standards of acceptability and teaches student to develop hands on skills necessary to generate quality single and multiple pass welds in all positions while utilizing commonly used filler materials including low hydrogen, non-low hydrogen, and iron powder electrodes. Lab Fee Required.

Prerequisite: Proficiency on the English and Basic Math portion of the Placement Test

Total Semester Hours: 7

Winter Session

Spring Semester

## WELD 105 - Print Reading \& Welding Symbols

Credits: 3
This course covers weld print reading commonly utilized in the welding industry. Print reading to be covered includes at least: the American Welding Society (AWS) welding symbols, sketching, view representation, orthographic projection, measurement, structural steel materials, weld joint configuration and detailing, basic layout, and pipe system design. Lab Fee Required.

Prerequisite: Proficiency on the English and Basic Math portion of the Placement Test

## WELD 120 - Welding Metallurgy

Credits: 2
In this course students will gain the knowledge of basic metallurgical principles in relation to fusion welding. Welding Metallurgy will also include the process, both the physical and mechanical properties, metal type, carbon equivalency, choice of filler metal, heat input (Joules), and the byproduct of heat on the weld zone (HAZ) along with the effects of heat and stress relieving applications within the welding field. Lab Fee Required.

Prerequisite: WELD 101, WELD 105, WELD 110, WELD 115

## WELD 135 - Gas Metal Arc Welding

## Credits: 3

This course includes proper equipment selection and setup, electrode selection, gas selection and techniques used in the gas metal arc welding (GMAW) processes on steel, stainless steel and aluminum. Instruction in this course follows the American Welding Society (AWS) standards of acceptability to develop the hands on skills necessary to generate quality single and multiple pass welds in all positions on all thicknesses of metal plate. Lab Fee Required.

Prerequisite: WELD 120, WELD 125, WELD 130

Total Semester Hours: 8

## Welding Technology, Certificate

The Welding Technology Program provides students with a comprehensive understanding of the science, technology, and applications essential for successful employment in the welding and metal industry. In addition to gaining an overall understanding of welding machines, weld processes, and hands-on proficiency, students develop skills in the areas of print reading, welding symbols, metallurgy, weld inspection, destructive and non-destructive testing. Students gain important knowledge and skills necessary to prepare them for weld qualification to code specifications. Students perform quality welds and cuts, evaluate welds to industry standards, operate metal fabricating equipment, and apply communication skills in the work environment.

## First Year

Fall Semester

ENGL 101 - English Composition I

Credits: 3
This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects which include personal, rhetorical, and expository models. Research skills are introduced.

## WELD 101 - Welding Safety

## Credits: 1

This course will familiarize students with the knowledge on welding safety procedures, normal operating procedures; while also covering safe operation and hazards associated with welding.

## WELD 110 - Thermal Cutting and Oxyfuel Welding

## Credits: 3

This course acts as an introduction on various types of thermal cutting and oxyfuel welding and brazing procedures currently used in the industry. Training in the course follows the American Welding Society (AWS) standards of acceptance. Lab Fee Required.

Prerequisite: Proficiency on the English and Basic Math portion of the Placement Test

## WELD 115 - Shielded Metal Arc Welding I

Credits: 3
This course covers equipment and proper setup of said equipment; while introducing students to electrodes, and electrode selection used in shielded metal arc welding (SMAW). Instruction in this course follows the American Welding Society (AWS) standards of acceptability and teaches student to develop hands on skills necessary to generate quality single and multiple pass welds in all positions while utilizing commonly used filler materials including low hydrogen, non-low hydrogen, and iron powder electrodes. Lab Fee Required.

Prerequisite: Proficiency on the English and Basic Math portion of the Placement Test

Total Semester Hours: 10

Winter Session

Spring Semester

## WELD 105 - Print Reading \& Welding Symbols

## Credits: 3

This course covers weld print reading commonly utilized in the welding industry. Print reading to be covered includes at least: the American Welding Society (AWS) welding symbols, sketching, view representation, orthographic projection, measurement, structural steel materials, weld joint configuration and detailing, basic layout, and pipe system design. Lab Fee Required.

Prerequisite: Proficiency on the English and Basic Math portion of the Placement Test

## WELD 125 - Shielded Metal Arc Welding II

Credits: 3
This course covers equipment and proper setup of said equipment; while going more in depth on electrodes and electrode selection used in shielded metal arc welding (SMAW). Instruction in this course follows the American Welding Society (AWS) standards of acceptability and teaches students to develop the hands on skills necessary to generate quality single and multiple pass welds, in all positions, utilizing increasing diameter electrodes of the low hydrogen and non-low hydrogen filler metals frequently used in the field following the structural steel welding code. Students will weld joints to replicate butt-beam to beam, beam to column splicing, heavy plate and heavy equipment welding. Students learn the skills in the AWS D1.1 Structural Steel Welding Code with low hydrogen electrodes, unlimited plate thickness, and with or without backing in all positions. Lab Fee Required.

Prerequisite: WELD 101, WELD 105, WELD 110, WELD 115

Total Semester Hours: 6

Winter Session

Second Year

## Fall Semester

## MATH 105 - Technical Mathematics

## Credits: 3

This course is intended for students who have introductory algebra proficiency, and who need to apply mathematical concepts in a technical program. The purpose of the course is to prepare AAS students for the mathematical aspects of their work in the technical trades.

Prerequisite: Proficiency on the College Placement Examination or grade of C or better in MATH 017/MATH 023.

## WELD 130 - Flux Cored Arc Welding

## Credits: 3

This course includes proper equipment selection, setup, proper choice of electrodes, and gas selection used in flux cored arc welding (FCAW) and submerged arc welding (SAW). Instruction in the course follows the American Welding Society (AWS) standards of acceptability and teaches students to develop the hands on skills necessary to generate quality single and multiple pass welds in all positions utilizing flux cored electrode wires with and without the presence of shielding gases on medium to heavy plate. Lab Fee Required.

Prerequisite: WELD 101, WELD 105, WELD 110, WELD 115

## WELD 140 - Welding Fabrication

## Credits: 3

This course provides instruction on both the creation of schematics and construction of welding projects. The creation of schematics and planning
of the project will include blueprints and estimated cost of time, labor and supplies needed. Testing of projects will be used to check correctness and soundness of the created welds. Methods for testing will include both visual and non-destructive methods. Lab Fee Required.

Prerequisite: WELD 130

Total Semester Hours: 9

## Spring Semester

## WELD 120 - Welding Metallurgy

## Credits: 2

In this course students will gain the knowledge of basic metallurgical principles in relation to fusion welding. Welding Metallurgy will also include the process, both the physical and mechanical properties, metal type, carbon equivalency, choice of filler metal, heat input (Joules), and the byproduct of heat on the weld zone (HAZ) along with the effects of heat and stress relieving applications within the welding field. Lab Fee Required.

Prerequisite: WELD 101, WELD 105, WELD 110, WELD 115

## WELD 201 - Basic Pipe Welding

## Credits: 3

Instruction in this course will cover the welding of both light and heavy walled pipe. Welding will be completed in all positions using shielded metal arc welding (SMAW) and methods used for fit-up and layout. All welding in this course will follow practices that are permitted by the American Society of Mechanical Engineers (ASME) Section IX and the American Petroleum Institute (API) 1104 and the American Welding Society (AWS) Lab Fee Required.

Prerequisite: WELD 135, WELD 140, WELD 201

Total Semester Hours: 5

## WordPress Theme Design, C.O.A.

This certificate is organized for students seeking hands-on experience in learning the WordPress Content Management System (CMS) and will provide the skills needed to design interactive websites using modern digital tools. The WordPress CMS is an Open Source tool and is one of the most popular platforms for either personal or business website development. Acquire the skills necessary to create a personal WordPress site or blog, a fully optimized e-commerce store, analyze and employ plugins as site enhancements and convey a basic understanding of website architecture.

## First Year

Fall Semester

Credits: 3
This course is an introduction to Web Site Development. Students will receive intensive hands-on experience in coding web pages, including linking, layout and design, forms, graphics, security concerns, and maintaining a Web Site. Lab Fee Required.

Prerequisite: COMS 110 or any course above COMS 110

## GRAD 105 - Vector Graphics \& Page Design

## Credits: 3

This course emphasizes techniques and applications used to produce published documents for both Internet and print media. Students will learn to design documents, publications, and related projects using industry standard software on both MAC and PC platforms. An emphasis is placed on basic computer graphic skills through practical experience with two-dimensional paint and draw programs, as well as layout programs for print and web. Projects covered include advertising design, page layout, computer illustrations, digital imaging, and the scanning and manipulation of images. Lab Fee Required.

Prerequisite: Any COMS course

## GRAD 119 - Website Management for Digital Marketing

Credits: 3
This course is designed to introduce students to WordPress Content Management System for either personal or business website use. The course covers the basics on how to use the WordPress platform including installation, content management, and configuration. Prior web publishing experience is not required. Familiarity with web browsers and email is highly recommended. Lab Fee Required.

## GRAD 128 - Digital Imagery \& Editing

## Credits: 3

This course provides students with the intensive exploration of advanced digital imaging as it applies to photography creating PDF documents, optimizing web graphics and complex layered images. Students will perfect their ability to creatively use digital imaging software to create sophisticated graphics for print and the web. Further study and practical application will be applied to creating documents for both the Internet and print mediums. An emphasis is placed on developing quality portfolio pieces. Lab Fee Required.

## Prerequisite: GRAD 105

Total Semester Hours: 12

Winter Session

## Spring Semester

Credits: 3
This next level course represents the continuation of Website Management for Digital Marketing. It provides students with the opportunity to take their Content Management System skills to the next level. The course content is ideal for those who are already comfortable building WordPress sites, but are looking to work in the field professionally. Students will gain insight and skills needed to build sophisticated, branded and customized websites for themselves and/or their clients. Students will work on their own websites and learn how to install and customize plugins and themes as well as how to update, upgrade, back them up and manage them. Students are required to pay for web hosting and a domain name. Lab Fee Required.

## GRAD 235 - Video and Motion Graphics

## Credits: 3

This course introduces students to software products (editing suites and special effects) that are now widely used in the gaming and entertainment industries for editing and graphic manipulation. Students will learn to use specialized compositing tools to edit scenes, insert graphic effects, place sound effects and blend music to create a final professional product. Software packages used in this class include Adobe's After Effects® and Premiere ${ }^{\circledR}$.

Total Semester Hours: 6

## Catalog Home

Sussex County Community College has been providing quality education to area residents by offering two-year degrees and professional certificates in a wide variety of career fields. The College continues its tradition of high academic standards to help students meet and exceed their goals.

The College is affordable with an open admission policy. The ease of transferring credits to four-year institutions makes Sussex the right choice for students looking to stretch their higher education dollars. As a result, nearly 40 percent of area college-bound students chose to begin their education at Sussex. In addition, we continue to add in-demand programs, giving students viable job opportunities after graduation and employers an added workforce.

The Sussex Online Catalog allows students to access information from a computer or mobile device. It provides program offerings, course content, graduation requirements, financial Aid, tuition, academic program information, and more.

The Online Catalog applies to students entering or returning to Sussex in the 2022-2023 academic year and students whose catalog year is 2022-2023. The catalog year includes the fall, spring, winter, and summer semesters.

## Degree Programs

Sussex County Community College offers programs leading to the Associate in Arts (A.A.), Associate in Fine Arts (A.F.A.), Associate in Science (A.S.) and Associate in Applied Science (A.A.S.) degrees and programs leading to Professional Certificates.

All matriculated students, whether they plan to transfer to a four year institution or complete their college careers at the end of their programs, are eligible for the associate degree or certificate if all graduation requirements set forth in this catalog have been met. The program outlines are offered as guidelines and courses do not necessarily need to be taken in the order suggested. Please note that many courses require prerequisites.

Academic programs are subject to change. Students should contact the Academic Affairs Office or the Student Advising and Counseling Center for the most current information.

## Certificates

## Career Programs

## Associates in Applied Science

- 3D Computer Arts Option, A.A.S. - Graphic Design
- Agricultural Business, A.A.S.
- Automotive Service Technology, A.A.S.
- Building Construction Technology Option, A.A.S. - Technical Studies
- Business Management, A.A.S.
- Child Development Specialist, A.A.S.
- Computer Information Systems, A.A.S.
- Cosmetology Option, A.A.S. - Technical Studies
- Culinary Arts Option, A.A.S. - Technical Studies
- Diesel Service Technology Option, A.A.S. - Technical Studies
- Digital Forensics Option, A.A.S. - Computer Information Systems
- Electronic Music and Recording Option, A.A.S. - Technical Studies
- Fire Science Technology, A.A.S.
- Game Development Option, A.A.S. - Computer Information Systems
- Graphic Design, A.A.S.
- Health Science, A.A.S.
- Hotel and Restaurant Management Option, A.A.S. - Business Management
- Illustration Option, A.A.S. - Graphic Design
- Information Technology Option, A.A.S. - Computer Information Systems
- Machine Tool Technology Option, A.A.S. - Technical Studies
- New Media Communication, A.A.S.
- Nurse Education, A.A.S.
- Optics Technology Option, A.A.S. - Technical Studies
- Paralegal Studies, A.A.S.
- Digital Marketing Option, A.A.S. - Graphic Design
- Supply Chain Management, A.A.S. - Technical Studies
- Technical Studies, A.A.S.
- Technical Theater Option, A.A.S. - Technical Studies
- Welding Technology Option, A.A.S. - Technical Studies


## Certificates

- Automotive Service Technology, Certificate
- Child Development Specialist, Certificate
- Computer Information Systems, Certificate
- Computerized Accounting, Certificate
- Culinary Arts, Certificate
- Digital Journalism, Certificate
- Elder Law Specialist, Certificate
- Fire Science Technology, Certificate
- Machine Tool Technology, Certificate
- Medical Assistant, Certificate
- Optics Technology: CNC, Certificate
- Optics Technology: Conventional, Certificate
- Optics Technology: Metrology, Certificate
- Paralegal, Certificate
- Supply Chain Management, Certificate
- Web Design, Certificate
- Welding Technology, Certificate


## Transfer Programs

## Associate in Arts

- Anthropology Option, A.A. - Liberal Arts
- Communications/Journalism Option, A.A. - Liberal Arts
- Communications/Broadcast Option, A.A. - Liberal Arts
- Communications/Film Study Option, A.A. - Liberal Arts
- Elementary/Secondary Education Option, A.A. - Liberal Arts
- English Option, A.A. - Liberal Arts
- History Option, A.A. - Liberal Arts
- Liberal Arts, A.A.
- Music Option, A.A. - Liberal Arts
- Musical Theater Option, A.A. - Liberal Arts
- Political Science Option, A.A. - Liberal Arts
- Pre-Law Option, A.A. - Liberal Arts
- Psychology Option, A.A. - Liberal Arts
- Sociology Option, A.A. - Liberal Arts
- Theater Arts Option, A.A. - Liberal Arts


## Associate in Fine Arts

- Architecture Design Option, A.F.A. - Studio Arts
- Art Education Option, A.F.A. - Studio Arts
- Fashion Design Option, A.F.A. - Studio Arts
- Interior Design Option, A.F.A. - Studio Arts
- Photography Option, A.F.A. - Studio Arts
- Studio Arts, A.F.A.


## Associate in Science

- Accounting, A.S.
- Biology Option, A.S. - Science/Mathematics
- Business Administration, A.S.
- Chemistry Option, A.S. - Science/Mathematics
- Computer Science Option, A.S. - Science/Mathematics
- Criminal Justice, A.S.
- Engineering Science Option, A.S. - Science/Mathematics
- Environmental Studies, A.S.
- Exercise Science, A.S.
- Geology Option, A.S. - Science/Mathematics
- Horticultural Science, A.S.
- Human Services, A.S.
- Information Systems Option, A.S. - Science/Mathematics
- Mathematics Option, A.S. - Science/Mathematics
- Pre Medical/Dental Option, A.S. - Science/Mathematics
- Pre Nutrition/Dietetic Option, A.S. - Science/Mathematics


## Course Descriptions

## Accounting

Credits: 3
This course is a study of accounting principles and procedures. The accounting cycle is covered for a service industry. Additional topics include accounting for merchandising operations; cash and short-term investments; inventory; the acquisition, allocation, and disposal of tangible and intangible assets; and current liabilities.

# ACCT 102 - Accounting Princ. II Managerial 

Credits: 3
This course addresses managerial accounting concepts which are necessary for decision-making, performance evaluation, planning, and control. Emphasis is placed on using accounting data as a tool to enhance the information's usefulness to the firm's management. The course deals with corporate equity, the management cycle, product costing methods and standards, responsibility accounting and segment analysis, budgeting, costbehaviors, activity-based systems, statement analysis, and preparation of the statement of cash flow. Quantitative methods necessary for managerial accounting will be emphasized.

Prerequisite: ACCT 101 (Grade of C or better)

ACCT 107-Computerized Accounting
ACCT 107-Computerized Accounting

Credits: 3
This course is designed to provide students with a working knowledge of accounting software packages used in industry. The software packages will be representative of the various types on the market. Students will use the following accounting modules: general ledger, accounts receivable, accounts payable, fixed assets, payroll, and cash receipts/payments. Lab Fee Required.

Prerequisite: ACCT 101 (Grade of C or better)

ACCT 201 - Intermediate Accounting I
ACCT 201 - Intermediate Accounting I

Credits: 3
This course is a continued study of the theory and practices of accounting principles regarding the preparation of financial statements. Included is the in-depth study of accounting for assets, liabilities, equities, revenues and expenses at an advanced level.

Prerequisite: ACCT 102 (Grade of C or better)
ACCT 202 - Intermediate Accounting II

## ACCT 202 - Intermediate Accounting II

Credits: 3
This course is an in-depth study of the integral parts of financial statement analysis in accounting concepts. Special accounting applications involving complex business transactions are explained in detail.

Prerequisite: ACCT 201 (Grade of C or better)

## ACCT 205 - Payroll Accounting

Credits: 3
This course is designed to prepare students to enter into the payroll accounting profession. Students learn the various federal and state requirements that govern payroll record keeping and reporting. The student will study ways to implement the requirements in both a manual and an automated payroll environment.

Prerequisite: ACCT 101 (Grade of C or better)
ACCT 250 - Special Topics in Accounting

## ACCT 250 - Special Topics in Accounting

Credits: 3
This course focuses on selected topics in accounting. Since topics may change each time the course is offered, students should consult the courseoffering schedule each semester.

## Agricultural Science

AGSC 101 - Intro. to Agricultural Science

## AGSC 101 - Intro. to Agricultural Science

Credits: 3
This course introduces students to career opportunities and the general concepts of horticulture which includes plant taxonomy, physiology, crops, and their general management.

AGSC 107 - Agriculture Pest Control \& Mgmt.

## AGSC 107 - Agriculture Pest Control \& Mgmt.

Credits: 4
This course is designed to introduce the student to the fundamental theories, principles, and practices of pest control for agriculture and ornamental horticulture crops. Diagnostic skills for insect, disease, and weed identification are presented.

Corequisite: AGSC 107L
AGSC 150 - Organic Farming

## AGSC 150 - Organic Farming

Credits: 4
This course prepares students with the fundamental knowledge and skills to grow organic food, flowers and culinary herbs. Principles of soil biology and plant health management will be covered along with field planning, scheduling, harvest and storage following the standards set forth by the National Organic Program. Lab Fee Required.

## AGSC 201 - Agricultural Marketing

Credits: 3
This course covers the practices used in the marketing of farm products. Principles of farm cooperatives, farm markets and stores, crop planning, methods of distribution, research procedures and marketing problems facing the farmer today will be discussed.

Prerequisite: BUSA 101 (Grade of C or better)
AGSC 240 - Agricultural Science Internship

## AGSC 240 - Agricultural Science Internship

Credits: 3
This course is a capstone experience offering students the opportunity to integrate work experience and classroom instruction through the joint efforts of the employer, the College, and the student. Trainees, with the assistance of their teacher-coordinator and worksite supervisor(s), pursue their occupation career objective through group and individualized instruction. Lab Fee Required.

Prerequisite: 9 Credits in Agricultural Business or Horticultural Science, Permission of Program Coordinator

American Sign Language

AMSL 101 - American Sign Language I

## AMSL 101 - American Sign Language I

Credits: 3
This course is designed to develop basic communicative skills in American Sign Language. This course will emphasize grammatical structures, sign vocabulary, fingerspelling, numbers, expressive and receptive skills, facial grammar and non-manual communication, and the anatomy and physiology of the human hearing system and hearing loss. Additionally, this course provides an introduction to the culture of the Deaf community.

Corequisite: ENGL 021 and ENGL 032

## AMSL 102 - American Sign Language II

## AMSL 102 - American Sign Language II

Credits: 3
This course strengthens students' expressive and receptive skills in American Sign Language, broadens their understanding of the Deaf community, culture and language, and provides an additional vocabulary base of several hundred signs from American Sign Language. This course instructs the student in the use of classifiers as well as providing them with an introduction to the idiomatic vocabulary of American Sign Language.

Prerequisite: AMSL 101

## Credits: 3

This course will instruct the student in the expressive and receptive communication skills, vocabulary (including classifiers and commonly used idiomatic expressions) commonly used among the Deaf culture and community. The student will learn to isolate the concepts expressed in spoken English, and to transpose them into the idiomatic expressions of American Sign Language.

Prerequisite: AMSL 102

## Anthropology

ANTH 101 - Introduction to Anthropology

## ANTH 101 - Introduction to Anthropology

Credits: 3
This course is an integrated overview of the four fields of anthropology. Physical anthropology, cultural anthropology, linguistics, and archeology are explored as subfields and together as an integrated whole. Emphasis is placed on the study of the social and biological origins of human culture, religious diversity, linguistic diversity, and patterns of social inequalities.

## ANTH 115 - Biological Anthropology

## ANTH 115 - Biological Anthropology

Credits: 4
This course examines how Homo sapiens evolved. It starts with a core understanding of scientific methodology, evolutionary theory, and the genetic code. The paleontological record and methodologies for dating fossils and artifacts are studied. Anatomy, behavior, and classification of non-human primates with emphasis on the common ancestry Homo sapiens share with them are studied. Comparison and contrasting primate and hominin fossil records over the last 8 million years are also studied. Students will examine Paleolithic artifacts that highlight critical periods of human evolution. The course surveys human phenotypic diversity across clinical gradations. The interplay between anatomically modern human biology and cultural behavior is shown to be a key to understanding human evolution.

Prerequisite: Proficiency in Reading, Writing \& Math on College Placement Test or equivalency.

## ANTH 120 - Cultural Anthropology

## ANTH 120-Cultural Anthropology

Credits: 3
This course is a study of a broad range of human behavior from a cross-cultural perspective including language and communication, concepts of love \& beauty, marriage \& the family, economic systems \& political organization and religion \& magic. This course provides a background to human cultural origins and variability.

## ANTH 131 - Principles of Archaeology

## ANTH 131 - Principles of Archaeology

## Credits: 3

This is an introductory course in archeology. A major focus is on the interpretation of material culture to answer questions about human evolution

# ANTH 133 - Archaeology Field Methods 

## Credits: 3

This course offers an introduction to the tools and field methods of archaeology. Students will participate in a scientific endeavor rather than a simulation. Field instruction will be carried out at an archaeological site registered with the New Jersey State Museum. Topics will include mapping sites, site preparation, grid set-up, shovel testing, trowel excavation, recording data, the basics of soils classification, and artifact identification and interpretation. Emphasis will be placed on the relevance of archaeology for understanding the history of local communities. Students will become familiar with the methods and theory behind historical archaeology, Pre-Contact archaeology, colonial archaeology and preindustrial archaeology.

## ANTH 150 - Magic, Myth \& Religion

Credits: 3
This course examines the spectrum of human interaction with the supernatural. A major focus is on belief systems and practitioners that make the supernatural meaningful and relevant to people's lives. Modern and traditional beliefs and rituals are studied from a cross-cultural perspective, including many from American culture. The universality of the religious experience, religion's role in creating social structures, and altered states of consciousness are also studied.

ANTH 220 - Environment \& Cultural Behavior

## ANTH 220 - Environment \& Cultural Behavior

Credits: 3
This course is an anthropological approach to human environmental issues and global environmental problems and the various ways people worldwide have come to adapt to a wide variety of habitats. Strategies and their environmental consequences used by hunter gatherers, subsistence herders, horticulturists, agriculturalists, and industrial societies are explored. Peoples and environments of Africa, the Americas, Asia, Europe, Australia, and Oceania are studied.

ANTH 250 - Special Topics in Anthropology

## ANTH 250 - Special Topics in Anthropology

Credits: 3
This course focuses on selected topics in Anthropology. Since topics may change each time the course is offered, students should consult the course-offering schedule each semester.

## AOTE 101 - Automotive Fundamentals

Credits: 3
This course is designed as an entry-level survey of automotive systems and their repair. It is a prerequisite for all other automotive technology courses. With approval of the program coordinator, appropriate ASE certification may be substituted for this course. Lab Fee Required.

Corequisite: AOTE 110
AOTE 110 - Automotive Electrical Systems

## AOTE 110 - Automotive Electrical Systems

Credits: 3
This course is designed to apply knowledge of electricity and electronics specifically to automotive systems. Topics include starting, charging, fuel injections, ignition, body electrical systems, and electrical accessories. This course helps prepare students for ASE certification. Lab Fee Required.

Corequisite/Prerequisite: AOTE 101
AOTE 118 - Auto. Heating \& Air Conditioning

## AOTE 118 - Auto. Heating \& Air Conditioning

Credits: 3
This course focuses on the principles of operation and service techniques of automobile air conditioning systems. Topics include component familiarization, testing, diagnosing, charging and repair. This course helps prepare students for ASE certification. Lab Fee Required.

Corequisite/Prerequisite: AOTE 101 and AOTE 110
AOTE 120 - Automotive Brake Systems

## AOTE 120 - Automotive Brake Systems

## Credits: 3

This course will explore the automotive brake system in depth. Diagnosis and repair of both drum and disk brake systems, power brake boosters, master and wheel cylinders will be covered. Traction control and anti-lock brake systems are covered from operating principles through diagnosis and repair. This course helps prepare students for ASE certification. Lab Fee Required.

Prerequisite: AOTE 101 and AOTE 110
AOTE 130 - Steering \& Suspension Systems

## AOTE 130 - Steering \& Suspension Systems

## Credits: 3

This course will explore the automotive steering and suspension systems in depth. Detailed instruction of design, operating principles and service of these systems will be covered. Tires, tire construction, steering geometry and alignment angles are studied. Proper techniques and procedures
for complete front-end service, wheel alignment, wheel balance and steering mechanisms is covered. This course helps prepare students for ASE certification. Lab Fee Required.

Prerequisite: AOTE 101 and AOTE 110
AOTE 203 - Engine Construction, Operation \& Service

## AOTE 203 - Engine Construction, Operation \& Service

Credits: 3
This course will cover proper diagnosis, disassembly, inspection and rebuilding techniques. Use of diagnostic, measuring and machine shop equipment will be included as the students disassemble and rebuild a complete engine. This course helps prepare students for ASE certification. Lab Fee Required.

Prerequisite: AOTE 101
AOTE 204 - Manual Trans. \& Drivelines

## AOTE 204 - Manual Trans. \& Drivelines

Credits: 3
This course will cover the principles of manual transmissions, their operation and service. Topics will include drivelines, differentials, clutches, U-joints, RWD, FWD, and 4-wheel drive. This course helps prepare students for ASE certification. Lab Fee Required.

Prerequisite: AOTE 101
AOTE 206 - Auto. Transmissions \& Transaxles

## AOTE 206 - Auto. Transmissions \& Transaxles

Credits: 3
This course will emphasize the theory, operation and diagnosis of automatic transmissions and transaxles. Rebuilding of automatic transmissions will be introduced. This course helps prepare students for ASE certification. Lab Fee Required.

Prerequisite: AOTE 101
AOTE 208 - Advanced Automotive Electronics

## AOTE 208 - Advanced Automotive Electronics

## Credits: 3

This course reviews basic fundamentals then proceeds into semi-conductors, amplifiers, integrated circuits and microprocessors as they relate to the automobile. Practical application of theory is stressed as part of diagnoses, trouble shooting, repair and use of diagnostic equipment. This course helps prepare students for ASE certification. Lab Fee Required.

Prerequisite: AOTE 101

## AOTE 215 - Automotive Engine Performance

Credits: 3
This course will cover engine mechanical ignition and fuel system diagnosis and repair. The students will use latest diagnostic procedures and equipment as well as appropriate service bulletins and manuals to obtain necessary tune-up specifications. This course helps prepare students for ASE certification. Lab Fee Required.

Prerequisite: AOTE 101

## AOTE 255 - Automotive Proficiencies

## AOTE 255 - Automotive Proficiencies

Credits: 3
This course is designed to have the automotive technology student gain practical experience and enhance class/lab learning. The student is presented with practical work tasks in all basic automotive subject areas. Lab Fee Required.

Prerequisite: ALL AOTE technical courses and permission of the Program Coordinator.

AOTE 261 - Service Center Education Class

## AOTE 261 - Service Center Education Class

## Credits: 1

This course is designed for automotive students who are on internship. The course teaches/reinforces work skills and attitudes, cooperative work behavior, and workplace expectations.

## AOTE 262 - Service Center Internship

## AOTE 262 - Service Center Internship

Credits: 3
This course is designed to have the automotive technology student gain practical experience and enhance class/lab learning. The student spends a total of 135 hours in a repair facility.

Prerequisite: All AOTE technical courses or permission of the Program Coordinator

## Art

ARTA 101 - Basic Design

## ARTA 101 - Basic Design

Credits: 3
This course provides an introduction to the practical and theoretical applications of two-dimensional design. This is a lecture course where students explore methods for developing their intuitive responses to form and shape, line, color and value, space, and other basic elements of composition and design.

## ARTA 103 - Art History I

Credits: 3
This course surveys visual artistic expression from the Neolithic period to the fourteenth century, including ancient, medieval and non-European art forms. The development of artistic concepts in the ancient world, gender, and non-western art are central topics in this general survey course.

Prerequisite: ENGL 021, ENGL 032 or Placement into ENGL 101

## ARTA 104 - Art History II

## ARTA 104 - Art History II

## Credits: 3

This course surveys the history of art from the fourteenth through the twenty first centuries. The development of artistic concepts in the contemporary world, art and gender, and non-western art and architecture are central topics in this general survey course. Emphasis is place on viewing art forms in context of culture and gender and understanding the philosophical foundations and critical theories that support and influence them

Prerequisite: ENGL 021, ENGL 032 or Placement into ENGL 101

## ARTA 106 - Art Appreciation

## ARTA 106 - Art Appreciation

Credits: 3
This course builds an informed foundation for students wishing to understand and enjoy art. Art theory, practice, and history are introduced, through which students expand their awareness of visual arts and are encouraged to realize their own innate creative potential. All mediums are studied: painting, sculpture, photography, multimedia, film, design, and printmaking, including a comprehensive global/gender inclusive art history survey.

Prerequisite: ENGL 011

## ARTA 107 - History of Contemporary Art

## ARTA 107 - History of Contemporary Art

## Credits: 3

This course surveys the history of Contemporary Art, beginning with its roots in the Modernism of Europe at the beginning of the twentieth century and developing comparisons and historical connections to Contemporary Art in today's world art market. Emphasis is placed on viewing art forms in context of their history and intention and understanding the philosophical foundations and critical theories that support and influence them.

Credits: 3
This course introduces students to the basic foundations of drawing methods, including a broad-based survey of art history and appreciation. Students experiment with a variety of materials: pencil, charcoal, and conte-crayon practicing 1,2 and 3 point perspective, and elemental architectural drawing techniques within an historical context. Students explore various elements of personal expression while comparing their efforts to major works of art. The course also introduces the art of still life, landscape, portrait, life drawing, gesture and contour drawing and classical drawing techniques. Studio fee required.

ARTA 110 - Intro to Color

## ARTA 110 - Intro to Color

Credits: 3
This course develops an understanding of the expressive and compositional qualities of color and its role in the creation of art and design through lectures and experiment. Various color theories and their applications are explored with reference to works of art. Students create compositions using color as the primary criteria for expression. Studio fee required.

ARTA 115 - Three Dimensional Design
ARTA 115 - Three Dimensional Design

Credits: 3
This course introduces the basic concepts of three-dimensional design. In a workshop setting students examine three-dimensional relationships and explore methods of shaping and structuring space. Lab Fee Required.

ARTA 120 - Introduction to Fibers

## ARTA 120 - Introduction to Fibers

Credits: 3
This course will introduce students to many varied fiber techniques including weaving, dyeing, and off-loom constructions. Knotless netting, feltmaking, coiling, twining, and papermaking as well as surface design on fabric will be included. Screenprinting, blockprinting, batik, and shibori are also among the techniques explored. Personal imagery and individual ways of working with a combination of these techniques will be the focus of this course. Lab Fee Required.

ARTA 135 - Alternative Processes in Photography
ARTA 135 - Alternative Processes in Photography

Credits: 3
This studio course introduces the art and/or photography student to hand coated photographic processes that may include cyanotype, gum bichromate, vandyke printing as well as experimental methods allowing for artistic expression. Methods for production of enlarged duplicate negatives will be covered. Art and painting students will be challenged to explore the various expressive methods using film as a point of departure. Offered Spring Only. Studio Fee Required.

## ARTA 150 - Life Drawing I

Credits: 3
This course establishes the basic vocabulary necessary to begin drawing the human form. It defines the concepts of the "nude" as an art form and as a point of departure for all other forms of drawing. Emphasis is placed on gesture and contour drawings, use of drawing materials, anatomy studies, and drawing the human form in traditional ways. Studio Fee Required.

ARTA 156 - Life Drawing II

## ARTA 156 - Life Drawing II

Credits: 3
This studio course further develops the range and quality of a student's drawing. The life model is used and personal interpretation is stressed. Studio Fee Required.

## ARTA 160 - Landscape Drawing

## ARTA 160 - Landscape Drawing

Credits: 3
This course provides direct practical experience drawing in the landscape using the SCCC campus and other Sussex County sites as resources. Works by master landscape artists are also studied for reference and inspiration. Lab Fee Required.

## ARTA 170 - Portrait Drawing

## ARTA 170 - Portrait Drawing

Credits: 3
This is a course in portrait drawing using pastel, pencil, and charcoal. Focus will be on anatomy and likeness as well as mark making, shading, and understanding volume. Lab Fee Required.

ARTA 173 - Intro. to Sculpture

## ARTA 173 - Intro. to Sculpture

## Credits: 3

This course will explore the properties of three-dimensional materials that may include plaster, metal, stone, wood or clay. Students will learn to model, carve, and construct in a variety of media. Studio Fee Required.

ARTA 175-Ceramics I

Credits: 3
This beginning studio course introduces the basic principles and techniques of form making in ceramic media, as well as fundamentals of idea research and transformation. A variety of processes, such as hand building and wheelthrowing, are covered; slipping, glazing and firing techniques are also introduced. The history of ceramics complements studio practice. Students also learn safe use of appropriate equipment and studio organization. Offered through the SCCC/PVCC Alliance, this course will utilize the PVCC Ceramics Studio. Lab Fee Required.

## ARTA 180 - Painting I

## ARTA 180 - Painting I

Credits: 3
This course is an introduction to the basic materials and techniques of the oil/acrylic medium. Still life, models, and landscape subjects are explored, and historical and contemporary masterworks are used as references. The emphasis is upon composition, color, and experimentation with paint as a foundation for developing a personal visual language. Lab Fee Required.

## ARTA 185 - Digital Fine Art I

## ARTA 185 - Digital Fine Art I

Credits: 3
This fine art course serves as an introduction to the history, theory and software applications that are currently employed in the field of digital art. As a foundation for future creative endeavors, students will gain understanding of the aesthetic and creative possibilities inherent in the relationship between digital and traditional fine art mediums. Using digital tools, students will engage in drawing and painting. Lab Fee Required.

Prerequisite: ARTA 101 and ARTA 180

## ARTA 186 - Digital Fine Art II

## ARTA 186 - Digital Fine Art II

Credits: 3
This fine art course advances knowledge of contemporary aesthetic issues particular to the fine art digital realm and builds upon the theoretical and technical foundation acquired in ARTA 185: Digital Fine Art I. Students will expand the expressive potential of their developing visual language. Lab Fee Required.

Prerequisite: ARTA 185 or permission of instructor

## ARTA 195 - Printmaking

## ARTA 195 - Printmaking

## Credits: 3

This studio course provides an introduction to printmaking as an art form and explores the aesthetic possibilities of linoleum and wood-block relief printing, as well as experimenting with the monotype and other printmaking techniques. It provides opportunities for graphic and fine art students to expand their expressive visual language, improve drawing ability, and learn about the historical and contemporary printed multiple images. Basic studio methodologies and non-toxic materials will be employed. Lab Fee Required.

## ARTA 200 - Watercolor

## Credits: 3

This course offers an opportunity to explore the watercolor medium and its expressive range. A contemporary approach provides for experimentation with various techniques. Lab Fee Required.

## ARTA 201 - Painting II

## ARTA 201 - Painting II

## Credits: 3

Students learn to articulate a language of form and color with greater emphasis upon experimentation and developing personal expression in the work. Reference to traditional and contemporary masterworks is provided. Lab Fee Required.

Prerequisite: ARTA 180 or Permission of Instructor
ARTA 210 - Drawing From The Still Life

## ARTA 210 - Drawing From The Still Life

## Credits: 3

This course develops drawing ability as well as perceptual skills by concentrating upon the kinds of problems which the still life subject offers. There is emphasis placed upon rendering forms and their spatial relationships and understanding composition as an element of personal expression. The class works from different kinds of set-ups and will refer to works which show how artists have been drawn to this subject from the time of ancient Pompeii to the present. Lab Fee Required.

## ARTA 215 - Advanced Drawing

## ARTA 215 - Advanced Drawing

## Credits: 3

This studio course continues the development of drawing skills through observation, with an emphasis on visual problem-solving, achieving personal form qualities and demonstrating the ability to expressively use visual language. It is designed to support ideas being developed in other media for students beyond the beginning level. Traditional and experimental drawing materials, techniques, and subjects, including the life model, are employed. Lab Fee Required.

Prerequisite: ARTA 150

## ARTA 220 - Ceramics II

## ARTA 220 - Ceramics II

## Credits: 3

This course affords the student the opportunity to extend his/her knowledge and understanding of ceramics processes at the intermediate level. Included are advanced hand building techniques in conjunction with wheelthrowing and molding. In addition, students will be expected to learn to

## ARTA 250-Special Topics in Art

## ARTA 250 - Special Topics in Art

## Credits: 3

This course focuses on selected topics in art. Since the topics may change each time the course is offered, students should consult the courseoffering schedule each semester.

## ARTA 260 - Portfolio Development

## ARTA 260 - Portfolio Development

Credits: 3
This course prepares students to graduate with the professional skills necessary for gallery representation or transfer to a four-year fine art institution, as reflected in a prepared portfolio. Each student creates an articulate "artist's statement" and a finished professional portfolio of original artwork. Studio Fee Required.

## ARTA 262 - Portfolio for Architecture Design

## ARTA 262 - Portfolio for Architecture Design

## Credits: 2

This lecture course explains architectural design in an historical context and compares students' work to multi-cultural models. Students create individual artist statements and construct professional portfolios of original designs to enable transfer to a four-year degree program and/or internship in architecture.

Prerequisite: Instructor Permission Required

## Biology

BIOS 010 - Intro to Biological Concepts

## BIOS 010 - Intro to Biological Concepts

## Credits: 3

This course is a preparatory course designed to familiarize the beginning college student with selected biological principles and concepts. The course is for students who have a limited background in biology and for those who have not studied biology recently. A self-paced teaching method is used, and there is extensive use of computer assisted instruction. Topics include scientific method, levels of organization, cells, energy, medical terminology, and evolution. This course is not designed to transfer.

## BIOS 101 - General Biology

Credits: 4
This course introduces the student to the principles of modem biology. Emphasis is on the chemistry, structure, heredity, reproduction, development, ecology, and evolution of living things. For non-science majors. Lab Fee Required.

Corequisite: BIOS 101L
BIOS 102 - Intro. to Human Biology

## BIOS 102 - Intro. to Human Biology

## Credits: 4

This course is an introduction to human anatomy and physiology for the non-biology major. It is designed to develop an appreciation for the structure and functions of the human body; to point out the relationship of body systems to health and disease; and to emphasize human biology as it relates to everyday living experiences. Lab Fee Required.

Corequisite: BIOS 102L
BIOS 103 - Anatomy \& Physiology I

## BIOS 103 - Anatomy \& Physiology I

## Credits: 4

This course is a systematic study of the structure and functions of the human body. Topics include general terminology, cells, tissues, integumentary, muscular, and nervous systems. Lab Fee Required.

Corequisite: BIOS 103L
BIOS 104 - Anatomy \& Physiology II
BIOS 104 - Anatomy \& Physiology II

## Credits: 4

This course is a continuation of Anatomy and Physiology I. Topics include the endocrine, circulatory, immune, respiratory, digestive, urinary, and reproductive systems. Lab Fee Required.

Corequisite: BIOS 104L
Prerequisite: BIOS 103 (Grade of C or better)

## BIOS 107 - Nutrition Fundamentals

## BIOS 107 - Nutrition Fundamentals

## Credits: 3

This course is designed to acquaint students with nutritional research concepts, the role of nutrients in the human body, the relation of nutrition to human behavior, and the study of nutrition-related health problems. This course interweaves concepts related to the science of human metabolism and body composition.

# BIOS 108 - Introduction to Environmental Sustainability 

## Credits: 4

This course is designed to explore the factors influencing the environment and to increase awareness of environmental problems and solutions. The student will learn scientific methods and scientific knowledge of issues of a sustainable future. Topics include population, energy, natural resources, food, water, biodiversity, waste management, global climate change, and the social, legal, ethical and cultural impacts of human interaction with the environment. Many issues will be examined from varying points of view, requiring comparisons of different attitudes and considerations. Ethical implications of action, policy, and situations will be examined. Lab exercises and service learning will supplement the theory presented. Volunteer work or the equivalent will be required. Purchase of lab equipment required.

Corequisite: BIOS 108L
BIOS 110 - Biology I

## BIOS 110 - Biology I

## Credits: 4

This course is designed to familiarize the student with the general principles and unifying concepts of biological science. Topics include scientific investigations, the physical and chemical properties of living matter, cell structure and function, energy transformations, genetics, evolution and diversity. Lab Fee Required.

Corequisite: BIOS 110L
Prerequisite: MATH 040 or the approved score on the College Level Math Placement Test

BIOS 112 - Biology II

## BIOS 112 - Biology II

## Credits: 4

This course is a continuation of Biology I and maintains its emphasis on major biological concepts and connections. Topics include plant and animal structure and function, reproduction, development, and ecology. Lab Fee Required.

Corequisite: BIOS 112L
Prerequisite: BIOS 110 (Grade of C or better)

BIOS 122 - Intro. to Environmental Science

## BIOS 122 - Intro. to Environmental Science

## Credits: 4

This course is designed to explore the factors influencing the environment and to increase awareness of environmental problems. Topics include air, land, and water resources, ecology, waste management, and the human effects on the environment. Lab exercises and field trips will supplement the theory presented. Lab Fee Required.

Corequisite: BIOS 122L

## BIOS 124 - Ecology

Credits: 4
This course is designed to familiarize the student with the basic concepts of ecology and field biology. Topics include ecosystems, communities, population dynamics, and energy flow. Lab exercises and fieldwork will supplement the theory. Lab Fee Required.

Corequisite: BIOS 124L
Prerequisite: MATH 110

BIOS 130 - Introduction to Botany

## BIOS 130 - Introduction to Botany

## Credits: 4

This course is designed to study the structural and functional adaptations of algae and plants to the environment. It includes the study of the following processes: Seed germination, growth, photosynthesis, reproduction, and transport. Plant evolution and their relationship to the environment and to humans will be discussed. The laboratory component of the course includes field and laboratory studies of plant diversity, morphology and physiology. Students will design and carry out their own independent investigations. Lab Fee Required.

Corequisite: BIOS 130L
Prerequisite: BIOS 110 or Permission of Instructor

BIOS 150 - Nutrition, Fitness \& Wellness

## BIOS 150 - Nutrition, Fitness \& Wellness

## Credits: 3

This course covers topics in sports nutrition and basic exercise science. The primary goal of this course is to develop the student's understanding of how food fuels the body and affects optimal fitness and sports performance. Students will gain an in-depth understanding of the roles of carbohydrate, protein, and fat in the diets of active people as well as the role that nutrition plays in disease prevention. Consideration is also given to the ways in which food, fluids, and nutritional supplements support optimal health and training, performance, and recovery.

BIOS 210 - Microbiology

## BIOS 210 - Microbiology

## Credits: 4

This course involves a systematic study of microorganisms. Topics include the classification, structure, function, genetics, ecology, and control of microbes. Clinical aspects, infection and immunity, and industrial aspects of microbiology will also be covered. Lab Fee Required.

Corequisite: BIOS 210L
Prerequisite: One previous semester of science
BIOS 250 - Special Topics in Biology

## BIOS 250 - Special Topics in Biology

## Credits: 4

This course focuses on selected topics in Biology. Since topics may change each time the course is offered, students should consult the course

## Building Construction

BCST 101 - Intro. to Building Construction

## BCST 101 - Intro. to Building Construction

## Credits: 1

This course is a survey of the construction industry including a brief overview the overall construction processes from initial concept through startup of the complete facility, career opportunities in the construction industry, employability, and an introduction to the materials and systems used in construction, with an emphasis on vocabulary building. Students will become familiar with The U.S. Green Building Council Leadership in Energy and Environmental Design (LEED).

Corequisite: BCST 103 Construction Safety, Tools and Equipment
BCST 103 - Construction, Safety, Tools \& Equipment

## BCST 103 - Construction, Safety, Tools \& <br> Equipment

Credits: 2
This course is designed to identify, reduce, and eliminate construction-related hazards by studying safety regulations and agencies. Students will survey hand and power tools typically used to perform construction work, the maintenance of tools and equipment, and emerging tool technology. Emphasis is on OSHA safety standards, hand and power tools and equipment safety, rigging, communication, health standards, confined space entry, hazardous materials, and right to know.

Corequisite: BCST 101 Introduction to Building Construction
BCST 112 - Print Reading and Sketching

## BCST 112 - Print Reading and Sketching

## Credits: 3

This course is a thorough exploration into the structure of blueprints and reading them. Emphasis is on components of blueprints, basic technical diagrams, interpretation of building, piping and plumbing, electrical, air conditioning and refrigeration drawings. Students will practice techniques to create pictorial and multiple-view drawings in the style of a blueprint to convey information simply and completely. Lab Fee Required.

## BCST 125-Codes in Construction

## BCST 125 - Codes in Construction

## Credits: 1

This course explores the current International Residential Code (IRC) for residential buildings and the interpretation of code language, tables, and illustrations. Emphasis is on identification of requirements for building planning, foundations, floors, walls, ceilings, roof assemblies, and energy efficiency. Exploration into requirements for radon control, methods, and existing structures will be covered.

# BCST 130 - Construction Site Preparation and Layout 

Credits: 1
This course explores the current International Residential Code (IRC) for residential buildings and the interpretation of code language, tables, and illustrations. Emphasis is on identification of requirements for building planning, foundations, floors, walls, ceilings, roof assemblies, and energy efficiency. Exploration into requirements for radon control, methods, and existing structures will be covered.

## BCST 142 - Construction Materials and Methods I

## Credits: 3

This course is a study of residential and commercial building erection and fabrication techniques and construction materials. Proper terminology, usage and sustainability of traditional wood, steel, masonry, concrete materials and prefabricated/premanufactured methods and materials will be covered. Students will work to complete a construction project. Lab fee required.

Prerequisite: BCST 101 Introduction to Construction, BCST 103 Construction Safety, Tools and Equipment, BCST 112 Print Reading and Sketching, and BCST 125 Codes in Construction

## BCST 150 - Intro. to Electrical and Mechanical Systems

## BCST 150 - Intro. to Electrical and Mechanical Systems

Credits: 2
This course is a study of electrical and mechanical systems, how they are built, and how they affect the construction project. Topics will include evaluation of construction drawings, air conditioning, heating, plumbing, fire protection, electrical power and lighting, and building control materials and systems. Lab fee required.

Prerequisite: BCST 101 Introduction to Construction, BCST 103 Construction Safety, Tools and Equipment, BCST 112 Print Reading and Sketching, and BCST 125 Codes in Construction

BCST 210 - Roof Structures and Stairs

## BCST 210 - Roof Structures and Stairs

## Credits: 4

This course is a study of the construction of roof and stair structures. Design, materials and framing techniques will be explored. Topics include roof systems, rafter and truss design, framing, and the layout and installation of stairs. Lab fee required.

Prerequisite: BCST 101 Introduction to Construction, BCST 103 Construction Safety, Tools and Equipment, BCST 112 Print Reading and Sketching, and BCST 125 Codes in Construction

## BCST 230 - Construction Materials and Methods II

Credits: 3
This course is a second level course covering topics of building materials and construction methods in residential and commercial construction applications. Students will continue to develop knowledge of building materials and advance their skills in a construction project. Proper terminology, usage and sustainability of traditional exterior and finishing materials will be covered. Students will work to complete a construction project. Lab fee required.

Prerequisite: BCST 142 Construction Materials and Methods I

BCST 235 - Weather Resistant Barriers \& Finishes

## BCST 235 - Weather Resistant Barriers \& Finishes

## Credits: 2

This course is a study of developing skills in the selection and installation of resistant systems, siding and roofing materials, soffit, and fascia. Student will explore code requirements of weather resistant barriers. Lab fee required.

Prerequisite: BCST 142 Construction Materials and Methods I, BSCT 150 Introduction to Electrical and Mechanical Systems, BCST 210 Roof Structures and Stairs

BCST 245 - Masonry Principles \& Concrete Construction

## BCST 245 - Masonry Principles \& Concrete Construction

Credits: 4
This course is a study of masonry construction materials and methods and principles of concrete design. Students will focus on terms, definitions, and methods of construction practices related to masonry construction and concrete. Lab fee required.

## BCST 255 - Interior Finishes

## BCST 255 - Interior Finishes

Credits: 2
This course introduces building materials and finishes used in interior applications. Student will learn the technical vocabulary and concepts associated with materials, construction, fabrication, and evaluation. Exploration of interior building materials in relationship to creative design solutions will be covered safeguarding human and environmental health. Safe and professional installation will be practiced as related to building construction, design, and occupation. Lab fee required.

Prerequisite: BCST 142 Construction Materials and Methods I, BCST 150 Introduction to Electrical and Mechanical Systems

## Credits: 4

This course introduces students to concepts and procedures for fine woodworking practices. Students will explore cabinetmaking, cabinetry styles, human factors, working drawings, kitchen cabinets, industrial production cabinetmaking, health and safety, measuring and laying out materials, stationary power machines, hand and portable power tools, employment and experience building a basic cabinet system. Topics include lumber and millwork, manufactured panel products, veneers and plastic overlays, hardware, surfacing and shaping, turning, joint making, abrasives and sanding machines, gluing and clamping, bending and laminating wood, overlaying and inlaying veneer, installing plastic laminates, case construction, doors, drawers, and applying finishing materials. Lab fee required.

Prerequisite: BCST 230 Construction Materials and Methods II, BSCT 255 Interior Finishes, BCST 235 Weather Resistant Barriers and Finishes, BCST 245 Masonry Principles and Concrete Construction

BCST 270 - Estimating, Planning, Scheduling and Management

## BCST 270 - Estimating, Planning, Scheduling and Management

## Credits: 4

This course offers students the opportunity to learn effective methods and techniques associated with the organization, planning and implementation of a construction project. Student will explore characteristics of a project including the planning process, organization, contract management, field record keeping, quality control, safety, project closeout and warranties/claims, and post project analysis. Topics will include cost estimating and budgeting methods, cash flow analysis, and time management, identification of needed resources, resource constraints and allocation. Lab fee required.

Prerequisite: BCST 230 Construction Materials and Methods II, BSCT 255 Interior Finishes, BCST 235 Weather Resistant Barriers and Finishes, BCST 245 Masonry Principles and Concrete Construction

BCST 280 - Building Construction Internship

## BCST 280 - Building Construction Internship

## Credits: 3

This course is designed to have the building construction student gain practical experience and enhance class/lab learning. The student spends a total of 135 hours in a construction environment.

Prerequisite: All BCST technical courses with the exception of BCST 260 Trim and Millwork and BCST 270 Estimating, Planning, Scheduling and Management, or permission of the Program Coordinator

## Business

BUSA 101 - Intro. to Business

## BUSA 101 - Intro. to Business

Credits: 3
This course is designed to provide the student with an overview of all critical business functions. Topics include forms of business ownership, legal aspects of business, human resource management, finance, marketing, accounting, management information systems, international business and contemporary business issues. Students taking this course are prepared for more advanced courses in business.

## BUSA 110 - Business Communications

Credits: 3
This course is an exploration of the communication process in business. Topics include communication theory, styles of communication, business letters and reports, resume writing, employment letters and interviews, oral communication, business presentations, and communication technology. The use of computers in business is also covered.

Prerequisite: COMS 110, ENGL 101
BUSA 120 - Small Business Management

## BUSA 120 - Small Business Management

## Credits: 3

This course is designed to introduce the student to the principles and practices of successful small business operations. Topics include new product planning, product management, sales forecasting, consumer behavior, promotion and pricing, finance, staffing, international markets and contemporary business issues. Students acquire an overview of essential small business management skills.

## BUSA 125 - Principles of Supervision

## Credits: 3

This course covers the functions of first and middle-level supervisory positions. Topics include leadership, problem- solving, motivation, human relations, communications, employee discipline, conflict resolution, teamwork, and stress management. This course is not recommended for students planning to transfer to a four-year institution.

Prerequisite: BUSA 101

BUSA 190 - Business Applications using Electronic Spreadsheets

## BUSA 190 - Business Applications using Electronic Spreadsheets

## Credits: 3

This course presents a practical approach for implementing spreadsheet software in the planning and developing of budgets, cash flows, financial statements, and other business records. Emphasis is placed on the financial functions available in the programs and the development of macros. Basic data base management is also incorporated. Lab Fee Required.

Prerequisite: ACCT 101
BUSA 205 - Business Law I

## BUSA 205 - Business Law I

## Credits: 3

This course is an introduction to the judicial process as it pertains to business law. Topics include the history of business law, contracts, business

## BUSA 206 - Business Law II

## BUSA 206 - Business Law II

## Credits: 3

This course is the continuation of the study of business law. Topics include insurance, the creation and operation of corporations, partnerships, and proprietorships, liabilities, indemnification of parties, and documents of incorporation.

Prerequisite: BUSA 205
BUSA 211 - Mgmt. \& Organizational Behavior

## BUSA 211 - Mgmt. \& Organizational Behavior

Credits: 3
This course is an introduction to management structure and transformational processes in organizations. Topics include planning, organizing, staffing, organizational control, motivation, group dynamics behavior, leadership, managing change and contemporary issues.

Prerequisite: BUSA 101

## BUSA 220 - Principles of Marketing

## BUSA 220 - Principles of Marketing

## Credits: 3

This course is an introduction to the basic principles and practices in industrial, consumer, and international marketing. Topics include product development, pricing, distribution, and promotion. The course prepares students for advanced study in specialized areas of marketing, retailing, and sales.

Prerequisite: BUSA 101
BUSA 235 - Intro. to International Business

## BUSA 235 - Intro. to International Business

Credits: 3
This course provides an introduction to the global business environment. Topics include an overview of international business, the global economy, managing an international business, cultural diversity, international trade and investment, international marketing, and multinational accounting and business operations.

Prerequisite: BUSA 101 or Permission of Instructor
BUSA 250-Special Topics in Business

Credits: 3
This course focuses on selected topics in Business. Since topics may change each time the course is offered, students should consult the courseoffering schedule each semester.

## BUSA 260 - Business Internship

## BUSA 260 - Business Internship

Credits: 3
This course focuses on a professional work experience and training in the workplace. Student will work in a job related to the program, complete course assignments, and develop a portfolio.

Prerequisite: BUSA 211 and permission of the Program Coordinator

Child Development

CDEV 101 - Intro. to Early Childhood Educ.

## CDEV 101 - Intro. to Early Childhood Educ.

Credits: 3
This course presents an overview of early childhood education. Observing and assessing children in a pre-school setting will be part of the course. Any student thinking of parenthood or a career working with young children would benefit from this course.

CDEV 150 - Lang. Devel. \& Lang. Arts in Early Childhood Education

## CDEV 150 - Lang. Devel. \& Lang. Arts in Early Childhood Education

Credits: 3
This course studies the natural development of language and verbal abilities. Emphasis is on techniques for the encouragement and support of language and communication skills, readiness for reading, and other intellectual processes.

CDEV 160 - Child Health and Nutrition

## CDEV 160 - Child Health and Nutrition

## Credits: 3

This course is for early childhood educators. Emphasis is on nutrition and good health practices and their effect on the growing child, meal planning and preparation, and developmentally appropriate ways to convey health and nutrition information to young children.

## CDEV 250 - Spec. Topics in Early Child. Ed.

Credits: 3
This course focuses on selected topics in Early Childhood Education. Since the topics may change each time the course is offered, students should consult the course offering schedule each semester.

CDEV 260 - Methods of Teaching Infants \& Toddlers

## CDEV 260 - Methods of Teaching Infants \& Toddlers

Credits: 3
This course examines various methods and techniques that put the infant and toddler curriculum into motion. Teaching techniques are examined in relation to the skill development and readiness activities to be accomplished in early childhood.

CDEV 270 - Curriculum Studies in Early Childhood Education

## CDEV 270 - Curriculum Studies in Early Childhood Education

Credits: 3
This course assists early childhood professionals in developing a more complete understanding of curriculum and curriculum planning for young children. Students learn how to individualize, adapt, create, and implement integrated learning activities.

## CDEV 272 - Music \& Art in Early Childhood Education

## Credits: 3

The creative process will be explored through music and art experiences. Students will learn new ways to communicate feelings and knowledge. An awareness and sensitivity to the world around us and individuality will be stressed.

CDEV 280 - Child Care Internship I

## CDEV 280 - Child Care Internship I

Credits: 3
This course is designed to help students apply the interpersonal and theoretical skills developed in the classroom through field experience. Students are placed in selected child care centers that offer direct learning experiences and supervision.

## CDEV 285 - Child Care Internship II

## CDEV 285 - Child Care Internship II

Credits: 3
This is a capstone experience and affords students the opportunity for practical application of skills learned in classroom experience. Students are placed in selected child care centers or schools that offer direct learning experience and supervision.

Prerequisite: CDEV 101, CDEV 280, PSYC 111 and Permission of Early Childhood Program Coordinator

## CDEV 290 - Current Topics in Early Childhood Education

## CDEV 290 - Current Topics in Early Childhood Education

## Credits: 3

This course is an exploration and analysis of issues currently impacting upon early childhood professionals. Topics include advocacy, kindergarten readiness, sex role development, TV, discipline, child care choices, developmentally appropriate curriculum practices, mainstreaming, multicultural education, parental involvement, education, and rights.

## Chemistry

## CHEM 100-Introductory Chemistry

## CHEM 100 - Introductory Chemistry

## Credits: 4

This course includes the basics of inorganic, organic, and biochemistry. The emphasis is on environmental issues, and on energy production and utilization in living organisms. Lab experiments illustrate the concepts studied. Lab Fee Required.

Corequisite: CHEM 100L
Prerequisite: MATH 017 or MATH 023 or the approved score on the College Placement Test

## CHEM 107 - Forensic Science

## CHEM 107 - Forensic Science

## Credits: 4

This course introduces the student to the basic principles of forensic science and the application of those principles in the collection, examination, evaluation, and interpretation of crime scene evidence. The course provides the student with the opportunity to explore the intersection of several scientific areas (e.g., biological, physical, chemical, medical, and behavioral science) as they apply to the investigation and resolution of crimes.

Corequisite: CHEM 107L
Prerequisite: MATH 010, MATH 015, MATH 017, or MATH 023 and MATH 040

## CHEM 110 - College Chemistry I

Credits: 4
This course covers general chemical principles and their applications in research and industry. Topics include matter and measurement; math in chemistry; atoms; molecules, and ions; elemental periodicity; stoichiometry; formulas and, equations; the mole; intramolecular and intermolecular bonds; reaction types including redox and acid/base; properties and reactions of solutions, gases, and the solid state; industrial processes. The lab component covers materials separation, analytical methods and instruments, qualitative and quantitative analysis; and lab report writing skills. This course is scheduled during the day in the fall semester, and during the evening in the spring semester. Lab Fee Required.

Corequisite: MATH 110, CHEM 110L

## CHEM 112 - College Chemistry II

## CHEM 112 - College Chemistry II

## Credits: 4

This course is a continuation of CHEM 110, College Chemistry I. Topics include chemical kinetics; chemical equilibrium; chemical thermodynamics, electrochemistry, nuclear chemistry, main-group element chemistry, metals and metallurgy, transition metals and coordination chemistry, environmental chemistry; introduction to organic and biological chemistry. The lab component covers kinetics, electrochemistry, and coordination compounds. The course is scheduled during the day in the spring semester, and during the evening in the fall semester. Lab Fee Required.

Corequisite: CHEM 112L
Prerequisite: CHEM 110 (Grade of C or better)

## CHEM 210-Organic Chemistry

## CHEM 210-Organic Chemistry

## Credits: 5

Lecture includes naming, drawing, stereochemistry, physical properties, NMR, IR, GC/MS, UV/VIS, reactions, and mechanisms of alkanes, alcohols, and ethers. Mechanisms include free radical, nucleophilic substitution, elimination, and addition. Laboratory topics are chemical hygiene and safety, as well as microscale and macroscale techniques for identification and purification of organic compounds. Lab Fee Required.

Corequisite: CHEM 210L
Prerequisite: CHEM 112 with grade of C or better
CHEM 212-Organic Chemistry II

## CHEM 212 - Organic Chemistry II

## Credits: 5

This course is a continuation of Organic Chemistry I. Lecture includes naming, drawing, stereochemistry, physical properties, reactions, and mechanisms of alkenes, alkynes, conjugated systems, aromatic compounds, aldehydes, ketones, enols, enolates, carboxylic acids, carboxcyclic acid derivatives, amines, amine derivatives, and ester enolates. Mechanisms include electrophilic aromatic substitution, ipso substitution, electrocylic, nucleophilic addition, and nucleophilic addition/elimination. Lab Fee Required.

Corequisite: CHEM 212L
Prerequisite: CHEM 210 with grade of C or better

## CHEM 215 - Biochemistry

## Credits: 4

This course introduces the student to the molecular architecture of biomolecules such as: nucleic acids, proteins, carbohydrates and lipids; metabolism; catalysis and control of biochemical reactions; enzyme kinetics and bioenergetics; and expression and processing of bioinformation. The lab component covers techniques that are used in clinical, food, and bioresearch labs. Lab Fee Required.

Corequisite: CHEM 212, CHEM 215L
Prerequisite: CHEM 210 (Grade of C or better)
CHEM 250-Special Topics in Chemistry

## CHEM 250 - Special Topics in Chemistry

Credits: 4
This course focuses on special topics in Chemistry. Since the topics may change each time the course is offered, students should consult the course-offering schedule each semester.

Corequisite: CHEM 250L

## Chinese

CHIN 101 - Elemenatary Mandarin Chinese I

## CHIN 101 - Elemenatary Mandarin Chinese I

## Credits: 3

This is an introductory course in Chinese emphasizing the fundamentals of speaking, reading, writing, and listening. The course focuses on building basic vocabulary and introducing students to the Chinese culture. It is designed for students with no Chinese experience.

CHIN 102 - Elementary Mandarin Chinese II

## CHIN 102 - Elementary Mandarin Chinese II

## Credits: 3

This course is a continuation of Elementary Mandarin Chinese I. Students with one prior semester of Chinese will expand their abilities in speaking, reading, listening and writing. They will develop more advanced usage of the Chinese language and will increase their understanding of the Chinese culture.

Prerequisite: CHIN 101 (Grade of C or better) or two years of high school Chinese (Grade of C or better)

## College Foundations

COLL 101 - Foundations for Success

## COLL 101 - Foundations for Success

Credits: 3
This is a student-centered course covering numerous strategies to encourage students to become active and empowered learners. A primary goal of this course is to help students make the most out of their college experience. Students will obtain information about college life and culture and develop strategies and techniques to enhance success in their academic, personal and professional lives. The course is infused with opportunities to understand, practice and implement critical thinking. Students will also gain practical information to help prepare to transfer to a four-year university or enter the workforce directly. All topics will be presented in both theory and practice. This course is required of all degree-seeking candidates and must be taken within the initial 16 credits after entry.

COLL 201 - Capstone for Liberal Arts

## COLL 201 - Capstone for Liberal Arts

## Credits: 1

This course is for Liberal Arts degree seeking students who have completed at least 45 credits. The course is designed to assist students in the transition from the community college to a four-year educational institution or to placement in the work force. Students will engage in projects that require them to think critically about themselves and reflect on the knowledge gained during their community college experience. Students will also explore future academic and career-related paths and develop skills to enhance their success.

COLL 203 - Capstone for Criminal Justice

## COLL 203 - Capstone for Criminal Justice

## Credits: 1

This course is for all Criminal Justice degree-seeking students who have completed at least 45 credits. The course is designed to assist students in the transition from the community college to a four-year educational institution or to placement in the work force. Students will engage in projects that require them to think critically about themselves and reflect on the knowledge gained during their community college experience. Students will explore future academic and career-related paths and develop skills to enhance their success.

# COLL 204 - Capstone in Film Studies 


#### Abstract

Credits: 1 This capstone course is for Communications: Film Studies Option students who have completed 45 credits. It is designed to assist students in the transition from the community college experience to a four-year educational institution or placement in a media-related environment. Students will be provided with practical experiences in film studies, culminating in the creation of a portfolio that demonstrates critical and technical competencies. The portfolio can include examples of the student having published film reviews (including pieces published in The College Hill, Idiom \& Image, local daily and weekly publications, as well as online Websites) and/or provide evidence of having had films produced via cable television channels, online sources, or any other form of electronic media. In addition, through various writing assignments, students will demonstrate their ability to think critically about the value of their current educational experiences and assess its benefits.


Prerequisite: 45 credits

## COLL 205 - Capstone for Journalism

## COLL 205 - Capstone for Journalism

Credits: 1
This capstone course is for Journalism Option students who have completed all journalism-related course requirements and have a total of 45
completed credits. Emphasizing the creation of a journalism portfolio and the writing of two personal essays, the course is designed to assist students in the transition to a four-year institution or to placement in the workforce. Students will think critically about the value of their education and assess its benefits. Two office meetings must be arranged with the professor. One meeting must take place at the beginning of the semester; the other meeting should be arranged after the student has completed his or her portfolio and personal essays. In addition, personal interaction between the professor and the student will be maintained via a weekly exchange of email.

Prerequisite: Successful completion of 45 credits (including completion of all Journalism Option requirements)
COLL 206 - Capstone for Business \& Accounting

## COLL 206 - Capstone for Business \& Accounting

## Credits: 1

This course is intended for al students seeking to achieve a degree in Accounting, Business Administration or Business Management. Students must have completed 45 credits prior to course registration. This course is designed to assist students in the transition from the community college to a four-year educational institution or to placement in the work force. Students will engage in projects that require them for think critically about themselves and reflect on the knowledge gained during their community college experience. Students will also explore future academic and career-related paths and develop skills to enhance their success. This course is not intended for students who enroll in an internship or practicum course as part of a career or technical program of study.

Prerequisite: Completion of 45 credits. Course must be taken within one semester of graduation.
COLL 207 - Capstone for Psychology

## COLL 207 - Capstone for Psychology

Credits: 1
The course is designed to assist students in the transition from the community college to a four-year educational institution with a concentration in Psychology. Students engage in projects that require them to think critically about themselves and reflect on the knowledge gained during their community college experience. Students also explore future academic and career-related paths and develop skills to enhance their success in a psychology-related field.

COLL 208 - Capstone for Computer Science \& Information Systems

## COLL 208 - Capstone for Computer Science \& Information Systems

## Credits: 1

This course is intended for all Computer Science and Information Systems degree seeking students who have completed at least 45 credits. The course is designed to assist students in the transition from the community college to a four-year educational institution or to placement in the work force. Students will explore future academic and career-related paths. Students will also engage in analysis, writings, and problem solving work that shall require them to think critically and reflect on the knowledge gained during their community college experience.

Prerequisite: Must have completed 45 credits
COLL 209 - Capstone for Environmental Studies
COLL 209 - Capstone for Environmental Studies

Credits: 1

# COLL 210 - Capstone for Biological and Clinical Sciences 

## Credits: 1

This capstone course is designed to assist students in the transition from the community college experience to a four year educational institution. Students are required to creatively analyze, synthesize, and evaluate knowledge gained during previous semesters. Students will read several papers from the current research literature in their area of interest and will write a review paper on that topic. Additional assignments are designed to involve students in critical thinking and problem-solving. Throughout the semester students will engage in self-reflection activities related to their major and overall community college experience.

Prerequisite: Must have completed 45 credits

## COLL 211 - Capstone for Mathematics and Chemistry

## COLL 211 - Capstone for Mathematics and Chemistry

## Credits: 1

This capstone course is for Engineering/Physics Option students who have completed all Engineering/Physics-related course requirements and have a total of 45 completed credits. It is designed to assist students in the transition from the community college experience to a four-year educational institution. Students will engage in analysis, writings, and problem-solving work that shall require them to think critically and reflect on the knowledge gained during their community college experience.

Prerequisite: Must have completed 45 credits

## Communications

COMM 101 - Intro. to Mass Communications

## COMM 101 - Intro. to Mass Communications

## Credits: 3

This course examines the technical and socio-economic evolutions of print and electronic media with an emphasis on current ethical issues. Publishing, broadcasting and other emerging media are studied in terms of social and personal impact.

## Broadcasting

Credits: 3
This course examines the development of radio and television from historical, technical, business, programming, and regulatory perspectives. Special emphasis is given to how these industries currently operate and career opportunities within.

## COMM 120 - Introduction to Multi-Media

Credits: 3
This course introduces the student to the field of multimedia. The student will experience a convergence of media uses and explore recent technologies and trends in the area of multimedia. Hardware systems, videodisk design, flow charts, software tools, scripts and production will be covered. Students will work in groups to design and prepare a multimedia presentation.

Prerequisite: GRAD 105
COMM 130-Television Production I

## COMM 130-Television Production I

Credits: 3
This course introduces students to the equipment and process used to produce television programs. In SCCC's on- campus studio, students will learn basic skills and terminology utilized in the television industry.

COMM 132 - Cinematography

## COMM 132 - Cinematography

## Credits: 3

This course serves as an introduction to the filmmaker's art. Film theory and basic history will augment an intensive examination of the image making process. Lectures, labs, and practical assessments will be used in the production of several small projects and a cooperative long-form project.

COMM 155 - Live Sound Production

## COMM 155 - Live Sound Production

Credits: 3
This course is designed to allow students an opportunity train in live sound support for public address set up and operations, live sound mixing for musical performances such as concerts, theatrical performances and special presentations requiring public address systems. Emphasis is on the theory and physical workings of a mixing console. Lab Fee Required.

## COMM 180 - Editing

Credits: 3
This course deals with copyediting, headline writing, news selection and layout of newspapers. It will contain supervised practice in editing news copy and writing headlines.

Prerequisite: ENGL 101

COMM 203 - Writing for the Media

## COMM 203 - Writing for the Media

## Credits: 3

This course introduces techniques for writing commercials, interviews, news and dramatic material to be broadcast. Theory and formatting of this specialized type of writing are practiced and analyzed.

## COMM 205-Radio \& Television Performance

## COMM 205 - Radio \& Television Performance

Credits: 3
This course introduces students to the equipment and process used to perform on radio and television. Through broadcasting facilities at SCCC, students will learn basic skills to perform as announcers, radio newscasters, on air DJ's, TV news and sports reporters, and voiceover specialists.

Prerequisite: Writing for Radio and Television

COMM 210 - Multimedia Production

## COMM 210 - Multimedia Production

## Credits: 3

This course is a continuation of the basic course in multimedia with an emphasis on the design and creation of original multimedia presentations. In addition, students will design and specify the necessary hardware and software systems to create an effective product. Lab Fee Required.

Prerequisite: GRAD 240

## COMM 219 - On-line Journalism

## COMM 219 - On-line Journalism

Credits: 3
This course is an introduction to on-line journalism. Students are required to have a computer and Internet access. Those enrolled in the course will have the opportunity to work within or create a Web page, via the College's existing Web site. Skills to be developed include: using the Internet, the World Wide Web, E-mail, and other electronic sources; producing newsworthy stories and creating attention-getting Web sites; finding and using accurate sources of electronic information; gathering, arranging, and analyzing data; using AP style; preparing investigative reports and creating in-depth feature pieces; as well as performing other electronic journalism-related assignments.

## COMM 220 - Photojournalism

## Credits: 3

This course will provide students with a basic understanding of visual communications media, with particular emphasis on digital still cameras. Students will be required to submit a variety of short-term (i.e., spot news) and long-term (i.e., photo essay) assignments using their own 35 mm and/or digital still cameras. The course will include a basic review of lighting, color and digital imaging, exposure, composition, and special effects. Throughout the semester students will be assigned to cover approximately a dozen photojournalism assignments. By the end of the semester, students will have a proficiency in producing professional quality photographic images for newspapers and magazines, as well as digital photographic images for electronic and Web publications.

Prerequisite: ENGL 215 or COMM 219
COMM 221 - Radio Production \& Broadcasting

## COMM 221 - Radio Production \& Broadcasting

## Credits: 3

This course examines the production of radio broadcasting to prepare the student for an on-air radio shift. It analyzes the creative responsibilities involved in the elements of a radio station broadcast day while following FCC rules. Students will be trained to use studio and remote audio equipment, operating the radio station automation equipment, practice in writing and producing a radio show, DJ and talk, directing, and performing in audio production. The student will be required to produce 1 hour of local radio programing for WRSK 97.5 LPFM .

## COMM 223 - The Gothic in Liter. \& Cinema

## COMM 223 - The Gothic in Liter. \& Cinema

## Credits: 3

ENGL 223 The Gothic in Literature and the Cinema will survey literature and cinema that are considered "Gothic." Characteristic themes will include authors' and directors' conceptions of death and decay, desire and sexuality, obsession and madness. The primary focus of the course will be on the study of literature and cinema. As a result, students will gain familiarity with and experience in: reading and analyzing literacy texts; using literary and cinematic terminology (e.g., genre, allegory, character narrative, misen-scene, montage, auteur, etc.); and writing critical essays that compare and contrast literary and cinematic works. Novels and films will include: Mary Shelly's Frankenstein, Bram Stoker's Dracula, Sheridan Le Fanu's Carmilla, Shirley Jackson's The Haunting of Hill House, and Richard Matheson's I Am Legend. In addition, the short stories of Poe, Hawthorne, duMaurier, and others will be read, and films based on these authors' work and/or themes will be discussed.

Prerequisite: ENGL 102 (Grade of C or better)

COMM 225 - Public Relations

## COMM 225 - Public Relations

## Credits: 3

This online course provides an overview of the key elements involved in providing effective public relations for corporations, not-for-profit organizations, businesses, institutions, and government agencies. Elements to be covered will include methods of public relations research, strategic planning, preparing collateral materials, and writing effective press releases -ones that will ensure placement with media organizations.

Prerequisite: ENGL 101 (Grade of C or better or Permission of Instructor)

# COMM 230 - Crit. Analy. \& Survey of Cinema 

Credits: 3
This course will explore the film genres, film terms, and styles by examining the racially, ethnically, culturally and sexually diverse themes of producers and directors throughout the world. The course also will provide a historical survey of the cinema. Emphasis will be on writing critical pieces that demonstrate knowledge of aesthetic principles and culturally diverse themes as they apply to film as an art form.

Prerequisite: ENGL 101
COMM 250-Special Topics in Communication

## COMM 250 - Special Topics in Communication

## Credits: 3

This course focuses on special topics in Communication. Since the topics may change each time the course is offered, students should consult the course-offering schedule each semester.

COMM 280 - Internship in Broadcasting/Radio

## COMM 280 - Internship in Broadcasting/Radio

## Credits: 3

This course offers the students the opportunity to receive real life experiences in a broadcast radio station, satellite radio station, campus radio station, or audio recording facility. During this course, in real radio broadcast and audio recording situations, student will be required to perform as news and traffic reporters, on air talent, commercial voice overs, and marketing. The successful student will work closely with proven professionals in the field and will required to perform under a deadline in the station and on live remote situations. This course affords the student the opportunity to sharpen their skills and perform important tasks to gain employment in their field of study.

COMM 285 - Internship in Broadcasting/Video Production

## COMM 285 - Internship in Broadcasting/Video Production

## Credits: 3

This course offers the students the opportunity to receive real life experiences in a broadcast, cable, or industrial television production facility. During this course in a real production situation, students will be required to perform as camera operators, lighting technicians, digital editors, audio assistants, and production assistants for television programs in the production process. The successful student will work closely with proven professionals in the field and will be required to perform under a deadline. This course affords the students the opportunity to sharpen their skills and perform important tasks to gain employment in their field of study.

COMM 290 - Internship Portfolio: New Media

## COMM 290 - Internship Portfolio: New Media

# COMM 291 - Portfolio Preparation and Presentation 

## Credits: 1

In this course, students will develop a portfolio of professional quality that is representative of technical and creative skills and career objectives. Excellent portfolio organization and resume presentation will be stressed. Cover letters, interviewing styles, and image presentation will be discussed. Students will write their goals, both short and long range, create a resume and develop a digital and presented portfolio for critique suitable for presentation to a school, client, or job interview.

Corequisite: COMM 290
Prerequisite: 24 Credits in the Major Field of Study

## Computer Science

COMS 110-Computer Concepts \& Applications

## COMS 110 - Computer Concepts \& Applications

## Credits: 3

This course is designed to provide the student with a level of knowledge necessary to function in today's technological society. Topics include computer and network terminology, hardware, software, and processing concepts. A large portion of the class time is dedicated to exercises performed using integrated software packages. Lab Fee Required.

Corequisite: COMS 110S
COMS 111-IT Fundamentals

## COMS 111 - IT Fundamentals

## Credits: 3

This course teaches the fundamentals of IT device installation, configuration, and maintenance of a systems hardware components through textbook and lab exercises. Students will learn all the skills they need to become certified professionals and customer-friendly technicians using today's tools and technologies. Lab Fee Required.

COMS 113 - Intro. to Information Systems

## COMS 113 - Intro. to Information Systems

## Credits: 3

This course is concerned with how organizations utilize information technology. The course deals with the operational activities involved in gathering, processing, storing, distributing and the use of information and its associated changing technologies. The case studies present students

# COMS 114 - Intro. to Computer Science I 

## Credits: 3

This course introduces the student to the fundamentals of computer science using an emphasis on programming methodology and problem solving. Topics include introductory concepts of computer systems, algorithm design, programming languages, software engineering, and data abstraction with related applications. A high level programming language is completely discussed and is used as a means to demonstrate concepts. Lab Fee Required.

## COMS 115 - Intro. to Computer Science II

## Credits: 3

This course is the continuation of COMS 114. Topics include intermediate to advanced programming techniques with logical data structures and the design and analysis of such structures. The course also covers techniques for program development, algorithm analysis, efficiency, along with abstraction, an introduction to data structures, searching, sorting, recursion and string manipulation. Lab Fee Required.

Prerequisite: COMS 114 or Equivalent
COMS 120-Computer Software Applications

## COMS 120 - Computer Software Applications

## Credits: 3

This course is a comprehensive hands-on study of Office Automation which provides the student with extended knowledge of Windows, word processing, electronic spreadsheets, and data base management. Lab Fee Required.

Prerequisite: COMS 110 or Higher
COMS 132 - Game Programming

## COMS 132 - Game Programming

Credits: 3
Elements of game programming are established with an emphasis on programming methodology, problem solving, and the graphics essential for game development. Topics include introductory game theory, algorithm design, programming languages, software engineering, and data abstraction with related applications. A high level programming language is completely discussed and is used as a means to demonstrate the concepts.

Prerequisite: COMS 114 Introduction of Computer Science I or COMS 142 Programming in C++
COMS 135 - Programming in Python

## COMS 135 - Programming in Python

Credits: 3
This course is designed to introduce the student to the programming language Python. Python and its various packages are essential tools for many programmers, engineers, researchers, and data scientists across academia and industry. In addition to learning the basics of Python, an introduction to parts of NumPy, SciPy, and Matplotlib will be covered.

COMS 141 - Linux Fundamentals for Cyber Security

## COMS 141 - Linux Fundamentals for Cyber Security

## Credits: 3

This course supplies critical knowledge for securing a Linux operating and also for using cybersecurity tools as a basis for future study in forensics. In a lab setting, concepts introduced range from proper set-up and installation of accounts through administration of devices, services, and processes - all with a focus on security through scripting. Lab Fee Required.

COMS 142 - Programming in C++

## COMS 142 - Programming in C++

Credits: 3
This course is an introduction to programming in C++. The topics covered include data storage types, formatted input/output, logical and mathematical operators, user written functions, and one dimensional arrays. Students are required to write short programs to gain proficiency in the techniques taught. Lab Fee Required.

## COMS 143 - Advanced Programming in C++

## Credits: 3

This course is a continuation of COMS 142, presenting some of the more advanced features of programming in $\mathrm{C}++$. The topics covered will include multidimensional arrays, strings, file input/output, data structures and object oriented techniques. Lab Fee Required.

Prerequisite: COMS 142 or Equivalent
COMS 148 - Introduction to LINUX

## COMS 148 - Introduction to LINUX

## Credits: 3

This course is designed to familiarize students with the Linux operating system, which has all of the features of a modem, fully fledged operating system: true multitasking; virtual memory; shared libraries; demand loading; shared, copy-on-write executables; proper memory management; and TCP/IP networking. Students will lean to install the OS, and use its command interface and graphical interface(s). Samba, and networking with TCP/IP in the Linux environment will also be discussed. Lab Fee Required.

## COMS 155 - Web Site Development I

Credits: 3
This course is an introduction to Web Site Development. Students will receive intensive hands-on experience in coding web pages, including linking, layout and design, forms, graphics, security concerns, and maintaining a Web Site. Lab Fee Required.

Prerequisite: COMS 110 or any course above COMS 110
COMS 156 - Web Site Development II

## COMS 156 - Web Site Development II

Credits: 3
This course is a continuation of Web Site Development I. Students will move into more complex techniques that may include, but are not limited to, Cascading Style Sheets, an introduction to scripting and CGI/Server-side scripting, and XML. Lab Fee Required.

Prerequisite: COMS 155 (Grade of C or better or better)

COMS 210 - Systems Analysis \& Design

## COMS 210 - Systems Analysis \& Design

Credits: 3
This course examines techniques of computer systems analysis and design with an emphasis on structuring a computer system based on the needs of the user. Final projects will provide students with practical use of contemporary system analysis and design tools. Lab Fee Required.

Prerequisite: COMS 113 or COMS 114 or COMS 120 or COMS 142
COMS 218 - Database Management Systems

## COMS 218 - Database Management Systems

## Credits: 3

This course presents the concepts of database systems and data models. Topics include introductory to advanced design concepts, implementation, SQL, integrity, management and performance, web technologies, administration and security. Lab Fee Required.

## COMS 221-Operating Systems

## COMS 221 - Operating Systems

Credits: 3
This course is an introduction to the concepts and facilities of operating systems and control language software. Topics include multiprogramming, timesharing, virtual storage and the management of programs and data within the system. Different types of operating systems will be discussed. Lab Fee Required.

## COMS 223 - Data Structures

Credits: 3
This course focuses on intermediate to advanced programming topics dealing with logical structures of data, together with the design and analysis of related algorithms. Topics include arrays, lists, linked lists, trees, stacks, graphs, and memory management. Algorithms for searching, sorting and information retrieval are also explored. Students demonstrate proficiency by completing laboratory assignments. Lab Fee Required.

Prerequisite: COMS 115 or COMS 143 Recommended
COMS 225 - Computer Aided Design

## COMS 225 - Computer Aided Design

Credits: 3
This course is an introduction to the principles of Computer-Aided Design (CAD) and the operation of CAD Systems. Students will use data entry devices to prepare working diagrams and schematic designs on industrial level workstations with Auto CAD. Lab Fee Required.

Prerequisite: Prior exposure to microcomputers and/or drafting

## COMS 226 - Computer Aided Design II

## COMS 226 - Computer Aided Design II

Credits: 3
This course is a follow-up for COMS 225 Computer Aided Design (CAD). It includes intermediate to advanced topics utilizing AutoCAD. Students will extend their knowledge of 2D and 3D CAD design, drafting, modeling, architectural drawing, and engineering. Projects are integrated into the class lectures. Lab Fee Required.

COMS 227-E-Commerce

## COMS 227 - E-Commerce

## Credits: 3

This course is designed to have students explore how the Internet and various online technologies are impacting business enterprises. Students will focus on two major topic areas: the relationship between corporate strategies and technology, and an overview of the requirements of launching and managing an e-commerce website. Lab Fee Required.

Prerequisite: BUSA 101 or any COMS course
COMS 228 - Internet Marketing

## COMS 228 - Internet Marketing

## COMS 230 - Networks and Telecommunications

Credits: 3
This course is an introduction to data communications. Topics include various transmission systems, hardware, software and local area networks. Laboratory assignments will include the installation and maintenance of a local area network -Novell NetWare. . Lab Fee Required.

Prerequisite: COMS 113 or COMS 114 or COMS 120 or COMS 142
COMS 234-Networking Management \& Security

## COMS 234 - Networking Management \& Security

## Credits: 3

This course builds upon the student's understanding of the concepts of internetworking technology and design. Advanced routing techniques such as Virtual LAN's and Access Lists are discussed and configured. Routing protocols are introduced and discussed. Network management is introduced and demonstrated.

COMS 239 - Fund. of Computer Architecture

## COMS 239 - Fund. of Computer Architecture

## Credits: 3

This course is an introduction to computer organization and architecture. Topics covered are the overview of the early Von Neumann model through modern architectural models. Topics also presented include data representation, digital logic, circuit diagrams, assembly language organization, processors, memory addressing, memory storage, input/output processing, and interfaces. Lab Fee Required.

Corequisite: COMS 114 or COMS 142
COMS 240 - Computer Information Systems Internship

## COMS 240 - Computer Information Systems Internship

## Credits: 3

This is a college-supervised program in a data processing environment. The course is designed to expose students to the methods and procedures utilized by data processing professionals.

Prerequisite: COMS 120, COMS 206, COMS 214; Permission of the Program Coordinator
COMS 250 - Spec. Topics in Comp. Info. Sys.

# COMS 250 - Spec. Topics in Comp. Info. Sys. 

## Credits: 3

This course is designed to address specific topics in Computer Information Systems. Since the topics may change each time the course is offered, students should consult the course-offering schedule each semester. Lab Fee Required.

Prerequisite: COMS 112 or Permission of the Program Coordinator

## Cosmetology

## COSM 101 - Principles \& Procedures I

## COSM 101 - Principles \& Procedures I

Credits: 7
This course is an introduction and overview to cosmetology principles, procedures, and hands on skills will be covered. Topics include hair styling implements, equipment, bacteriology, scalp abnormities and diseases, corrective treatments, sanitation, sterilization, wigs and hair pieces, draping, basic sectioning, shampoos, rinses, finger waves, pin curls, braids, rollers, combing, brushing, blow drying, school safety, cosmetology safety, math skills, histology of hair, and the composition, function, requirements, and procedures of the State Board of Cosmetology and Hairstyling Exam. Emphasis on safety and sanitation measures will be implemented in all instruction. Students may be required to complete additional studio/lab time to meet the number of class hours required by the state. Lab Fee Required.

## COSM 105 - Principles \& Procedures II

## Credits: 7

This course is an introduction to basic services of cosmetology and a comprehensive overview of the history of coloring will be explored. Topics include the principles and procedures, using creative expression and artistry, for hair cutting, coloring, lightening, scalp and hair analysis, and permanent waving. Emphasis on safety and sanitation measures will be implemented in all instruction. Students may be required to complete additional studio/lab time to meet the number of class hours required by the state. Lab Fee Required.

Prerequisite: COSM 101

## COSM 108 - Principles \& Procedures III

## COSM 108 - Principles \& Procedures III

Credits: 7
This course is instruction in understanding the structure, diseases and disorders of skin, face, head, neck, bones, nerves, hands and nails will be explored. Topics include histology of skin, history of barber shaving, skin care, facial massage, trimming of facial hair (including beard and mustache, eyebrow, ear and nose hair trim), straight razor shave procedure, paraffin wax treatment, basic cosmetics, manicures, pedicures, artificial nails, nail diseases/disorders, nail repair, and any corrective treatments. Emphasis on safety and sanitation measures will be implemented in all instruction. Students may be required to complete additional studio/lab time to meet the number of class hours required by the state. Lab Fee Required.

# COSM 110 - Science and Ethics for Cosmetology 

## Credits: 7

This course is instruction in understanding the science as it relates to cosmetology, and a study into ethical practices for the licensed professional will be incorporated. Topics include physiology, osteology, myology, neurology, and chemistry as they are related to the cell/tissue structure, circulatory, endocrine, excretory, digestive, respiratory, reproductive and body systems affected by cosmetology. Additionally business practices, laws regulations, and ethics practices will be explored. Emphasis on safety and sanitation measures will be implemented in all instruction. Students may be required to complete additional studio/lab time to meet the number of class hours required by the state. Lab Fee Required.

Prerequisite: COSM 105 and COSM 108
COSM 115 - Practical Application I

## COSM 115 - Practical Application I

## Credits: 4

In this course students will independently and safely practice cosmetology methods, while also continuing to accrue the necessary hours to sit for the NJ State Board Examination. Topics include the art of soft selling products and services, and providing services for clients in a salon atmosphere. Emphasis on safety and sanitation measures will be implemented in all instruction. Students may be required to complete additional studio/lab time to meet the number of class hours required by the state. Lab Fee Required.

Prerequisite: COSM 105 and COSM 108
COSM 201 - Practical Application II

## COSM 201 - Practical Application II

## Credits: 4

In this course students will independently and safely practice cosmetology methods, while also continuing to accrue the necessary hours to sit for the NJ State Board Examination. Emphasis on safety and sanitation measures will be implemented in all instruction. Students may be required to complete additional studio/lab time to meet the number of class hours required by the state. Additionally students will prepare for the New Jersey State Board Exam. Lab Fee Required.

Prerequisite: COSM 110 and COSM 115

## Criminal Justice

CRJS 100 - Intro. to the Crim. Justice Sys.

## CRJS 100 - Intro. to the Crim. Justice Sys.

Credits: $\mathbf{3}$
This course is an overview of the criminal justice system in the United States. Topics include a study of the criminal justice system, the police, courts, and corrections. This course is a prerequisite for all other criminal justice courses except CRJS 105 and CRJS 110.

## Credits: 3

This course studies the police function in modem society. Topics will include methods of selection and training, police discretion, the use of force and the police role in the community.

Prerequisite: CRJS 100
CRJS 105 - Criminology

## CRJS 105 - Criminology

Credits: 3
This course studies crime as a social phenomenon. Topics include crime statistics, theories of the causes of crime, criminal typologies, the limits of the law and societal responses to crimes and criminals. Students are encouraged to take Introduction to Sociology (SOCA101) before enrolling in this course.

CRJS 110 - Criminal Law

## CRJS 110 - Criminal Law

Credits: 3
This course is a study of the principles of criminal law in the United States. Topics will include the adversary system, principles of justification and excuse, arrest, search, and seizure. The New Jersey Code of Criminal Justice and the procedural guarantees of the U.S. and NJ Constitutions will be examined.

## CRJS 115 - Juvenile Justice

## CRJS 115 - Juvenile Justice

## Credits: 3

This course is a study of the historical foundations for the establishment of Juvenile Courts in the United States. Topics include the juvenile justice process, functions of juvenile justice system components, sociological concepts and theory of the adolescent subculture.

Prerequisite: CRJS 100
CRJS 140 - Health \& Fitness for the Public Safety Professional

## CRJS 140 - Health \& Fitness for the Public Safety Professional

## Credits: 3

This course will explore basic concepts of health and physical fitness for the public safety professional. It will provide the student with the means for self-evaluation through various testing situations. It will also assist students in the development and maintenance of a healthy lifestyle as needed for a career in the public safety field: Police officers, Firefighters, Corrections, Court personnel working for Federal, State or local agencies. Topics investigated are lifestyle issues in wellness including cardiovascular function, weight management and nutrition, strength, flexibility, stress management and principles/programs of exercising.

## CRJS 141 - Motor Vehicle Law and Traffic Enforcement

## Credits: 3

This course explores the motor vehicle laws for the State of New Jersey and how those laws pertain to traffic enforcement for police officers. Topics addressed in the course include: registration and licensing of motor vehicles; equipment violations; parking violations; driving while intoxicated (alcohol and drugs); breathalyzer (alco-test) and blood alcohol content; accident investigation, fatal accident investigation; radar, highway, and traffic signs; pedestrians and bicycles; standard operating procedures for motor vehicle stops; search and seizure of motor vehicles; courtroom testimony; and fines and penalties for operation offenses.

## CRJS 142 - Terrorism \& Homeland Security

## Credits: 3

This course examines the response of the law enforcement community to both domestic and international terrorism, with a special emphasis on the origins of terrorism. Related topics include an examination of the terrorist's mindset, the rise of extremist groups, the role of special interest/anarchist groups, terrorist financing, the management of domestic terrorism, the role of intelligence, concepts of threat assessment, and legal considerations associated with terrorist intelligence and management strategies.

## CRJS 150 - Police Patrol Administration

## CRJS 150 - Police Patrol Administration

## Credits: 3

This course introduces basic patrol strategies and focuses on techniques and procedures used in the prevention and detection of crimes.
Prerequisite: CRJS 100
CRJS 180 - Corrections

## CRJS 180 - Corrections

## Credits: 3

This course is a survey of the theories and applications of correctional practices in both community and institutional models. The physical, educational, and social aspects of incarceration are studied with respect to their impact on the rehabilitative prospects of the inmate.

Prerequisite: CRJS 100
CRJS 210 - Criminal Investigation

## CRJS 210 - Criminal Investigation

## CRJS 215 - Criminal Court Procedures

Credits: 3
This course is a comprehensive review of substantive criminal law and criminal due process. The importance of constitutional law to these fields is emphasized, as are practical insights into the operations of the criminal court system.

Prerequisite: CRJS 100
CRJS 220 - Contem. Issues in Law Enforce.

## CRJS 220 - Contem. Issues in Law Enforce.

Credits: 3
This course addresses current issues in law enforcement. Analysis and solutions are sought for such topics as community relations, corruption, AIDS, the role of politics, etc.

Prerequisite: CRJS 100
CRJS 221 - Victimology

## CRJS 221 - Victimology

## Credits: 3

This course introduces students to the central questions and research in the field of victimology beginning with a historical overview through contemporary theory and practice. It is focused on examining the role of victims in the criminal process, problems of adjustment to victimization, issues of victim compensation, restorative justice, victim's rights, and future directions for victimology as a field of study. Several victim typologies will also be addressed. This course provides the student with the tools necessary for critical evaluation and understanding of the often neglected role of the victim before, during and after the criminal event.

## CRJS 223 - Constitutional Law

## CRJS 223 - Constitutional Law

Credits: 3
This course will examine the U.S. Constitution as the framework for government. Leading decisions of the U.S. Supreme Court will be analyzed in the areas of Civil Rights and Civil Liberties with emphasis on the Bill of Rights, and the 13th, 14th, and 15th amendments.

CRJS 225 - Community Corrections
CRJS 225 - Community Corrections

Credits: 3
This course examines the major types of community based correctional alternatives ranging from probation to weekend incarceration and halfway houses. Attention is given to correctional law, personnel development, correctional management, controversies, political pressures and emerging trends.

CRJS 230 - Practicum in Criminal Justice Agency Operations

## CRJS 230 - Practicum in Criminal Justice Agency Operations

## Credits: 3

This course applies theory to the actual functioning of local agencies of the criminal justice system. Students are exposed to the theoretical underpinnings of such agencies as the police, prosecutor, public defender, courts, jails, prisons and emergency management response agencies. Extensive opportunities to participate in the actual operations of these agencies are also provided.

Prerequisite: 30 credits including 12 in criminal justice, $3.0 \mathrm{GP} A$ and permission of coordinator
CRJS 250 - Special Topics in Law Enforce.

## CRJS 250 - Special Topics in Law Enforce.

Credits: 3
This course is designed to address specific topics in Criminal Justice. Since the topics may change each time the course is offered, students should consult the course-offering schedule each semester.

Prerequisite: CRJS 100

## CRJS 288 - Criminal Justice Portfolio Development and Process

## CRJS 288 - Criminal Justice Portfolio Development and Process

## Credits: 3

This course utilizes the process of prior learning assessment (PLA) to award college-level credit for learning and knowledge that students have acquired through work experience, in-service training, police academy training, and practical experience in the field of criminal justice. Under the supervision of the instructor, students will develop narrative essays, portfolios, and related materials that document prior learning and mastery of specific competencies.

## Culinary

CULA 101 - Practicum I

Credits: 1
This course introduces the student to is the first of three hands-on practicum classes which allows students to practice the skills and knowledge taught in the classroom in a real-world environment. Students follow set criteria and guidelines in a progressive learning structure to master general practices in the hospitality industry including workplace behavior, marketing, banquet logistics, and small business procedures.

## CULA 103 - Food Service Sanitation

## CULA 103 - Food Service Sanitation

Credits: 1
This course provides the student with an in-depth study of food microbiology and a review of significant food-borne illnesses. Emphasis will be placed on food safety and adherence to local, state and federal regulations that address food service sanitation. The course is intended to prepare students for the National Restaurant Association Educational Foundation Certification exam and the New Jersey State Department of Health Food Service Managers Sanitation course exam

CULA 105 - Basic Culinary Skills

## CULA 105 - Basic Culinary Skills

## Credits: 3

This course introduces the student to the fundamentals that are required to be a professional culinarian. Topics such as knife skills, stocks, sauces, soups as well as recipe conversion, costing and product identification are all practiced in a lab setting. These are the basic building blocks that are required for future culinary success. Lab Fee Required.

Prerequisite: CULA 103 Food Service Sanitation All Culinary classes must be completed with C or better to progress.

## CULA 107 - Food Principles

## CULA 107 - Food Principles

## Credits: 3

This course provides the student with an in-depth study of food microbiology and a review of significant food-borne illnesses. In a lab setting, emphasis will be placed on food safety and adherence to local, state and federal regulations that address food service sanitation. The course is intended to prepare students for the National Restaurant Association Educational Foundation Certification exam and the New Jersey State Department of Health Food Service Managers Sanitation course exam. Lab Fee Required.

Prerequisite: CULA 103 Food Service Sanitation, CULA 105 Basic Culinary Skills All Culinary classes must be completed with C or better to progress.

## CULA 110 - Meat Fabrication for Culinarian

## CULA 110 - Meat Fabrication for Culinarian

## Credits: 3

This course introduces the student to a structured environment with a hands-on practical meat cutting experience. In a lab setting, students fabricate cuts for the production restaurant and also deal with whole carcasses and primal cuts. Students are also introduced to meat-grading procedures and techniques and to the identification of meat quality and familiarization with yield testing. Students are also introduced to a systems approach to the planning and preparation of sausages and other cold food preparation techniques as an alternative to other conventional types of food preparation.

Prerequisite: CULA 103 Food Service Sanitation, CULA 105 Basic Culinary Skills, All Culinary class must be completed with C or better to progress

## CULA 118 - Garde Manger

## CULA 118 - Garde Manger

## Credits: 3

This course introduces the student to Garde Manger (cold foods) it takes a systems approach to the planning and preparation of cold foods as another conventional types of food preparation. Cold kitchen principles are thoroughly covered in the sanitation, menu planning, purchasing, preparation, presentation, and storage of cold foods. Students will learn how to tailor the guidelines of cold food preparation to fit the specific needs of any operation. Lab Fee Required.

Prerequisite: CULA 103 Food Service Sanitation, CULA 105 Basic Culinary Skills, CULA 107 Food Principles, CULA 110 Meat Fabrication for Culinarian All Culinary class must be completed with C or better to progress.

## CULA 122 - Basic Baking

## CULA 122 - Basic Baking

## Credits: 3

This course introduces the student to baking as a systems approach to the introduction, planning and preparation of baked goods. In a lab setting, beginning baking principles are introduced in the planning, purchasing, preparation, presentation, and proper storage of basic baked goods. Students learn how to tailor the guidelines of learned baking techniques to fit the specific needs of any operation. Lab Fee Required.

Prerequisite: CULA 103 Food Service Sanitation, CULA 105 Basic Culinary Skills, CULA 107 Food Principles, CULA 110 Meat Fabrication for Culinarian, CULA 118 Garde Manger All Culinary class must be completed with C or better to progress.

## CULA 135 - Advanced Baking \& Pastry

## CULA 135 - Advanced Baking \& Pastry

## Credits: 3

This course introduces the student to an extensive, hands-on approach to the planning and preparation of advanced baked goods. Advanced baking principles are applied in the planning, purchasing, preparation, presentation, and proper storage of baked goods. Students tailor the guidelines of baking techniques to fit the specific needs of any operation. Lab Fee Required.

Prerequisite: CULA 103 Food Service Sanitation, CULA 105 Basic Culinary Skills, CULA 107 Food Principles, CULA 110 Meat Fabrication for Culinarian, CULA 118 Garde Manger, CULA 122 Basic Baking, CULA 130 Charcuterie All Culinary class must be completed with C or better to progress.

CULA 140 - Breakfast \& Lunch Cookery

## CULA 140 - Breakfast \& Lunch Cookery

## Credits: 3

This course introduces the student to a systems approach to sanitation, planning, preparation, and resource management. In a lab setting, cooking principles are thoroughly covered with respect to nutrition and preparing, purchasing, receiving, storing, and serving food. Students adapt the topics covered to fit the specific needs of any operation. Lab Fee Required.

Prerequisite: CULA 103 Food Service Sanitation, CULA 105 Basic Culinary Skills, CULA 107 Food Principles, CULA 110 Meat Fabrication for Culinarian, CULA 118 Garde Manger, CULA 122 Basic Baking, CULA 130 Charcuterie, CULA 135 Advanced Baking and Pastry All Culinary class must be completed with C or better to progress.

## CULA 170 - Practicum II

## Credits: 1

This course is the second of three hands-on practicum classes which allows students to practice the skills and knowledge taught in the classroom in a real-world environment. Students follow set criteria and guidelines in a progressive learning structure to master general practices in the hospitality industry including workplace behavior, marketing, banquet logistics, and small business procedures.

Prerequisite: CULA 101 Practicum I

## CULA 202 - Italian Cuisine

## CULA 202 - Italian Cuisine

## Credits: 3

This course introduces the student to classical Italian cuisine. Students explore the many different regions of Italy and prepare dishes from each region. Students also learn the interworking of the restaurant environment which enhances their career success in the culinary arts. Lab Fee Required.

Prerequisite: CULA 103 Food Service Sanitation, CULA 105 Basic Culinary Skills, CULA 107 Food Principles, CULA 110 Meat Fabrication for Culinarian, CULA 118 Garde Manger, CULA 122 Basic Baking, CULA 130 Charcuterie, CULA 135 Advanced Baking and Pastry, CULA 140 Breakfast and Lunch Cookery All Culinary class must be completed with C or better to progress.

## CULA 210 - International Cuisine

## CULA 210 - International Cuisine

## Credits: 3

This course introduces the student to international cuisine and it takes a hands on approach to the planning, development and creation of food styles from around the world. Cooking principles are thoroughly covered including sanitation, ethnic ingredients, menu planning, cooking techniques and plate presentation. Cuisines that will be covered are Indian, Asian, Mexican, Italian, Mediterranean and Spanish. Lab Fee Required

Prerequisite: CULA 103 Food Service Sanitation, CULA 105 Basic Culinary Skills, CULA 107 Food Principles, CULA 110 Meat Fabrication for Culinarian, CULA 118 Garde Manger, CULA 122 Basic Baking, CULA 130 Charcuterie, CULA 135 Advanced Baking and Pastry, CULA 140 Breakfast and Lunch Cookery, CULA 202 Italian Cuisine

## CULA 220 - Practicum III

## CULA 220 - Practicum III

Credits: 1
This course is the last of three hands-on practicum classes which allows students to practice the skills and knowledge taught in the classroom in a real-world environment. Students follow set criteria and guidelines in a progressive learning structure to master general practices in the hospitality industry including workplace behavior, marketing, banquet logistics, and small business procedures.

CULA 235-Classical French Cuisine

Credits: 3
This course introduces the student to Classical French Cuisine in a hands-on environment where students will explore the evolution of modern day cuisine. This course covers the various regions of France emphasizing indigenous ingredients and preparation methods. Lab Fee Required.

Prerequisite: CULA 103 Food Service Sanitation, CULA 105 Basic Culinary Skills, CULA 107 Food Principles, CULA 110 Meat Fabrication for Culinarian, CULA 118 Garde Manger, CULA 122 Basic Baking, CULA 130 Charcuterie, CULA 135 Advanced Baking and Pastry, CULA 140 Breakfast and Lunch Cookery, CULA 202 Italian Cuisine, CULA 210 International Cuisine All Culinary class must be completed with C or better to progress.

CULA 255 - North American Cuisine

## CULA 255 - North American Cuisine

Credits: 3
This course introduces the student to North American cuisine and takes a hands on approach to the planning, development and the creation of popular food styles from North America. Cooking principles and practices are thoroughly covered including sanitation, preparation, ingredient identification, menu planning, cooking techniques and plate presentation. Lab Fee Required.

Prerequisite: CULA 103 Food Service Sanitation, CULA 105 Basic Culinary Skills, CULA 107 Food Principles, CULA 110 Meat Fabrication for Culinarian, CULA 118 Garde Manger, CULA 122 Basic Baking, CULA 130 Charcuterie, CULA 135 Advanced Baking and Pastry, CULA 140 Breakfast and Lunch Cookery, CULA 202 Italian Cuisine, CULA 210 International Cuisine, CULA 235 Classical French Cuisine All Culinary class must be completed with C or better to progress.

CULA 280-Culinary \& Hospitality Arts Internship

## CULA 280 - Culinary \& Hospitality Arts Internship

## Credits: 2

This course is designed to give the culinary arts or hospitality student professional work experience in a job related to the specific program. The student will receive hands-on work experience in a job related to the program, complete course assignments, and develop a portfolio.

Prerequisite: Permission of Coordinator or Chair

## Cyber Crime

## CYBR 100 - Introduction to Cyber Crime

## CYBR 100 - Introduction to Cyber Crime

## Credits: 3

The student will focus on technology-based crimes. Explore cyber forensics including information warfare, cyber terrorism, information theft, data corruption, and disruption of service. Discussion on computing devices as instruments furthering exploitation of children, organized crime and other criminal acts. Identify vulnerabilities within national and private infrastructure, assess risks and security measures.

Prerequisite: COMS 110
CYBR 101 - Digital Forensics I

## CYBR 101 - Digital Forensics I

## Credits: 3

The student will explore a professional approach to computer and cyber crime investigations. Students will learn to identify potential electronic
evidence, create strategies to locate and recover evidence and perform forensic analysis in a lab setting. Students will discuss legal and ethical considerations of computer crime investigations. Lab Fee Required.

Prerequisite: COMS 110/CYBER 100
CYBR 102-Cyber Law

## CYBR 102-Cyber Law

## Credits: 3

Students will explore methods of investigating and preventing cybercrimes and infringements upon information security. Students will discuss laws governing e-commerce and intellectual property protections, focusing on Landmark and other cases such as Napster. The class will also debate privacy rights and free speech on the internet.

Prerequisite: CYBR 100

## CYBR 103 - Digital Forensics II

## CYBR 103 - Digital Forensics II

## Credits: 3

This course provides Students the opportunity to recover and analyze evidence using industry standard commercial grade Guidance Software EnCase Forensics v8 and Mobile Investigator. The students practice preserving digital evidence, recovering deleted evidence, performing USB analysis, and analyzing cellphone data in a lab setting. In addition, students also examine Digital Forensics \& eDiscovery best practices. They will explore approaches to Network Forensic investigations and insider threats while using investigation results to develop reports and courtroom testimony. Lab Fee Required.

Prerequisite: CYBR 100/CYBR 101/CYBR 102
CYBR 110 - Practicum in Cyber Crime Investigation

## CYBR 110 - Practicum in Cyber Crime Investigation

## Credits: 1

This course provides experience in Cybercrime investigations of technology security. Emphasis is placed on student involvement dealing with security issues or computer crime activities. Upon completion, students should be able to successfully analyze, retrieve erased evidence and testing in mock proceedings against their criminal entrepreneurs

Prerequisite: CYBER 100/101/102/103

## Diesel Technology

DESL 102 - Diesel Engines

## DESL 102 - Diesel Engines

## Credits: 3

This course introduces students, in a lecture and lab setting, to the basic principles of diesel engines and systems. The course covers component

## DESL 103 - Diesel Drivetrain

## DESL 103 - Diesel Drivetrain

## Credits: 3

This course provides students, in a lecture and lab setting, with in-depth coverage of diesel transmissions and drivetrain components. Students troubleshoot and repair transmission and clutch failures. Students inspect and service drive axle and related components. Lab fee required.

DESL 104 - Brake Systems

## DESL 104 - Brake Systems

Credits: 3
This course introduces students, in a lecture and lab setting, to the basic principles of diesel brake systems and operation. Students explore advanced concepts and schematics including anti-lock, air, pneumatic, hydraulic brake systems, and related components. Lab fee required.

## DESL 105 - Steering and Suspension

## Credits: 3

This course introduces students, in a lecture and lab setting, to the design, function, maintenance, and repair of steering and suspension systems. Students explore component repair, alignment procedures, and tire and wheel service. Lab fee required.

## DESL 106 - Electrical Systems

## DESL 106 - Electrical Systems

Credits: 3
This course introduces students, in a lecture and lab setting, to the basic principles of electrical systems of diesel powered equipment. Students explore the operation of starters, alternators, and batteries. Lab fee required.

DESL 107 - Heating \& Air Conditioning Systems

## DESL 107 - Heating \& Air Conditioning Systems

Credits: 3
This course introduces students, in a lecture and lab setting, to the basic principles of electrical systems of diesel powered equipment. Students explore the operation of starters, alternators, and batteries. Lab fee required.

# DESN 101 - Principles of Design I 

## Credits: 3

This course combines the history of design from the industrial revolution to the present with practicable knowledge and exercises in scale and proportion through two and three dimensional drawing and/or building problems. Students will explore influences of past design on our present culture through projects including architectural, interior design, and furniture design concepts. Emphasis will be placed on the refinement of sketching and mechanical drawing to realize individual ideas. Projects will explore relationships between historical and cultural special systems and the relationship to the human proportion. Students will be expected to develop a complete original design concept and to articulate the development of that visual concept within the historical framework. Lab Fee Required.

Prerequisite: ARTA 101, ARTA 108
DESN 102 - Principles of Design II

## DESN 102 - Principles of Design II

## Credits: 3

This course is a continuation of Principles of Design I and continues to focus on the elements of design methodology and visual problem solving. Projects will continue to advance students ability to translate ideas through mechanical drawing and sketching techniques. Students will be expected to formulate and develop original design concepts from inception through the varied stages to completion. Additionally, emphasis will be placed on the finished presentation of the project. Projects will explore industrial design, decorative arts, fashion, furniture, and interior design. Lab Fee Required.

Prerequisite: DESN 101
DESN 120 - History of Design

## DESN 120 - History of Design

## Credits: 3

This broad based survey course tracks major developments in the field of design in the areas of architecture, furniture design, fashion, industrial design and interior design emphasizing multi-cultural and historical contexts. The development of schools and trends, the relationships between historical, cultural, and political movements and the interaction of art, design, and culture are fully explored.

DESN 125 - Intro. to Fashion Merchandising

## DESN 125 - Intro. to Fashion Merchandising

## Credits: 3

This course explores fashion and the fashion industry. Students explore the basic design elements and principles of design as related to textiles and the fashion industry. The history of clothing and fashion, current trends and influences, fashion designers and capitals, merchandising skills and careers are covered. Lab fee is required.

## DESN 201 - Advanced Study in Design

Credits: 3
This is an advanced course that encourages design option students to develop individual preferences within the design field. Each student in the class will concentrate on his/her own chosen area, i.e.; industrial design, interior design, fashion design, furniture design, decorative arts, etc. Each student will be expected to articulate their intention with regards to their individual projects and to explore various techniques within their particular genre. Lab Fee Required.

Prerequisite: DESN 102

## DESN 202 - Fashion Construction I

## DESN 202 - Fashion Construction I

Credits: 3
This studio course in Fashion Design introduces the student to design, construction and presentation of clothing and costuming. Through lectures and labs, students will explore techniques, fabrics, tools, and equipment to develop the skills needed by the professional couturiere. Lab fee is required.

Prerequisite: Permission of Program Coordinator

## DESN 203 - Fashion Construction II

## DESN 203 - Fashion Construction II

Credits: 3
This course develops skills relevant to the Fashion Design Industry through advanced techniques in design, construction and presentation of clothing and costuming in the studio. Students explore techniques, fabrics, tools, and equipment used by the professional couturiere. Lab fee required. Studio fee required.

Prerequisite: DESN 202
DESN 225 - Fashion Merchandising Mgmt.

## DESN 225 - Fashion Merchandising Mgmt.

Credits: 3
The course covers merchandising concepts, methods and calculations important to successful business practices in the fashion industry. Students explore the principles, procedures, and techniques practiced by buyers and merchandisers of fashion goods to determine what to buy and which resources to select. Lab fee is required.

## DESN 250 - Spec. Topics in Design

## DESN 250 - Spec. Topics in Design

## Credits: 3

This course focuses on special topics in Design. Since the topics may change each time the course is offered, students should consult the courseoffering schedule each semester.

## ECON 101-Macroeconomics

Credits: 3
This course is an analysis of major economic concepts. Topics include the elements of national income; the economic roles of government and labor; classical economics; monetary institutions and policies; the Keynesian model and modern fiscal policy; the macroeconomic aspects of world trade.

ECON 102 - Microeconomics

## ECON 102 - Microeconomics

## Credits: 3

This course is an exploration of economic factors that affect the firm and individual consumers. Topics include the laws of supply and demand, elasticity, consumer demand and utility theory, production, pricing, competitive behavior, monopoly and imperfect competition, labor economics, international trade.

ECON 250 - Spec. Topics in Economics

## ECON 250 - Spec. Topics in Economics

Credits: 4
This course focuses on special topics in Economics. Since the topics may change each time the course is offered, students should consult the course-offering schedule each semester.

## Education

## EDUC 202 - Historical and Philosophical Patterns in Education

Credits: 3
This course examines the societal philosophies which have influenced the historical development of educational theory and practice.

Credits: 3
This course will give techniques for each childhood professionals to use when integrating children with special needs into classrooms.
Prerequisite: ENGL 101, PSYC 101

EDUC 286 - Principles \& Practices of Teaching as a Profession

## EDUC 286 - Principles \& Practices of Teaching as a Profession

## Credits: 3

This course introduces the basic elements of teaching, such as classroom management, literacy, diversity of learners, lesson planning, multicultural education, and teaching methodologies. Students observe in a public school setting, interview a teacher. Effective speaking and writing skills are an integral part of the assessment of students in this course. Students utilize professional teaching standards to assess their teaching styles and abilities as future teachers. Familiarity with the New Jersey Core Curriculum Content Standards is also a component of this course.

Prerequisite: 32 Credits with a GPA of 2.75

EDUC 291 - Portfolio Develop. in Education

## EDUC 291 - Portfolio Develop. in Education

Credits: 1
This course is for degree seeking students in the Liberal Arts Education Option, who have completed 45 credit hours. The course is designed to assist students in the transition from the community college experience to a four year educational institution or to placement in the work force within the education field. Emphasis is placed on the development of a professional portfolio that documents coursework and experiences relevant to the New Jersey Professional Standards for Teachers (N.J.A.C.6A:9-3.3) or Interstate New Teacher Assessment and Support Consortium (INTASC) Standards.

## Electrical Lineman

## ELIN 101 - Utility Fundamentals \& Safety

## ELIN 101 - Utility Fundamentals \& Safety

## Credits: 3

This course is designed as a two-part learning experience where students explore principles and practices of health and safety in an energy services-related construction environment, and earn an Occupational Safety and Health Act OSHA 10 certification. Secondly, students study the electric, gas and telecommunications industries. Topics include personal protective equipment, safe work practices, hazardous materials, employee protection, the Environmental Protection Agency (EPA), Occupational Safety and Health Act (OSHA) and safety codes/standards. Past, present and future of fossil fuel, renewable energy, nuclear power, and natural gas from the ground to consumers, the telecommunications industry including land and cell phone operations will be covered.

## ELIN 105 - Electric Circuit Theory I

Credits: 3
This course is designed as a two-part learning experience where students explore introductory electrical theory and secondly basic electrical theory involved in the production and use of electrical energy. Topics include atomic structure, Ohm's law, series, parallel and complex circuits and sine wave principles associated to the National Electrical Code. Students explore and practice basic Direct Current circuitry calculations, Alternating Current (AC) properties, and rigging skills pertaining to the electrical industry.

## ELIN 110 - Electric Circuit Theory II

## ELIN 110 - Electric Circuit Theory II

Credits: 3
This course is designed as a two-part learning experience where students explore introductory electrical theory and secondly basic electrical theory involved in the production and use of electrical energy. Topics include atomic structure, Ohm's law, series, parallel and complex circuits and sine wave principles associated to the National Electrical Code. Students explore and practice basic Direct Current circuitry calculations, Alternating Current (AC) properties, and rigging skills pertaining to the electrical industry.

## ELIN 115 - Climbing Electrical Structures

Credits: 3
This course is designed to teach students how to safely climb and frame various electrical structures to heights of 50-65 feet. Topics include freehand and safety-strap climbing, and installation and removal of pole line hardware.

ELIN 120 - Construction of Overhead Structures

## ELIN 120 - Construction of Overhead Structures

Credits: 3
This course is designed to teach students to construct overhead high voltage structures. Topics include industry specification manuals interpretation, overhead hardware identification, construction methods and tool use.

ELIN 125 - Facilitate Teams \& Pole/Bucket Rescue

## ELIN 125 - Facilitate Teams \& Pole/Bucket Rescue

## Credits: 3

This course is designed as a two-part learning experience where students explore the role of supervisor, manager and leader of work teams. Secondly, students learn procedures necessary to complete a rescue of a line worker on a pole or in an aerial device.

## ELIN 130 - Electrical Stucture Installation and Transformers

## Credits: 4

This course is designed as a two-part learning experience where students will learn to properly install electrical structures with hand tools and with mechanized structure installation machinery. Secondly, students will mount and connect transformers to primary and secondary systems and gain the skill of paralleling of closed and open banks.

ELIN 135 - Energy Industry Blueprints, Symbols \& Documents

## ELIN 135 - Energy Industry Blueprints, Symbols \& Documents

## Credits: 1

This course is designed to teach students how to interpret system and strand maps for the gas, electric and communication industry. Students learn how to read building blueprints, staking and pole framing sheets. Additionally, students train to interpret line work construction drawings and equipment installation orders.

## ELIN 140 - GPS Mapping

## ELIN 140 - GPS Mapping

Credits: 1
This course is designed to teach students how to interpret system and strand maps for the gas, electric and communication industry. Students learn how to read building blueprints, staking and pole framing sheets.

## ELIN 155 - Field Construction I

## ELIN 155 - Field Construction I

## Credits: 3

This course is designed as a three-part learning experience where students work in actual field conditions. The first part of the class, students learn how to install single-phase high voltage systems including structural assembly, grounding requirements, guying, conductor installation, stringing and tying, single-phase transformer, capacitor and regulator installation. Secondly, this course covers underground installation, trencher operation, primary and secondary cable termination, services, pad mount transformers and sectionalizing cabinets, and street lighting. Topics include information about pneumatic and hydraulic controls essential for the electrician.

## ELIN 205 - Field Construction II

## ELIN 205 - Field Construction II

## Credits: 3

This course is designed to teach students to install multi-phase high voltage systems and underground multiple cable installation under actual field

## ELIN 210 - Field Construction III

## Credits: 3

This course is designed to teach students the fundamentals of overhead transmission structure construction and installation requirements for 69 KV systems. Students complete industry workshops/labs to be determined by the College.

## ELIN 280 - Electrical Lineman Seminar

## ELIN 280 - Electrical Lineman Seminar

## Credits: 3

This course is designed to demonstrate skills by completing industry workshops/labs as defined by the College.

## Electronics

ELET 101 - Fundamentals of Electronics

## ELET 101 - Fundamentals of Electronics

## Credits: 4

This course is a survey of electricity and electronics for automotive technology students. The principles of electrical components and circuits are studied. The course includes topics such as AC, D.C. parallel and series circuits, magnetism, motors, control components, and solid state devices. Laboratory assignments will stress the practical application of theory. Lab Fee Required.

Prerequisite: AOTE 201

## ELET 105 - Electronic Circuits I

## ELET 105 - Electronic Circuits I

## Credits: 4

This introductory course in circuit analysis defines fundamental electrical quantities and examines their relationship to various circuit components. Circuits comprised of resistance, capacitance, and inductance which are energized by both DC and AC sources are considered. In the laboratory the students perform experiments that confirm/demonstrate their grasp of the theory.

Corequisite: ELET 105L
Prerequisite: MATH 112
ELET 106 - Electronic Circuits II

## ELET 106 - Electronic Circuits II

## Credits: 4

This course in circuit analysis defines fundamental electrical quantities and examines their relationship to various circuit components. Circuits comprised of resistance, capacitance, and inductance which are energized by AC sources are considered. In the lab, the students perform experiments that confirm/demonstrate their grasp of the theory. Lab Fee Required.

## ELET 200 - Digital Electronics

## ELET 200 - Digital Electronics

## Credits: 4

This course is an introduction to digital logic and circuits. Characteristics of major families and their applications. Combinational logic synthesis, reduction and analysis techniques, as well as state machine design are covered. Lab Fee Required.

ELET 250-Spec. Topics in Electronics

## ELET 250 - Spec. Topics in Electronics

## Credits: 4

This course focuses on special topics in Electronics. Since the topics may change each time the course is offered, students should consult the course-offering schedule each semester.

## English

## ENGL 009 - Critical Reading \& Writing I

## ENGL 009 - Critical Reading \& Writing I

Credits: 3
This reading comprehension and critical writing course, part of a two-course sequence ENGL009/ENGL 011, assists students in developing college-level critical thing, reading comprehension, and fundamental standard writing skills. Emphasis will be on study skills, inferential thinking, writing effective paragraphs in response to texts, and introductory essay writing skills.

ENGL 011 - Critical Reading \& Writing II
ENGL 011 - Critical Reading \& Writing II

## Credits: 3

This course prepares students to reason while reading and writing in order to evaluate the written word, to judge its importance, and to express ideas through supporting details, reasons, and examples. The course also includes vocabulary and study skills development.

Prerequisite: Placement in this course is determined by the student's performance on the college placement Test.

## ENGL 012A - ALP Critical Reading \& Writing II

Credits: 3
This course, along with a co-designated section of ENGL 101, is part of the two-course ALP (Accelerated Learning Plan) that prepares students to engage in the critical reading, writing, and thinking necessary for college-level courses, while enrolled in credit courses. Emphasis in ENGL012 will be on active reading and writing techniques, study skills, inferential thinking, research skills, and effective college writing.

Prerequisite: Placement in this course is determined by the student's performance on the College Placement Criteria. Student must be in a codesignated ENGL 012/ENGL 101 ALP sequence.

ENGL 101 - English Composition I

## ENGL 101 - English Composition I

Credits: 3
This course advances the student's ability to write clearly and coherently by emphasizing the writing process. Emphasis is on writing projects which include personal, rhetorical, and expository models. Research skills are introduced.

## ENGL 102 - English Composition II

## ENGL 102 - English Composition II

Credits: 3
This course introduces students to short fiction, poetry, drama, and the novel. Written assignments are based on the readings. Writing skills learned in Composition I are further developed. Students will write a research paper which demonstrates understanding of literary criticism.

Prerequisite: ENGL 101 (Grade of C or better)
ENGL 125 - Tech. Writing \& Communication I

## ENGL 125 - Tech. Writing \& Communication I

Credits: 3
This course focuses on expository writing for business, industrial, and scientific fields, emphasizing the principles for organizing, writing, and revising clear, readable documents and reports. Students will practice written, oral, reading, and reasoning skills. Research skills will be advanced.

## ENGL 201 - Effective Speaking

## ENGL 201 - Effective Speaking

Credits: 3
This is a course in public speaking which stresses speech organization, effective delivery and critical listening skills. A strong emphasis is placed on student performance to help the student gain speech practice and develop self-confidence in a variety of speaking situations.

## ENGL 203-American Literature I

## Credits: 3

This course is a study of American thought and writing from colonial times through the post-Civil War period. Attention will be given to American social, religious, economic and political thinking as reflected in the works of American authors.

Prerequisite: ENGL 102

## ENGL 204 - American Literature II

## ENGL 204 - American Literature II

Credits: 3
This course focuses on major works in American Literature from the Civil War to the present. Attention will be given to the social, economic, and historical context of the works, as well as to the content, style, and themes of the individual authors.

Prerequisite: ENGL 102
ENGL 207 - Literature by Women

## ENGL 207 - Literature by Women

## Credits: 3

In this course, students will develop a portfolio of professional quality that is representative of technical and creative skills and career objectives. Excellent portfolio organization and resume presentation will be stressed. Cover letters, interviewing styles, and image presentation will be discussed. Students will write their goals, both short and long range, create a resume and develop a digital and presented portfolio for critique suitable for presentation to a school, client, or job interview.

Prerequisite: ENGL 102 (Grade of C or better)

## ENGL 208 - Theater History I

## ENGL 208 - Theater History I

Credits: 3
PERA208 This course is a survey of dramatic literature and theatrical history from ancient times through the Renaissance. Students will be introduced to all areas of the theater including: acting, directing, design, and theater architecture.

Prerequisite: ENGL 101
ENGL 209 - Theater History II
ENGL 209 - Theater History II

Credits: 3
PERA209 This course is a survey of dramatic literature and theatrical history from the Renaissance through modern times. Students will be introduced to all areas of the theater including: acting, directing, design, and theater architecture.

ENGL 211 - The Short Story

## ENGL 211 - The Short Story

## Credits: 3

This course traces the development of the short story from the early nineteenth century. It explores the conventions of the genre including character, plot, setting, point of view, style, and theme.

Prerequisite: ENGL 102

## ENGL 213 - Literary Masterpieces of the Western World I

## ENGL 213 - Literary Masterpieces of the Western World I

Credits: 3
This course examines some of the great works of the western world from the age of Homer to the late Middle Ages. Works studied include the Greek masterpieces, Roman literature, the Bible, Old English works, Chaucer, and Dante.

Prerequisite: ENGL 102
ENGL 215 - Journalism I

## ENGL 215 - Journalism I

## Credits: 3

This course is an introduction to print journalism. Skills to be developed include news reporting, interviewing, copy editing, fact checking, proofreading, as well as writing editorials and feature stories.

Prerequisite: ENGL 101 (Grade of C or better) or Permission of Instructor.
ENGL 216 - Children's Literature

## ENGL 216 - Children's Literature

## Credits: 3

This course introduces students to an appreciation of the breadth and variety of all genres of children's literature. Emphasis is placed on children's literature as an important factor in a child's understanding of the world. This course will enable students to recognize outstanding literature for children and acknowledge its place in the study of literature.

Prerequisite: ENGL 102
ENGL 217 - Journalism II
ENGL 217 - Journalism II

## Credits: 3

This course builds upon those reporting and writing skills acquired in Journalism I. Greater emphasis will be placed on gathering and evaluating news, and writing in-depth articles for various kinds of print media. In addition, the basics of newspaper design and editorial content will be covered through practical assignments related to the production of the college newspaper, The College Hill.

Prerequisite: ENGL 215 or COMM 219
ENGL 220 - Creative Writing

## ENGL 220 - Creative Writing

Credits: 3
This course is a writing workshop designed to help students write serious poetry and short fiction. Class discussions center on students' writing.
Prerequisite: ENGL 101

## ENGL 221 - Modern Poetry

## ENGL 221 - Modern Poetry

Credits: 3
This survey course will explore modem poets from the late 19th century to the modem day. Gender and generational, as well as international considerations allow for a wide range of poetic artists to be covered.

Prerequisite: ENGL 101 and ENGL 102 (Grade of C or better)
ENGL 222 - Shakespeare

## ENGL 222 - Shakespeare

## Credits: 3

This course provides students with an introduction to the works and world of the immortal Bard. Focus is on Shakespeare's handling of the greatest human dilemmas: the problems of power, the relationship of the individual to society, and the complexities of love. Students will be required to read samplings from the sonnets as well as selected histories, comedies, and tragedies.

Prerequisite: ENGL 101 and ENGL 102 (Grade of C or better)

## ENGL 230 - British Literature I

## ENGL 230 - British Literature I

## Credits: 3

This course is a general survey and analysis of selected representative British authors and works, with a focus on general historical patterns in the different periods of British literature. This course starts with the Middle Ages and progresses through the eighteenth century.

Prerequisite: ENGL 102 (Grade of C or better)

## ENGL 231 - British Literature II

Credits: 3
This course begins with a study of the Romantic Period and continues through contemporary British writers. The class will feature readings in the genres of non-fiction, fiction, drama, and poetry to provide a broad perspective of the innovations in the literature of these periods.

Prerequisite: ENGL 102 (Grade of C or better)

ENGL 250 - Special Topics in Literature
ENGL 250 - Special Topics in Literature

Credits: 3
This course focuses on selected topics in literature. Since the topics may change each time the course is offered, students should consult the course-offering schedule each semester.

ENGL 260 - Special Topics in Writing

## ENGL 260 - Special Topics in Writing

Credits: 3
This course focuses on selected topics in writing. Since the topics may change each time the course is offered, students should consult the courseoffering schedule each semester.

## Engineering Technology

## ENGR 100 - Introduction to Engineering

## ENGR 100 - Introduction to Engineering

Credits: 3
This course explores the topic of engineering and is appropriate for both those intending to major in engineering and those with an interest in learning about the various fields of engineering and other aspects of what engineers do. You will learn how to formulate, articulate, and solve problems, how to analyze problems using various case studies, and how to present the results of engineering work in a suitable format. They will also learn about the different disciplines of engineering and the multidisciplinary nature of modern engineering design.

Corequisite: PHYS 120
Prerequisite: MATH 113

ENGR 125 - Numerical Methods for Engineers

## ENGR 125 - Numerical Methods for Engineers

[^1]encountered as an engineer may involve a wide variety of mathematical phenomena, and hence it is beneficial to have an equally wide range of numerical methods with which to approach some of these problems. This course will provide an introduction to several of those methods

## ENGR 210 - Mechanics

## ENGR 210-Mechanics

Credits: 4
PHYS 210 This course studies the equilibrium of particles and rigid bodies subject to concentrated and distributed Newtonian forces. These studies are also applied to particles; rectilinear motion; simple, damped, and driven oscillations; gravitation and central forces; Lagrange's equations and the Hamiltonian.

Corequisite: MATH 220
Prerequisite: PHYS 120 (Grade of C or better)

## ENGR 220 - Engineering Statics

## ENGR 220 - Engineering Statics

Credits: 3
A study of the motion of bodies without reference to the forces; which cause the motion and the action of forces acting on the bodies and their resulting motions. Rectilinear and curvilinear motion in two and three dimensions using rectangular, normal/tangential and polar coordinate systems are investigated in kinematics. Kinetics includes discussions on work, potential and kinetic energy. Impulse and momentum are analyzed from Newton's second law along with the concepts of conservation of energy and momentum.

## ENGR 222 - Engineering Dynamics

## ENGR 222 - Engineering Dynamics

Credits: 3
A study of the motion of bodies without reference to the forces; which cause the motion and the action of forces acting on the bodies and their resulting motions. Rectilinear and curvilinear motion in two and three dimensions using rectangular, normal/tangential and polar coordinate systems are investigated in kinematics. Kinetics includes discussions on work, potential and kinetic energy. Impulse and momentum are analyzed from Newton's second law along with the concepts of conservation of energy and momentum.

Eng. Speak. Other Lang.

ESOL 035 - Basic ESOL Skill Development I

## ESOL 035 - Basic ESOL Skill Development I

Credits: 3
This is an intensive, core language development class for non-native speakers of English. Emphasis will be placed on basic language skills: listening comprehension, speaking, reading, and writing, and grammar. This course will be offered in seven and a half-week modules, meeting twice per week.

Prerequisite: ESOL Placement Test

## ESOL 037 - Basic ESOL Skill Development II

Credits: 3
This is an intensive intermediate core language course. Emphasis is placed on all disciplines of language learning: listening comprehension, speaking, reading, writing, and grammar. This course is offered in seven and a half week modules, and meets twice a week.

Prerequisite: ESOL 035 or ESOL Placement Test
ESOL 039 - Basic ESOL Skill Development III

## ESOL 039 - Basic ESOL Skill Development III

Credits: 3
This is an intensive advanced core language course. Emphasis is placed on all disciplines of language learning: listening comprehension, speaking, reading, writing, and grammar. This course is offered in seven and a half week modules, and meets twice a week.

Prerequisite: ESOL 037 or ESOL Placement Test
ESOL 057 - ESOL Intro. to Basic English Grammar I

## ESOL 057 - ESOL Intro. to Basic English Grammar

I

## Credits: 3

This is a beginning grammar course for non-native speakers of English. It introduces basic grammar, vocabulary, and pronunciation in conversational context based on survival skills.

Prerequisite: ESOL Placement Test
ESOL 058 - ESOL Intro. to Basic English Grammar II
ESOL 058 - ESOL Intro. to Basic English Grammar
II

Credits: 3
This is an intermediate grammar course for non-native speakers of English. Grammar pronunciation and vocabulary are further developed in conversational context.

Prerequisite: ESOL Placement Test
ESOL 059 - ESOL Intro. to Basic English Grammar III
ESOL 059 - ESOL Intro. to Basic English Grammar

Credits: 3
This is an advanced grammar course for non-native speakers of English. Grammar skills are further refined to a college level.
Prerequisite: ESOL Placement Test
ESOL 060 - ESOL Writing I

## ESOL 060 - ESOL Writing I

## Credits: 3

This is a beginning writing course for non-native speakers of English. Emphasis is placed on the development of writing skills at sentence and paragraph level.

Prerequisite: ESOL Placement Test
ESOL 061 - ESOL Writing II

## ESOL 061 - ESOL Writing II

Credits: 3
This is an intermediate writing course for non-native speakers of English. Topics include paragraph and short composition development.
Prerequisite: Grade of C or better in ESOL 058 or ESOL Placement Test
ESOL 062 - ESOL Writing III
ESOL 062 - ESOL Writing III

## Credits: 3

This is an advanced writing course for non-native speakers of English. Emphasis is placed on achieving writing skills required to function on a college level.

Corequisite: ESOL 059
Prerequisite: Grade of C or better in ESOL 061 or ESOL placement test
ESOL 074 - ESOL Reading \& Vocabulary I

## ESOL 074 - ESOL Reading \& Vocabulary I

## Credits: 3

This is a beginning level reading and vocabulary course for non-native speakers of English. Emphasis will be placed on reading comprehension, developing dictionary skills, recognizing spelling patterns, and acquisition of vocabulary themes centering around everyday American life.

Prerequisite: Grade of C or better in ESOL 035 or ESOL Placement Test
ESOL 075 - ESOL Reading \& Vocabulary II
ESOL 075 - ESOL Reading \& Vocabulary II

Credits: 3
This is an intermediate level reading and vocabulary development course for non-native speakers of English. Students will increase reading comprehension, vocabulary, and understanding of American Idioms. Emphasis will be placed on reading comprehension, independent reading, and accurate use of vocabulary in context.

Prerequisite: Grade of C or better in ESOL 074 or ESOL Placement Test
ESOL 076 - ESOL Reading \& Vocabulary III

## ESOL 076 - ESOL Reading \& Vocabulary III

Credits: 3
This is an advanced level reading and vocabulary course for non-native speakers of English. Students will be introduced to American Literature and college texts. Emphasis will be placed on reading independently in English, and acquisition of vocabulary suitable for successful transition into college courses.

Prerequisite: Grade of C or better in ESOL 075 or ESOL Placement Test
ESOL 078 - Integrated Language Skills for ESOL Students I

## ESOL 078 - Integrated Language Skills for ESOL Students I

## Credits: 6

This is an intensive six credit core language course for beginner and low intermediate ESOL students. Students will be introduced to pronunciation, vocabulary development, reading skills, and sentence structure.

## ESOL 079 - Integrated Language Skills for ESOL Students II

## Credits: 6

This is an intensive six credit core language development course for intermediate level ESOL students. Students will build on skills acquired in level one; pronunciation, vocabulary development, reading comprehension skills, paragraph structure, and grammar practice.

## ESOL 080 - College Prep English for ESOL Students I

## Credits: 6

This is an intensive six credit core language development course which begins to prepare ESOL students for college level work. Students practice effective communication skills, critical thinking, making inferences, correct syntax, review paragraph structure, and grammar practice at the high intermediate level.

## ESOL 081 - College Prep English for ESOL Students II

Credits: 6
This is an intensive 6 credit core language development course which prepares ESOL students for college level work. Students will increase effective communications skills for the academic environment, expand critical thinking, inferential skills, academic vocabulary, and composition skills at the advanced level.

ESOL 084 - TOEFL Preparation

## ESOL 084 - TOEFL Preparation

Credits: 3
This is a very advanced preparation course for non-native speakers of English who must take the Test of English as a Foreign Language. Students seeking college level skills in structure, written expression, listening and speaking and reading comprehension may also attend.

Prerequisite: Grade of C or better in ESOL 059 or ESOL Placement Test

ESOL 085 - ESOL Listening \& Speaking I

## ESOL 085 - ESOL Listening \& Speaking I

Credits: 3
This is an introductory course to the sound systems and speech patterns of American English for non-native speakers. Emphasis will be placed on proper pronunciation, listening comprehension, and basic conversational skills centering around topics concerning everyday American life.

Prerequisite: Grade of C or better in ESOL 035 or ESOL Placement Test
ESOL 086 - ESOL Listening \& Speaking II

## ESOL 086 - ESOL Listening \& Speaking II

Credits: 3
This is an intermediate course in communication for non-native speakers of English. Students will be introduced to the International Phonetic Alphabet, articulation diagrams, and participate in interactive dialogues for more fluency in the English language. Emphasis will be placed on communicating clearly by expanding conversational skills and listening comprehension.

Prerequisite: Grade of C or better in ESOL 085 or ESOL Placement Test

ESOL 087 - ESOL Listening \& Speaking III
ESOL 087 - ESOL Listening \& Speaking III

Credits: 3
This is a high intermediate communication course for non-native speakers of English. Students will further study: the International Phonetic Alphabet, stress, rhythm, and intonation patterns of American English. Emphasis will be on developing effective communication skills for the successful transition into an academic or professional environment.

Prerequisite: ESOL 086
ESOL 097 - Communication \& Presentation Skills for ESOL Students

## ESOL 097 - Communication \& Presentation Skills for ESOL Students

Credits: 3
This is an advanced course for non-native speakers of English in public speaking. Emphasis will be placed on speech organization, effective delivery, public presentations, and critical listening skills for effective note taking in the academic environment. A strong emphasis is placed on student performance to help the student gain speech practice, and develop self-confidence in addressing a variety of audiences in multiple speaking situations.

Prerequisite: ESOL 086 and ESOL 087

## Exercise Science

EXSC 101 - Intro. to Exercise Science

## EXSC 101 - Intro. to Exercise Science

Credits: 3
This is an introductory-level course to acquaint students with the development and structure of the field of exercise science. The current scientific development of the field is stressed, with additional emphasis on careers, certifications, professional organizations, and industry research and resource development. Requires proficiency in all developmental English and mathematical courses.

EXSC 105 - First Aid and Emergency Care

## EXSC 105 - First Aid and Emergency Care

Credits: 3
This course in first aid is designed to acquaint students with information about prevention of accidents and injuries, and about emergency assessment, recognition and treatment of trauma, and sudden illnesses. Upon successful completion of the requirements, students will receive AAOS First Aid certification.

Prerequisite: EXSC 101
EXSC 112 - Prin. of Personal Training I

## EXSC 112 - Prin. of Personal Training I

Credits: 3

Corequisite: EXSC 112L
EXSC 115 - Prin. of Personal Training II

## EXSC 115 - Prin. of Personal Training II

## Credits: 3

This course is designed to teach the student about the fundamental principles behind personal training. Exercise training principles, program design, and business skills pertinent to personal trainers will be considered. In addition, this course will assist in prepping the student to sit for a nationally recognized personal trainer certification exam. Lab fee required.

Corequisite: EXSC 115L
EXSC 121 - Aerobic Conditioning

## EXSC 121 - Aerobic Conditioning

## Credits: 1

This course is designed to educate the student about the different training principles and modalities of aerobic exercise training. Students taking this course will participate in a variety of aerobic conditioning programs to understand the technique, effort, and safety involved in this training style. Lab fee required.

## EXSC 123 - Anaerobic Conditioning

## EXSC 123 - Anaerobic Conditioning

## Credits: 1

This course is designed to teach the student about the different training principles and modalities of anaerobic exercise training. Anaerobic training typically involves more explosive and rapid exercises to improve performance on the athletic field but has also shown to have many health benefits for those not training for sport. Students taking this course will participate in a variety of anaerobic conditioning programs to understand the technique, effort, and safety involved in this training style. Lab fee required.

## EXSC 125 - Group Fitness

## EXSC 125 - Group Fitness

## Credits: 1

This course is designed to educate the student on how to design and lead group exercise classes. Students are expected to conduct and participate in group exercise classes emphasizing a variety of training styles such as total body conditioning, stretching and strengthening, and boot camp. This course will also teach the importance of safety and monitoring of proper exercise technique during group exercise classes.

## EXSC 127-Resistance Training

Credits: 1
This course is designed to teach students proper resistance training techniques and programming for all major muscle groups of the body. Proper handling of the resistance equipment, weight room etiquette, training theory, and program design will also be discussed in this course. Students taking this course will be required to participate in weight training sessions to develop a better understanding of the exercises and training style.

# EXSC 131 - Principles of Strength \& Conditioning I 

## Credits: 3

This course is designed to develop the student's knowledge and skills of advanced strength and conditioning concepts to prepare the student to work with athletes as strength coaches. The topics covered in this course include career opportunities, sports analysis, corrective exercise, performance preparation, and Olympic weightlifting techniques. Lab fee required.

Corequisite: EXSC 131L

EXSC 133 - Principles of Strength \& Conditioning II

## EXSC 133 - Principles of Strength \& Conditioning II

## Credits: 3

This course is designed to develop the student's knowledge and skills of advanced strength and conditioning concepts to prepare the student to work with athletes as strength coaches. The topics covered in this course include techniques and instruction for speed, agility, and quickness training, sport performance programming, conditioning for intermittent and endurance sports, and sports nutrition. Lab fee required.

EXSC 135 - Sports Injuries and Prevention

## EXSC 135 - Sports Injuries and Prevention

Credits: 3
This course is designed to develop the student's knowledge about common sports injuries and the preventive measures fitness professionals can take to minimize injury risk. The topics covered in this course include injury risk profiling, injury prevention, managing the injured athlete, and training considerations for special athletic populations. Students enrolled in this course are required to complete an independent research project including ten hours of observation with a licensed Athletic Trainer.

EXSC 137 - Sports Testing \& Interpretation

## EXSC 137 - Sports Testing \& Interpretation

Credits: 1
This course is designed to educate the student on common sports tests utilized in the field of strength and conditioning. Students taking this course will participate in a variety of sports performance assessments evaluating both health-related and performance-related components of fitness.

Topics covered in this course include testing of functional movement, cardiorespiratory endurance, anaerobic endurance, strength, agility, speed, power, and more.

EXSC 201 - Kinesiology

## EXSC 201 - Kinesiology

Credits: 3
This course is designed to acquaint students with the foundation of fitness screening and exercise prescription. The various parameters of fitness will be investigated including their measurements, interpretation of results, and application towards recommendations for personalized exercise programming for the general population, those with medical concerns, and the athletic population.

Corequisite: EXSC 201L
Prerequisite: EXSC 101, MATH 110 or Higher, BIOS 102 and BIOS 104

## EXSC 210 - Exercise Physiology

## EXSC 210 - Exercise Physiology

## Credits: 3

This course is designed to study the human responses to exercise and the adaptations that occur from various types of training programs in both lecture and laboratory setting, the student will learn the metabolic, circulatory, respiratory, neuromuscular and hormonal responses to exercise. Practical applications of this knowledge will be explored with regards to the role of exercise in maintaining and improving health, physical fitness and athletic performance in the general population, youth, athletes and seniors.

Corequisite: EXSC 210L
Prerequisite: EXSC 101, MATH 110 or Higher, BIOS 102 and BIOS 104

## EXSC 215 - Fitness Assessment \& Exercise Prescription

## EXSC 215 - Fitness Assessment \& Exercise Prescription

## Credits: 3

This course is designed to acquaint students with the foundation of fitness screening and exercise prescription. Various parameters of fitness will be investigated including exercise measurements, interpretation of results, and recommendations for personalized exercise programming for the general population, those with medical conditions, and athletes. Lab fee required.

Corequisite: EXSC 215L
EXSC 280 - Personal Trainer Internship

## EXSC 280 - Personal Trainer Internship

## Credits: 1

This course is designed as an internship to further the personal training student's skills and knowledge by shadowing a personal trainer in a health and fitness setting. Students will have the opportunity to observe different personal training job duties such as training clients, leading group exercise classes, fitness center supervision, and fitness management.

## EXSC 285 - Strength Coach Internship

## Credits: 1

This course is designed as an internship to further the strength coach student's skills and knowledge of the field by shadowing a certified strength and conditioning professional. Students will have the opportunity to observe different strength and conditioning job duties such as testing and training athletes, program development for different sports, injury prevention techniques, training schedule management, and strength coach leadership.

## French

FREN 101 - Elementary French I

## FREN 101 - Elementary French I

Credits: 3
This is an introductory course in French emphasizing the fundamentals of speaking, reading, writing, and listening. The course focuses on building basic vocabulary and introducing students to the French culture. It is designed for students with no French experience.

## FREN 102 - Elementary French II

## FREN 102 - Elementary French II

## Credits: 3

This course is a continuation of FREN 101 with an emphasis on the fundamentals of speaking, reading, writing, and listening. The course focuses on building basic vocabulary and introducing students to the French culture.

Prerequisite: FREN 101 (Grade of C or better) or two years of high school French (Grade of C or better)

## FREN 201 - Intermediate French I

## FREN 201 - Intermediate French I

## Credits: 3

This course is a continuation of FREN 102, developing skills in speaking, reading, writing, and listening at the intermediate level.
Prerequisite: FREN 102 (Grade of C or better) or three years of high school French (Grade of C or better), or its equivalent.
FREN 202 - Intermediate French II

## FREN 202 - Intermediate French II

## Credits: 3

This is a continuation of FREN 201, developing skills in speaking, reading, writing, and listening at the intermediate level.

## Fire Science

FRST 101 - Intro. to Fire Science

## FRST 101 - Intro. to Fire Science

## Credits: 3

This course is an introduction to the fundamentals of fire protection engineering. It is a study of fire hazards and controlling mechanisms, detection and alarm systems, fire behavior and the physical and chemical effects of combustion upon a single dwelling to problem areas such as high-rise buildings.

FRST 103 - Fire Prevention

## FRST 103 - Fire Prevention

## Credits: 3

This course provides fundamental information regarding the history and philosophy of fire prevention, organization and operation of a fire prevention bureau, use of fire codes, identification and correction of fire hazards, and the relationships of fire prevention with built-in fire protection systems, fire investigation, and fire and life-safety education.

Prerequisite: FRST 101
FRST 104 - Fire Administration

## FRST 104 - Fire Administration

## Credits: 3

This course examines the organization and management of the fire service. Topics include discussion of new technologies, changing organization structures, personnel and equipment, manpower and training, reporting systems and municipal budgets.

Prerequisite: FRST 101
FRST 105 - Fire Protection Systems

## FRST 105 - Fire Protection Systems

## Credits: 3

This course provides information relating to the features of design and operation of fire detection and alarm systems, heat and smoke control systems, special protection and sprinkler systems, water supply for fire protection and portable fire extinguishers.

Prerequisite: FRST 101
FRST 106 - Fire Tactics and Strategy

## FRST 106 - Fire Tactics and Strategy

Credits: 3
This course progressively covers fireground tactics and strategies from before the fact fireground preparation, through systematically planning, implementing and managing the strategic and/or tactical plan, to a process of reviewing events and critiquing performance.

Prerequisite: FRST 101

FRST 107 - Fire Investigation

## FRST 107 - Fire Investigation

## Credits: 3

This course instructs fire personnel to observe fire patterns, cause and origin, and clues of arson presented. Preserving the fire scene, the fire setter, legal considerations and fire investigations are also discussed.

## Prerequisite: FRST 101

FRST 110 - Fire Behavior and Combustion

## FRST 110 - Fire Behavior and Combustion

Credits: 3
This course explores the theories and fundamentals of how and why fires start, spread, and how they are controlled.
Prerequisite: FRST 101
FRST 202 - Bldg. Constr. for Fire Protect.

## FRST 202 - Bldg. Constr. for Fire Protect.

## Credits: 3

This course studies the components of building construction that relate to fire and safety. The focus of this course is on fire fighter safety. The elements of construction and design of structures are shown to be key factors when inspecting buildings, preplanning fire operations, and operating at emergencies.

Prerequisite: FRST 101
FRST 205 - Fire Protection Hydraulics \& Water Supply

## FRST 205 - Fire Protection Hydraulics \& Water Supply

## Credits: 3

This course is a review of hydraulic calculations and formulas, how to apply the standards to firefighting equipment and water supply. Sprinkler systems, fire pumps and hose lines are covered. This course requires fieldwork.

## FRST 208 - Hazardous Materials

Credits: 3
This course provides basic fire chemistry relating to the categories of hazardous materials including problems of recognition, reactivity, and health encountered by firefighters.

Prerequisite: FRST 101
FRST 210 - Occupational Health \& Safety

## FRST 210 - Occupational Health \& Safety

Credits: 3
This course covers the basic principles of Federal, State and FFPA standards and legislation emphasizing such topics as blood borne pathogens, NJ PEOSHA codes and related codes for general industry. It also addresses issues facing the firefighter such as injury, death, and health. This course is designed for N.F.P .A. 1500.

Prerequisite: FRST 101
FRST 230 - Legal Aspects of the Fire Serv.

## FRST 230 - Legal Aspects of the Fire Serv.

Credits: 3
This course introduces the Federal, State, and local laws that regulate emergency services, national standards influencing emergency services, standards of care, tort, liability, and review of relevant court cases.

Prerequisite: FRST 101 and FRST 103 (or FRST 101 and permission of Program Coordinator of Fire Science Technology)
FRST 250 - Special Topics in Fire Science

## FRST 250 - Special Topics in Fire Science

## Credits: 3

This course focuses on selected topics in Fire Science technology. Since topics may change each time the course is offered, students should consult the course-offering schedule each semester.

## Geography

GEOG 105 - Cultural Geography

## GEOG 105 - Cultural Geography

## GEOG 110 - World Geography

## Credits: 3

This course is an introduction to the study of geography focusing on a regional geographic approach. Particular reference is placed on the relationship of geographic features, natural resources, and economic development.

## GEOG 250 - Spec. Topics in Geography

## Credits: 4

This course focuses on special topics in Geography. Since the topics may change each time the course is offered, students should consult the course-offering schedule each semester.

## Geology

## GEOL 101 - Physical Geology

## GEOL 101 - Physical Geology

## Credits: 4

This course is designed to introduce students to earth and its physical processes, including the origin and nature of rocks and minerals, weather and its erosional forces, mountain building, volcanism, metamorphism, origin of ore deposits, plate tectonics, and problems of water supply and pollution. Field trips will be an integral part of the course. Lab Fee Required.

Corequisite: GEOL 101L

## GEOL 110 - Historical Geology

## GEOL 110 - Historical Geology

## Credits: 4

This course will introduce the student to the study of planet Earth through time. The class will study the concepts of stratigraphy (the study of strata) and the fossils they contain. This course will concentrate on the geologic history of North America with special attention to the Appalachian Basin and New Jersey. This course will discuss the history of the Earth, geological processes and biological history. This course will include labs and several field trips to observe concepts taught in the lectures. Lab Fee Required.

Corequisite: GEOL 110L
Prerequisite: GEOL 101

## GEOL 250 - Spec. Topics in Geology

## Credits: 4

This course focuses on special topics in Geology. Since the topics may change each time the course is offered, students should consult the courseoffering schedule each semester.

Corequisite: GEOL 250L

## Graphic Design

## GRAD 101 - Design I

## GRAD 101 - Design I

## Credits: 3

This course is an exploration of the fundamental principles of design through a series of weekly lectures, discussions, and short readings reinforced by studio assignments and critiques. This class focuses on developing the ability to skillfully use and combine core design elements and utilize design principles while mastering the craft of materials to convey meaning. Assignments are organized and designed to engage students with optimal learning opportunities in developing critical thinking skills and professional vocabulary allowing for further study. Although this course is not a software-oriented course student will be introduced to the computer utilizing Adobe Illustrator and Photoshop to gain very basic skills.

## GRAD 105 - Vector Graphics \& Page Design

## GRAD 105 - Vector Graphics \& Page Design

## Credits: 3

This course emphasizes techniques and applications used to produce published documents for both Internet and print media. Students will learn to design documents, publications, and related projects using industry standard software on both MAC and PC platforms. An emphasis is placed on basic computer graphic skills through practical experience with two-dimensional paint and draw programs, as well as layout programs for print and web. Projects covered include advertising design, page layout, computer illustrations, digital imaging, and the scanning and manipulation of images. Lab Fee Required.

Prerequisite: Any COMS course

## GRAD 107 - Drawing for Designers

## GRAD 107 - Drawing for Designers

## Credits: 3

This is a studio course where students will observe and create in the physical world away from the computer. This course suggests that real-world observation is invaluable in the planning of traditional illustration, digital illustration, 2D graphics, and 3D generated images. Areas of instruction will include graphic design drawing elements (such as line, value, texture, color, and composition), perspective, architecture, and environments. The course will also emphasize basic drawing techniques, anatomy for the artist, life drawing, lighting, texturing, and storyboarding. Students will learn how to efficiently work with pencil, charcoal, ink, markers, and mixed media. Lab Fee Required.

## GRAD 108 - History of Graphic Design

## Credits: 3

This course explores art and design in historical and philosophical context from the Paleolithic to the Digital Age utilizing visual, literary and web sources. In considering art and design beyond the aesthetic, emphasis will be placed on its role of these two forces in the areas of commerce, culture, propaganda, ideology and the social and political arenas. Through a series of workshop projects in a variety of media, this course will serve as a laboratory for students to express their understanding of the presence of the history of visual communication in contemporary life and raise informed questions about their own contributions to the future of the field. Lab Fee Required.

## GRAD 109 - Intro. to Digital Marketing

## GRAD 109 - Intro. to Digital Marketing

Credits: 3
This course focuses on techniques for writing, editing and researching content for social media platforms, and students will publish their work on their own Websites and Blogs. An emphasis is placed on the skills needed for quality storytelling via social media communication. Students will explore blogging, podcasting and social software technology. Students will implement social media research campaigns, develop original web content, and discuss interactive writing, interactive publishing, and the role of the interactive writer. Copyright law, libel law, information ethics and culture will be explored.

GRAD 115 - Intro. to Game Theory \& Develop.

## GRAD 115 - Intro. to Game Theory \& Develop.

## Credits: 3

This course is targeted as an introduction to game theory and development. Students will be engaged throughout the course to design both new and classic games through a user-friendly game programming interface. In addition, students will learn to create and design their own pixel art to enhance the look and feel of their own game. Many topics will be addressed throughout the course including game design, theory, creation, and production. Students will learn how games are distributed and design game programs that are platform independent. Lab fee required.

## GRAD 119 - Website Management for Digital Marketing

## Credits: 3

This course is designed to introduce students to WordPress Content Management System for either personal or business website use. The course covers the basics on how to use the WordPress platform including installation, content management, and configuration. Prior web publishing experience is not required. Familiarity with web browsers and email is highly recommended. Lab Fee Required.

## GRAD 122 - Typography \& Layout

## Credits: 3

This course is an introduction to typography and layout as applied to visual communication. Students will explore the history of typography, type recognition, typographic terms, fundamentals of type, and the appropriate use of typography in a variety of design applications. Emphasis is placed on the basic design principles of typographic compositions and typesetting. A range of theoretical and applied projects will be used to investigate typography as a fundamental communication tool. Students use both traditional and digital media employing page layout and software programs that utilize type. Lab Fee Required.

Prerequisite: GRAD 101, GRAD 105
GRAD 127 - Layout and Design

## GRAD 127 - Layout and Design

## Credits: 3

This course focuses on the elements and principles of print design using the computer as the major production tool. Students will learn to use storyboards and concept ideas in developing digitally created compositions and projects. This course includes the study of typography as it relates to page layout, graphic communication and publication design using both PC and MAC computers, as well as industry standard software for print publications. Students will integrate text and graphics to create a variety of real world projects. Lab Fee Required.

## GRAD 128 - Digital Imagery \& Editing

## GRAD 128 - Digital Imagery \& Editing

## Credits: 3

This course provides students with the intensive exploration of advanced digital imaging as it applies to photography creating PDF documents, optimizing web graphics and complex layered images. Students will perfect their ability to creatively use digital imaging software to create sophisticated graphics for print and the web. Further study and practical application will be applied to creating documents for both the Internet and print mediums. An emphasis is placed on developing quality portfolio pieces. Lab Fee Required.

Prerequisite: GRAD 105

## GRAD 132 - Design. \& Print. Stylized Books

## GRAD 132 - Design. \& Print. Stylized Books

## Credits: 3

This course is designed for art and design students who wish to create and publish children's books, short stories, cartoons, anime, poems, or collections. Students will learn to design and lay out their material (drawings, paintings, photographs, and scanned images) through the use of illustration software (Adobe Illustrator ${ }^{\circledR}$ ). The resulting images will be managed through the use of software designed for image manipulation (Adobe PhotoShop ${ }^{\circledR}$ ). The culmination of the artistic rendering will be integrated into a high-end composition through the use of specialized software (Adobe InDesign $®$ ) for output to print. In addition to the use of software, the course will introduce the student to the basics of color theory, typography, design, layout, pagination, preparation for print, and final print. The focus of the student's creative efforts throughout the semester will be upon the creation of a full color bound booklet. Lab Fee Required.

Prerequisite: GRAD 105
GRAD 135 - Advertising and Package Design

## GRAD 135 - Advertising and Package Design

Credits: 3
This course introduces the student to the development, scheduling, and production of 3D primary and secondary packaging plus related print

# GRAD 138 - Comic Book Illustration 

## Credits: 3

This course will provide a comprehensive introduction to the language and form of narrative illustration. The emphasis is on teaching the narrative language, use of tools, page and panel design, anatomy, drafting, perspective, storytelling and arrangement of images, while surveying various styles and genres related to the topic. Attention to developing essential drawing skills needed to create narrative illustrations on any level and for many types of applications will be explored. Completed projects would be suitable for inclusion in student portfolios.

GRAD 139 - Children's Book Illustration

## GRAD 139 - Children's Book Illustration

## Credits: 3

This class allows students to develop a children's book from an initial concept to a "dummy book" ready to submit to publishers. Students will have the opportunity to explore a variety of mediums and diverse illustration techniques using video enrichment and lectures about illustrators, writers and the publishing industry. Developing students' drawing skills will be emphasized in all class work, from preliminary sketches to final works. Students will develop creative thinking skills as they learn how to transform ideas into images that tell a story. Exploration of the different children's book genres will be covered.

## GRAD 140 - Digital Illustration \& Product.

## GRAD 140 - Digital Illustration \& Product.

## Credits: 3

This course focuses on the introduction and development of studio skills in the creative use of illustration materials and design principles. The student will experiment with a wide range of techniques and media including colored pencil, graphite, watercolors, and computer illustration using industry standard paint and drawing software. Students will work with their hand drawings and scanning, combining fine art and graphic design to develop professional portfolio pieces. The student will learn illustration theory as a means of communication and will work on projects including children's book and magazine illustration, spot illustrations for the web, print and pre-press information. Final art projects will be produced in a variety of media, while students combine illustration with other fine art and advertising design skills to create a professional commercial art portfolio. Lab Fee Required.

Prerequisite: GRAD 105 and GRAD 128
GRAD 141 - Animation and Design

## GRAD 141 - Animation and Design

## Credits: 3

In this course, students will learn to create 2-dimensional animations and interactive websites using a variety of art software. Topics covered include good interface design, character animation, morphing, tweening, storyboarding, sound and interactivity. Students will create a complete story animation and an interactive portfolio or website for their final project. Lab Fee Required.

## GRAD 142 - Digital Typography and Color

## GRAD 142 - Digital Typography and Color

## Credits: 3

This course is an introduction to the fundamentals of type. Topics covered will include letterforms, text layout and problem solving for print and digital media. The technology and history of typography will be covered as well as page layout and software programs utilizing type. Students will also learn about the nature of color on paper and on the computer, in the printing press and beyond. Color theory, history and preparation information about color for print and web will be covered. Lab Fee Required.

Prerequisite: GRAD 101 and GRAD 105
GRAD 144 - Color for Designers

## GRAD 144 - Color for Designers

## Credits: 3

This course is an introduction to color intended for the designer in a technology driven world. The course will emphasize insight into color terminology, traditional color theory, and the perception and use of color in all media. Additional focus is placed on the essential principles and elements of design and their application to a variety of studio projects. Further exploration of the future of color will also be covered. Lab Fee Required.

## GRAD 150 - Storyboarding \& Sequential Storytelling

## GRAD 150 - Storyboarding \& Sequential Storytelling

## Credits: 3

This course is designed to introduce the student to techniques used by artists and graphic designers when they create characters and environments prior to animation on the computer. Students begin by using a paper and pencil approach to create characters and the world they inhabit. Students then learn to map out on paper the way that the story will unfold. The use of this "pencil and paper" approach helps students explore and develop their own creative process and teaches them to take their ideas from intangible abstracts to fully visualized concepts. Lab Fee Required.

## GRAD 153 - Character Design

## GRAD 153 - Character Design

## Credits: 3

This course is designed to introduce the student to the essential craft of developing characters for stories, games, and other forms of video entertainment. Before any of these entertainment forms can be pursued, an artist must develop successful characters. Students will learn that the thousands of hours of work and countless frames of video involved in these endeavors all depend on the success of the artist's vision, and they will have the opportunity to study different forms of character development ranging from the elegant lines of Japanese Anime to the poignant expressions of King Kong. Pencil, paper, clay, and polymer will all be used along with sketched storyboards to help character designer's work with authors and directors to identify and realize projects. Lab Fee Required.

## GRAD 158-3D Modeling

Credits: 3
This course is designed to introduce the student to the basic concepts of modeling, texturing, and lighting and their application to 3D projects. Students will learn how artists build and sculpt 3D models, give them detailed textures, and light them in dozens of different ways using computer software. Topics include user interface, polygonal modeling, NURBS modeling, 3D cameras, lighting execution, textures and mapping. Lab Fee Required.

Prerequisite: COMS 110 or COMS 113
GRAD 162 - Character Modeling in 3D

## GRAD 162 - Character Modeling in 3D

## Credits: 3

This course introduces students to the art of 3D anatomy and sculpting. Using conceptual drawings and sculptures, students will learn to visualize and render their creations in a 3D perspective. Utilizing 3DS Max, bones and controllers will be added to these characters, enabling them to become animated works of art. Lab Fee Required.

Prerequisite: GRAD 153 and GRAD 158
GRAD 163-3D Environments

## GRAD 163-3D Environments

## Credits: 3

This course is designed to introduce the student to advanced, organic modeling techniques, advanced texturing, and lighting and their applications to 3D Environments. Students will learn how to utilize these advanced techniques to construct a virtual environment with creativity and appeal. Topics include organic modeling and edge flow, environmental textures and their applications, 3D cameras and the viewer perspective and advanced lighting.

Prerequisite: GRAD 158
GRAD 164 - Character Animation in 3D

## GRAD 164 - Character Animation in 3D

## Credits: 3

This course is designed to help the student develop skill in the animation of inanimate objects, character and interactivity between the two. Students will use a predetermined character to develop weight, emotion, and interactivity with personality and purpose. The course will expose students to traditional animation techniques, such as keyframing, pose-to-pose, and then help students see how these techniques apply to sophisticated 3D animation software such as 3DMAX. Lab Fee Required.

Prerequisite: GRAD 158
GRAD 201 - Presentation \& Print Production

## Credits: 3

This course will begin with training in various hand cutting and assembly techniques enabling the student to develop professional-level skills in craftsmanship. These skills combined with methods of presenting work will allow the student to develop into a well-rounded creative professional. Emphasis is placed on basic skills in cutting, mounting, folding, 3D construction and wrapping. Students will have the opportunity to apply these skills on a variety of projects. In the later part of the class lectures and projects will focus on preparing accurate files using a variety of software applications. Topics include setting up mechanical files, film separations, screen angles, trapping, process and spot color, file formats, creating plates for specialized inks and processes, and an overview of the life cycle of a print job. Completed projects would be suitable for inclusion in student portfolios. Lab Fee Required.

Prerequisite: GRAD 122, GRAD 128
GRAD 202-3D Level Design

## GRAD 202-3D Level Design

## Credits: 3

3D Level Design introduces students to the art of the game world. Utilizing Autodesk 3DS Max and Unreal Tournament 3 Editor, students will learn to manipulate "in-game" assets in order to construct a fluid, seamless, and creative environment to virtually explore and interact with. Along with development comes quality assurance, which is another in-depth process that we explore in this class. Testing our game world and making sure the characters inside of it can traverse terrain and obstacles with ease.

## GRAD 203 - Print Production

## GRAD 203 - Print Production

## Credits: 3

This course places emphasis on student proficiency in the pre-press stage of graphic design. Beginning with traditional paste-up skills and concepts, and transitioning to computer, students will learn how to make the artwork they create suitable for printing. Class lectures and projects will focus on preparing accurate files using a variety of software applications. An in-depth study of various printing processes, links, and paper is also included in the course. Students will learn to work effectively with service bureaus, and, when possible, the course will include tours of printing plants and a large, full-service output bureau. Completed projects would be suitable for inclusion in student portfolios. Lab Fee Required.

Prerequisite: GRAD 122, GRAD 144
GRAD 210 - Designing for Interactivity

## GRAD 210 - Designing for Interactivity

## Credits: 3

This course is an introduction to multimedia production using the latest professional authoring software to learn design principles and production processes essential to the creation of successful web design and multimedia projects, including basic animation and interactivity with the integration of sound and graphics. Planning complete projects as well as screen and interface design are covered at the introductory level. The emphasis is on practical experience using multimedia and web design software on both the MAC and PC platforms. Preparation of a digital portfolio is emphasized, as is the development of presentation skills for the corporate or freelance environment. Practical experience in concept generation, thumbnail sketching, storyboarding, and project organization are covered. Lab Fee Required.

Prerequisite: GRAD 128
GRAD 211 - Website Management for Digital Marketing II

## Marketing II

## Credits: 3

This next level course represents the continuation of Website Management for Digital Marketing. It provides students with the opportunity to take their Content Management System skills to the next level. The course content is ideal for those who are already comfortable building WordPress sites, but are looking to work in the field professionally. Students will gain insight and skills needed to build sophisticated, branded and customized websites for themselves and/or their clients. Students will work on their own websites and learn how to install and customize plugins and themes as well as how to update, upgrade, back them up and manage them. Students are required to pay for web hosting and a domain name. Lab Fee Required.

## GRAD 219 - Digital Marketing II

## GRAD 219 - Digital Marketing II

## Credits: 3

This course is designed to focus on how businesses are using Social Media as advertising tools as well as how to create and organize a welldesigned social media campaign. The use of social media platforms, such as, Facebook, YouTube, Twitter, etc., will be examined in depth. Students explore the importance of growing a social media audience and keeping their organization or clients relevant by tackling socially relevant projects, as well as the advantages of sharing social content, and ethical concerns. Social Media Marketing, Blogging, Search Engine Optimization, Email Marketing and PPC (Pay-per-click) Advertising are reviewed to create Viral Advertising campaigns. Lab Fee Required.

## GRAD 230 - Directed Themes in Illustration

## GRAD 230 - Directed Themes in Illustration

## Credits: 3

This course has students specialize in a single area of illustration of $r$ the entire term by choosing illustration projects in children's book, editorial, comic book, fashion, commercial or advertising, scientific, or caricature drawings to explore in a related series of instructor-directed themes. At the completion of this course, the student will have created a series of related portfolio projects that demonstrate advanced problem solving ability of a personal style, as well as continued improvement in developing skills in illustration methods and materials. Lab Fee Required.

Prerequisite: ARTA 150 or GRAD 153 and GRAD 107 or Permission of the Program Coordinator
GRAD 235 - Video and Motion Graphics

## GRAD 235 - Video and Motion Graphics

Credits: 3
This course introduces students to software products (editing suites and special effects) that are now widely used in the gaming and entertainment industries for editing and graphic manipulation. Students will learn to use specialized compositing tools to edit scenes, insert graphic effects, place sound effects and blend music to create a final professional product. Software packages used in this class include Adobe's After Effects® and Premiere ${ }^{\circledR}$.

Credits: 3
This course uses state of the art digital video and audio editing software so students will learn how to capture and manipulate video and sound, how to create streaming audio and video, how to create QuickTime movies and panoramas along with advanced Flash based movies for the Internet. Topics covered will include the latest web technologies to keep current in an ever-changing field. Students will work on both MAC and PC platforms and will also work in a studio environment for further experience on current and industry standard equipment.

Prerequisite: GRAD 105

GRAD 250 - Special Topics in Graphic Design

# GRAD 250 - Special Topics in Graphic Design 

## Credits: 3

This course focuses on selected topics in graphic design technology. Since topics may change each time the course is offered, students should consult the course-offering schedule each semester. Lab Fee Required.

Prerequisite: GRAD 105
GRAD 262 - Game Production

## GRAD 262 - Game Production

Credits: 3
This course is designed to bring practical experience, of working in collaborative teams, to produce games of the highest professional quality. Students utilize industry-standard software and advanced programming to explore the practical challenges of managing the development of a game. Emphasizes is on documentation and management skills, game design, character development, storyboarding, user interface, interactive storytelling, 3D animation, special effects, audio, and testing.

Prerequisite: GRAD 235 Video and Motion Graphics

GRAD 280 - Graphic Design Internship

## GRAD 280 - Graphic Design Internship

## Credits: 2

This course is designed for Graphic Design majors who have demonstrated advanced skill levels and for those who have potential to perform professionally in a work environment. Internships include practical work experience in an on or off campus business or project (i.e. advertising agencies, graphic design businesses or corporate art departments). An emphasis on personal presentation and success in the workplace is covered

Corequisite: GRAD 135
Prerequisite: GRAD 122, GRAD 144
GRAD 281 - Portfolio Prep. \& Presentation

## GRAD 281 - Portfolio Prep. \& Presentation

Credits: 1
In this course, students will develop a portfolio of professional quality which is representative of technical and creative skills and career objectives. Excellent portfolio organization and resume presentation, will be stressed. Cover letters, interviewing styles and image presentation will be discussed. Students will write their goals, both short and long range, create a resume and develop a digital and printed portfolio for

## GRAD 282 - Portfolio/Demo Reel Preparation and Presentation

## Credits: 2

In this course, students will develop a digital portfolio/demo reel of professional quality geared to the area of the industry the student is most interested in and representative of technical and creative skills and career objectives. Excellent portfolio organization and resume presentation will be stressed. Cover letters, interviewing styles and image presentation will be discussed. Students will write their goals, both short and long range, create a resume and develop a digital portfolio/demo reel for critique, suitable for presentation to a school, client or job interview.

## GRAD 283-3D Computer Arts Internship

Credits: 1
This course is designed for 3D Computer Arts majors who have demonstrated advanced skill levels and for those who have potential to perform professionally in a work environment. Internships include practical work experience in an on or off campus business or project (i.e. 3D studios, graphic design businesses or corporate art departments). Students are required to complete 45 hours in the field. Lab Fee Required.

Prerequisite: GRAD 101, GRAD 105, GRAD 107, GRAD 128, GRAD 144, GRAD 153, GRAD 158, GRAD 162, GRAD 163

## German

GRMN 101 - Elementary German I

## GRMN 101 - Elementary German I

Credits: 3
This is an introductory course in German emphasizing fundamentals of speaking, reading, writing, and listening. The course focuses on building basic vocabulary and introducing students to the German culture. It is designed for students with no German experience.

## GRMN 102 - Elementary German II

## GRMN 102 - Elementary German II

## Credits: 3

This course is a continuation of GRMN 101 with an emphasis on the fundamentals of speaking, writing and listening. The course focuses on building basic vocabulary and continuing the study of German culture.

## GRMN 201 - Intermediate German I

Credits: 3
This course is a continuation of GRMN 102, developing skills in speaking, reading, writing, and listening at the intermediate level.
Prerequisite: GRMN 102 (Grade of C or better) or three years of high school German (Grade of C or better), or its equivalent.

## GRMN 202 - Intermediate German II

## GRMN 202 - Intermediate German II

## Credits: 3

This is a continuation of GRMN 201 developing skills in speaking, reading, writing, and listening at the intermediate level.
Prerequisite: GRMN 201 (Grade of C or better) or Permission of Instructor.

## Health Science

HSCI 115 - Ethics, Communication, Business \& Law

## HSCI 115 - Ethics, Communication, Business \& <br> Law

## Credits: 3

This course is designed to focus on the professional relationship between healthcare professionals and the clients they serve. Emphasis will be placed in effective communication, and the communication process. Students will learn about ethics and legal issues of practice and culminates with the completion of a comprehensive business plan.

## History

HIST 101 - Hist of Western Civilization I

## HIST 101 - Hist of Western Civilization I

Credits: 3
This course emphasizes the political, social, economic, technological, and cultural forces that influenced the historical development of Western Civilization to 1648. Major topics include: Ancient Civilizations, Greece and Rome, Middle Ages, Renaissance, and Reformation.

Credits: 3
This course is a survey of Western Civilization since 1648 with emphasis on the concepts and historical movements vital to understanding the modem world. Major topics include the development of law and government, the emergence of the major ideologies of the nineteenth and twentieth centuries, the industrial revolution and economic modernization, 20th century "isms" and the impact of social and cultural development in Western Europe.

## HIST 105 - U.S. History I

## HIST 105 - U.S. History I

Credits: 3
This course is an examination of United States history from the age of discovery through the Civil War. Particular emphasis will be placed on the social, economic, and political forces that were responsible for the development of the new nation.

HIST 106 - U.S. History II

## HIST 106 - U.S. History II

## Credits: 3

This course is an examination of United States history from Reconstruction through the present. Particular emphasis will be placed on major themes in United States' politics, society, economics, and diplomacy.

HIST 110 - Hist. \& Heritage of Sussex Cty.

## HIST 110 - Hist. \& Heritage of Sussex Cty.

## Credits: 3

This course will present a study of Sussex County history and heritage. Using speakers, tours, and study materials, students will be exploring 200 years of Sussex County history and heritage.

HIST 201-20th Century Asia

## HIST 201-20th Century Asia

Credits: 3
This course will examine the major events, ideas, and forces that have shaped the Asian world in the years after 1898 . Special attention will be paid to the interaction of Western ideas of political freedom, economic development, and imperialism with the classical ideas of Asian societies. Demographic and other social cultural traits as well as the impact of modernization on traditional societies will likewise be assessed.

Credits: 3
This course focuses on selected topics in History. Since the topics may change each time the course is offered, students should consult the courseoffering schedule each semester.

## Horticultural Science

HORT 102 - Plant Propagation

## HORT 102 - Plant Propagation

Credits: 4
This course acquaints the student, through in class lectures and hands on labs, with the techniques and facilities needed for plant propagation in the greenhouse and nursery industry.

Corequisite: HORT 102L
HORT 105 - Sustainable Garden Design

## HORT 105 - Sustainable Garden Design

Credits: 3
This course prepares students with the knowledge and skills to design basic gardens and landscape areas. Students will learn about sustainable garden design elements such as rain gardens, rainwater harvesting and green roofs as well as integrating herb gardens, edible landscapes, native plants and areas of the garden for bees and other pollinators.

HORT 107 - Introduction to Turf

## HORT 107 - Introduction to Turf

## Credits: 3

This course prepares students with the knowledge and skills to identify turfgrass, common turf pests and associated weeds. Students will receive a solid introduction to the science of turfgrass, soil testing and renovation practices. Field trips combined with experiential activities on the SCCC main campus sports fields along with class discussions on new topics in turf create a comprehensive learning environment for students. Lab fee required.

HORT 135 - Ecological Landscape Management

## HORT 135 - Ecological Landscape Management

## Credits: 4

This course prepares students with the fundamental knowledge to manage and maintain a landscape with an ecological perspective. Emphasis on proper planting techniques such as understanding your site, adding soil amendments, fertilizing and watering new and renovated landscape plant installations.

Corequisite: HORT 135L

## HORT 201 - Introduction to Soil Science

Credits: 4
This course acquaints the student, through in class lectures and hands on labs, with soil concepts, plant nutrients, and their influence on plant growth. Emphasis will be placed on soil testing, nutrient deficiency symptoms, and fertilizer requirements.

Corequisite: HORT 201L

HORT 204 - Greenhouse Management

## HORT 204 - Greenhouse Management

Credits: 4
This course covers all aspects of the greenhouse business including construction, heating, cooling, and ventilation of a modern greenhouse. Lab Fee Required.

Corequisite: HORT 204L
Prerequisite: BIOS 110 (Grade of C or better)

HORT 207 - Introduction to Turf

## HORT 207 - Introduction to Turf

Credits: 4
This course provides student with advanced principles of turfgrass culture such as growth and development, pest management and current best practices. Students will assess, understand and employ real practices on campus lawns and sports fields resulting in an individual Turfgrass Management Plan and presentation as part of the overall learning experience. Lab fee required.

Hotel \& Restaurant Mgmt.

HOST 101 - Introduction to Hotel, Restaurant, and Institutional Management

## HOST 101 - Introduction to Hotel, Restaurant, and Institutional Management

Credits: 3
This course is designed to provide the student with an overview of the hospitality industry and focuses on the role of the professional manager within the industry. Topics include hotel and restaurant operation; meeting, event, and convention planning; travel and tourism; recreation and leisure management; gaming and casino operation; hospitality marketing; and human resource management within the framework of the hospitality industry. Career opportunities within the industry will also be addressed, as well as the ethical operation of hospitality enterprises

## Credits: 2

This course provides the student with the basics of food preparation through hands-on food preparation using residential kitchens at SCCC satellite sites. Students will have the opportunity to explore the food industry as a career choice while gaining appreciation for consumer choices both at home and when dining out. This course is intended to serve as a basis to determine interest for further study in the culinary arts and for personal growth. Lab Fee Required.

HOST 104 - Essentials of Baking

## HOST 104 - Essentials of Baking

## Credits: 2

This course provides students with the opportunity to develop the basic knowledge and skills needed for preparation of baked goods, including pastries. Students will have the opportunity to practice a variety of techniques used in the preparation of cakes, pastries, pies, cookies, and yeast and quick breads. Students will work in residential cooking laboratories at satellite sites. The application of pastries and baking will be applied in preparation of appetizers, main dishes, side dishes, sauces and desserts. Lab Fee Required.

HOST 240 - International Culinary Arts

## HOST 240 - International Culinary Arts

Credits: 4
This course is designed to introduce students to the flavor components of different cuisines globally. In addition to studying the cuisine of all five continents, the Caribbean and British Isles will be explored. Lab Fee Required.

Prerequisite: HOST 120
HOST 245 - Food as Art

## HOST 245 - Food as Art

## Credits: 4

This course is designed to introduce students to the art of cooking, including presentation, garnishes, flavor profiles to embellish the foods. We eat first with our eyes. This course will encourage personal creativity while incorporating professional traditions. Both hot and cold foods will be examined. Lab Fee Required.

Prerequisite: HOST 120
HOST 280 - Hospitality \& Culinary Arts Internship

## HOST 280 - Hospitality \& Culinary Arts Internship

## Credits: 2

This course is designed to give the culinary arts or hospitality student professional work experience in a job related to the specific program. The student will receive hands-on work experience in a job related to the program, complete course assignments, and develop a portfolio.

Prerequisite: Permission of Coordinator or Chair
Humanities

## HUMN 101 - Survey of World Culture I

Credits: 3
This survey course explores the evolution of western and non-western key ideas in art, music, and literature from prehistoric times to the 14th century. Emphasis is placed on the comparison of social, economic, religious, and political forces in the arts in a variety of cultures and diverse people.

HUMN 102 - Survey of World Culture II

## HUMN 102 - Survey of World Culture II

## Credits: 3

This survey course explores the evolution of western and non-western key ideas in art, music, and literature from the 15th to 21 st century societies. Emphasis is placed on the comparison of social, economic, religious, and political forces in the arts in a variety of cultures and diverse people.

HUMN 250 - Special Topics in World Culture

## HUMN 250 - Special Topics in World Culture

## Credits: 3

This course focuses on selected topics in World Culture. Since the topics may change each time the course is offered; students should consult the course offering schedule each semester.

## Human Services

HUMS 101 - Intro. to Social Work \& Social Welfare

## HUMS 101 - Intro. to Social Work \& Social Welfare

Credits: 3
This course introduces students to social service agencies and policies, the history of social welfare programs, and the goals and values of social work as a profession.

## HUMS 120 - Interviewing \& Counseling

## HUMS 120 - Interviewing \& Counseling

## Credits: 3

This course will focus on skills, theories, and principles of interviewing in human service settings. Emphasis will be placed on counseling techniques, group dynamics and cultural bias in the interview process. Offered fall semester only.

## HUMS 160 - Crisis Intervention

Credits: 3
This course will assist individuals who are in frontline positions to make decisions and provide assessments when dealing with clients in a crisis situation.

Corequisite: HUMS 101
Prerequisite: PSYC 101 or Permission of Instructor
HUMS 170 - Intro. to Gerontology

## HUMS 170 - Intro. to Gerontology

## Credits: 3

This course introduces the student to a range of topics relevant to working directly with the elderly population, including the changing roles of older adults in post-industrial societies, the human services needs of older adults, community resources for older adults, issues involved in working with families and caregivers, and knowledge of adult developmental processes.

HUMS 175 - Intro. to Developmental Disabil.

## HUMS 175 - Intro. to Developmental Disabil.

Credits: 3
This course provides an overview of developmental disabilities. Emphasis is placed on the history of developmental disabilities, details of various disabilities, the community and institutional service delivery system, and state and federal funding systems. Additionally, the course will examine health, adaptive behavior, abuse and neglect issues, as well as program planning and individual supports that contribute to greater quality of life for persons with developmental disabilities.

## HUMS 205 - Social Welfare Policy

## HUMS 205 - Social Welfare Policy

Credits: 3
This course examines the history and philosophy of U.S. social welfare policy from World War I through the present. The relative impact of political, social, and economic forces on policy decisions is examined in depth, and U.S. Policy is compared to that of other western democracies.

Prerequisite: HUMS 101 and SOCA 101
HUMS 210 - Interpersonal Violence Interven.

## HUMS 210 - Interpersonal Violence Interven.

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## HUMS 220 - Field Exp. in Human Services I

## Credits: 2

This is a combined field work and field seminar course. Students spend 120 hours as interns in a social service agency in direct contact with agency workers and agency service population, and under the task supervision of a Masters-level agency employee. They spend an additional 30 hours in seminar. Interviewing and counseling skills learned in earlier program courses are applied in the field setting. Additional skills are acquired in the lecture and integrated into the field setting as the semester progresses. All these skills are reinforced and expanded upon through the production of two process recordings or project logs per week per student, which are shared and analyzed in the seminar component of the course.

Prerequisite: Completion of 21 credits toward the A.S. in Human Services; HUMS 120 (Grade of C+ or Higher); or Permission of Program Coordinator.

HUMS 221 - Field Exp. in Human Services II

## HUMS 221 - Field Exp. in Human Services II

## Credits: 3

This course serves as an internship providing experiential learning through student involvement in a local agency.
Prerequisite: HUMS 220 and Permission of Program Coordinator

## HUMS 250 - Special Topics in Human Services

## HUMS 250-Special Topics in Human Services

## Credits: 3

This course focuses on selected topics in human services. Since the topics may change each time the course is offered, students should consult the course-offering schedule each semester.

## Italian

ITAL 101 - Elementary Italian I

## ITAL 101 - Elementary Italian I

## Credits: 3

This is an introductory course in Italian emphasizing the fundamentals of speaking, reading, writing, and listening. The course focuses on building basic vocabulary and introducing students to the Italian culture. It is designed for students with no Italian experience.

## ITAL 102 - Elementary Italian II

Credits: 3
This course is a continuation of ITAL 101 with an emphasis on the fundamentals of speaking, reading, writing, and listening. The course focuses on building basic vocabulary and continuing the study of the Italian culture.

Prerequisite: ITAL 101 (Grade of C or better) or two years of high school Italian (Grade of C or better)

ITAL 201 - Intermediate Italian I

## ITAL 201 - Intermediate Italian I

## Credits: 3

This course is continuation of ITAL 102, developing skills in speaking, reading, writing, and listening at the intermediate level.
Prerequisite: ITAL 102 (Grade of C or better) or three years of high school Italian (Grade of C or better) or its equivalent
ITAL 202 - Intermediate Italian II

## ITAL 202 - Intermediate Italian II

Credits: 3
This is a continuation of ITAL 201, developing skills in speaking, reading, writing, and listening at the intermediate level..
Prerequisite: ITAL 201 (Grade of C or better) or permission of the instructor.
ITAL 250 - Special Topics in Italian

## ITAL 250 - Special Topics in Italian

Credits: 3
This course focuses on selected topics in Italian. This course will provide an opportunity to expand the modern language offerings into the areas of history, literature, and civilization.

## Legal Studies

LEGA 100 - Intro. to the American Legal Sys

## LEGA 100 - Intro. to the American Legal Sys

## Credits: 3

POLS 111 This course is an introduction to the fundamental principles of the American Legal System. Topics include the structure of the state and federal court systems, legal terminology, and constitutional law decisions affecting every citizen and how to work within the system. Students will visit the Superior Court.

## LEGA 103 - New Jersey Practice

## Credits: 3

This course is an in-depth study of the Civil Court Rules for the New Jersey Court System. Each student will draft a summons, complaint, an answer, affirmative defenses, a counterclaim, a cross-claim, a third-party complaint, discovery requests and motions consistent with New Jersey Court Rules.

## LEGA 105 - Legal Research \& Writing I

## LEGA 105 - Legal Research \& Writing I

Credits: 3
This course is an introduction to the legal research process and legal writing. Topics include use of a law library, research techniques, computerassisted legal research, writing office memoranda and case briefs.

Prerequisite: ENGL 101
LEGA 106 - Civil Litigation

## LEGA 106 - Civil Litigation

## Credits: 3

This course is an introduction to the principles of civil litigation. Topics include client interview, investigation and evidence, courts and jurisdiction, alternative dispute resolution, pleadings, discovery, motion practice, and trial. Special emphasis is given to the Canon of Ethics and the Code of Professional Responsibility in representing clients during the litigation process.

## LEGA 110 - Estates and Trusts

## LEGA 110 - Estates and Trusts

## Credits: 3

This course is a study of basic estate planning and administration of decedents' estates. Topics include intestacy, wills, probate, federal and state taxes, accounting, and distribution of assets. Students learn to draft wills and prepare inheritance tax forms.

Prerequisite: LEGA 100

## LEGA 115 - Real Estate Transactions

## LEGA 115 - Real Estate Transactions

## Credits: 3

This course is a study of New Jersey real estate legal practice and procedures. Topics include conveyancing, forms, and the theory and practice of real estate transactions. Sample cases are used to illustrate the legal assistant's role in real property conveyance. Landlord-tenant laws and eviction procedures are also discussed.

## LEGA 120 - Family Law

## LEGA 120 - Family Law

## Credits: 3

This course is an introduction to New Jersey family law. Topics include divorce, annulment, property distribution, child custody, alimony, and support and visitation of children. New Jersey forms and procedures are reviewed. Students examine case studies and prepare matrimonial pleadings, agreements, and pre-trial memoranda.

Prerequisite: LEGA 100

## LEGA 210 - Legal Research and Writing II

## LEGA 210 - Legal Research and Writing II

Credits: 3
This course builds upon the knowledge gained in Legal Research and Writing I. Emphasis is placed on computer assisted legal research and advanced brief writing.

Prerequisite: LEGA 105

## LEGA 215 - Bankruptcy

## LEGA 215 - Bankruptcy

Credits: 3
This course will provide an overview of the three most utilized Chapters of the Bankruptcy Code: Chapters 7, 11, and 13. Concepts covered will include Property of the Estate, Exemptions, Discharge of Debts, Claims and Business and Personal Reorganizations. Additionally, the roles of the parties in a Bankruptcy case will be identified and students will be familiarized with various research sources.

## LEGA 217 - Worker's Compensation

## Credits: 3

This course will provide an overview and practical application of the Workers Compensation statutory method of providing benefits to an employee or his dependent who suffers a personal injury or death by accident or occupational disease arising out of and in the course of employment.

## LEGA 218 - Torts

## LEGA 218 - Torts

## LEGA 223 - Constitutional Law

Credits: 3
This course will examine the U.S. Constitution as the framework for government. Leading decisions of the U.S. Supreme Court will be analyzed in the areas of Civil Rights and Civil Liberties with emphasis on the Bill of Rights, the 13th, 14th and 15th amendments.

## LEGA 225 - Law Office Management

## LEGA 225 - Law Office Management

Credits: 3
This course will cover the fundamentals of law office management and organization. Subjects covered include: basic principles and structure of management, employment opportunities for the paralegal, timekeeping, trust, accounting systems, marketing issues, administrative and substantive systems in the law office and law practice technology.

## LEGA 230 - Elder Law

## LEGA 230 - Elder Law

Credits: 3
This course is the study of elder law. Topics include: Elder law practice; health problems of the elderly; life planning, including drafting a last will and testament and advance directives for healthcare; guardianship and conservatorship, estate planning, including the use of a variety of trusts; cohabitation, marriage and divorce from the elder law perspective; financial planning, including Social Security, Medicare and Medicaid, taxes, long-term care, viatical settlements and reverse mortgages; housing options, including nursing homes; age discrimination; elder abuse, including financial fraud; grandparents' rights; euthanasia and physician-assisted suicide; and legal aspects of funeral planning. Elder Law introduces the student to the roles attorneys, paralegals and geriatric professionals have within an elder law practice. Students will read case law from a varied selection of states. Student may prepare a variety of legal documents important in a typical elder law practice.

Corequisite: LEGA 100/POLS 111

## LEGA 250 - Spec. Topics in Paralegal Studies

## LEGA 250 - Spec. Topics in Paralegal Studies

Credits: 4
This course focuses on special topics in Paralegal Studies. Since the topics may change each time the course is offered, students should consult the course-offering schedule each semester.

Credits: 3
This course places the student in a supervised internship. Students will complete a minimum of 100 hours in the field. Classroom components of this course focus on legal ethics, portfolio development, interpersonal skills, resume preparation and interviewing techniques.

Prerequisite: LEGA 100, LEGA 103, LEGA 105, LEGA 106, 3 additional LEGA credits and Permission of Program Coordinator

## Mathematics

MATH 005 - Fundamentals of Basic Math

## MATH 005 - Fundamentals of Basic Math

## Credits: 1

This course provides instruction on fundamental concepts from MATH 010 Basic Mathematics.Topics include fractions, decimals, ratios and proportions, percents, exponents, and square roots. This course is intended for students who have taken the mathematics placement test and have not yet taken Basic Mathematics. Students must achieve proficiency on a retake of the mathematics placement test to pass this course.

Prerequisite: Appropriate mathematics placement score and no previous enrollment in MATH 010
MATH 010 - Basic Mathematics

## MATH 010 - Basic Mathematics

## Credits: 3

This course equips students with a working knowledge of the fundamentals of mathematics. Emphasis is placed on the understanding of basic mathematical concepts. Topics include whole numbers, fractions, decimals, ratios and proportions, percents, exponents, and square roots. Basic Mathematics is offered in the traditional classroom setting or in a self-paced computerized setting.

## MATH 010A - Basic Mathematics

## MATH 010A - Basic Mathematics

## Credits: 3

This self-paced computerized course equips students with a working knowledge of the fundamentals of mathematics. Emphasis is placed on the understanding of basic mathematical concepts. Topics include whole numbers, fractions, decimals, ratios and proportions, percents, exponents, and square roots. Students who complete MATH 010 may continue and complete MATH 023 Basic Algebra in the same semester if they so choose.

MATH 012 - Fundamentals of Basic Algebra

## MATH 012 - Fundamentals of Basic Algebra

Credits: 1
This course provides instruction on fundamental concepts from MATH 023 Basic Algebra. It is designed for students who have taken the algebra placement test and have not yet taken Basic Algebra or Introductory Algebra I or II. Students must achieve proficiency on a retake of the algebra placement test to pass this course.

## MATH 015 - Introductory Algebra I

## MATH 015 - Introductory Algebra I

## Credits: 3

This course, the first part of a two-semester basic algebra sequence, equips students with a working knowledge of basic algebraic concepts with a strong emphasis on problem-solving skills. Topics include variable expressions, first degree equations and inequalities, exponents, and polynomials. Upon successful completion of this course, the student must enter MATH 017.

Prerequisite: MATH 010 (Grade of C or betterI) or appropriate mathematics placement score

## MATH 017 - Introductory Algebra II

## MATH 017 - Introductory Algebra II

## Credits: 3

This course is a required continuation of MATH 015 . Successful completion of this course constitutes completion of the MATH $015 / 017$ math sequence. This course equips students with a working knowledge of basic algebraic concepts with a strong emphasis on problem-solving skills and prepares students to enter MATH 040, MATH 104, MATH 106, or MATH 108. Topics include factoring, algebraic fractions, graphing, systems of equations, radical expressions and quadratic equations.

Prerequisite: MATH 015 (Grade of C or better)

## MATH 023 - Basic Algebra

## MATH 023 - Basic Algebra

## Credits: 3

This course equips students with a working knowledge of basic algebraic concepts with a strong emphasis on problem-solving skills and prepares students to enter MATH 040, MATH 104, MATH 106, or MATH 108. Topics include variable expressions, first degree equations and inequalities, exponents, polynomials, factoring, algebraic fractions, graphing, systems of equations, radical expressions, and quadratic equations. Students who want a slower-paced course may elect to enroll in the MATH 015/MATH 017 sequence.

Prerequisite: MATH 010 (Grade of C or betterI) or appropriate mathematics placement score; and appropriate algebra placement score
MATH 040 - Intermediate Algebra

## MATH 040 - Intermediate Algebra

## Credits: 3

This course equips students with the algebraic concepts necessary for pre-calculus. Topics include completing the square, the quadratic formula, absolute value equations and inequalities, graphing linear and quadratic functions, rational exponents, radical equations, and complex numbers.

Prerequisite: MATH 017 (Grade of C or betterI) or MATH 023 (Grade of C or betterI) or appropriate algebra placement score

## MATH 104 - Contemporary Mathematics

Credits: 3
This course surveys several basic concepts of mathematics designed to give non-scientific/non-technical majors an understanding of the breadth of mathematics in areas other than computational application. Topics include: logic, financial management, geometry, measurement, probability and statistics.

Prerequisite: MATH 017/MATH 023 (Grade of C or better) or appropriate algebra placement score

## MATH 105-Technical Mathematics

## MATH 105 - Technical Mathematics

## Credits: 3

This course is intended for students who have introductory algebra proficiency, and who need to apply mathematical concepts in a technical program. The purpose of the course is to prepare AAS students for the mathematical aspects of their work in the technical trades.

Prerequisite: Proficiency on the College Placement Examination or grade of C or better in MATH 017/MATH 023.

## MATH 106 - Mathematical Concepts

## MATH 106 - Mathematical Concepts

## Credits: 3

This course surveys several basic concepts of mathematics designed to give non-scientific/non-technical majors an understanding of the breadth of mathematics in areas other than computational application. Topics include: problem solving, the real number system, linear and quadratic equations, exponents and logarithms, graphs and functions, and graph theory.

Prerequisite: Proficiency on the College Placement Examination or Grade of C or Better in MATH 017/MATH 023

## MATH 108 - Statistics

## MATH 108 - Statistics

## Credits: 3

This course includes the following topics: organization of data, measures of central tendency and dispersion, probability, the normal and binomial distributions, confidence intervals, hypothesis testing, analysis of variance, and correlation.

Prerequisite: MATH 017 (Grade of C or betterI) or MATH 023 (Grade of C or betterI) or appropriate algebra placement score

## MATH 110 - Pre-Calculus I

## MATH 110 - Pre-Calculus I

## Credits: 3

This course is designed to strengthen algebraic skills and give students the math confidence to proceed with calculus and other higher forms of mathematics. Topics include the study of functions, graphing techniques, polynomial, rational, exponential and logarithmic functions and systems of equations and inequalities.

Prerequisite: MATH 040 (Grade of C or betterI) or appropriate pre-calculus placement score

## MATH 111 - Business Calculus

## Credits: 3

This course introduces students to the techniques of differential and integral calculus. Emphasis is placed on the applications of limits derivatives and integrals in the field of business.

## MATH 112 - Pre-Calculus II

## MATH 112 - Pre-Calculus II

## Credits: 3

This course is a continuation of Pre-Calculus I. It emphasizes mastery of the basic concepts of trigonometry, vectors, and conic sections. Topics include trigonometric functions, applied and analytical trigonometry, and an introduction to analytic geometry.

## Corequisite: MATH 110

## MATH 113 - Calculus I

## MATH 113 - Calculus I

## Credits: 4

This course includes a review of algebraic and transcendental functions and their graphs; study of the concepts of limits and continuity, the derivative and its applications; indeterminate forms; introduction to integration and its applications.

Prerequisite: MATH 110 and MATH 112 (Grades of C or better) or appropriate pre-calculus placement score

## MATH 114 - Calculus II

## MATH 114 - Calculus II

## Credits: 4

This course is the second semester of a three semester sequence of introductory calculus. Topics include integration techniques, applications of integration, delete in.... forms infinite series, parametric equations, and polar coordinates.

Prerequisite: MATH 113 (Grade of C or better)

## MATH 201 - Discrete Mathematics

## MATH 201 - Discrete Mathematics

## Credits: 4

This course provides an introduction to discrete mathematics and its applications. Topics include elementary set theory, logic, combinatorics, relations, graphics and trees, functions and number theory.

Prerequisite: MATH 113 (Grade of C or better)

## MATH 213 - Calculus III

## Credits: 4

This course is a continuation of Calculus II. Topics include analytic geometry in three dimensions, functions of several variables, partial derivatives, multiple integrals, vectors, and introduction to vector calculus.

Prerequisite: MATH 114 (Grade of C or better)

MATH 215 - Linear Algebra

## MATH 215 - Linear Algebra

## Credits: 4

This course provides an introduction to Linear Algebra and its applications. Topics include systems of linear equations and matrices, determinants, vectors and vector spaces, linear transformations, eigenvalues and eigenvectors.

Corequisite: MATH 114
MATH 220 - Ordinary Differ. Equa. w/ Applic

## MATH 220 - Ordinary Differ. Equa. w/ Applic

Credits: 4
This course covers first and second order ordinary differential equations; systems of ordinary differential equations; applications of ordinary differential equations; and numeric and computational modeling techniques. The numeric modeling will be done by computer programming.

Prerequisite: MATH 114 (Grade of C or better)

## MATH 250 - Spec. Topics in Mathematics

## MATH 250 - Spec. Topics in Mathematics

## Credits: 3

This course focuses on selected topics in mathematics. Since topics may change each time the course is offered, students should consult the course-offering schedule each semester.

## Machine Tool Technology

MCHT 103 - Print and Drawing Interpretation

## MCHT 103 - Print and Drawing Interpretation

Credits: 3
This course introduces students to print reading specifically, for machining trades. In a lab setting, students draw prints in CAD software used to make industry standard prints. Lab Fee Required.

Prerequisite: Proficiency on the Basic English writing and Basic Math portion of the Placement Test.

# MCHT 125 - Machine Tool Technology II 

## Credits: 4

This course is a continuation of MCHT 105 Machine Tool Technology I. Emphasis is placed on personal traits needed to be successful in the trade, shop safety, print reading, layout work, accurate measuring and inspection. Areas of concentration are safety, repair, and maintenance. Setup and advanced operational procedures are covered on the metal lathe, vertical mill, horizontal mill, and drilling machines. New cutting tools and procedures to efficiently remove metal are introduced. The lab portion of the course is designed to allow students the opportunity to develop machining skills through practical experience and repeated performances to become more proficient in the machine tool trade. Lab Fee required.

Prerequisite: MCHT 105 with a C or better or permission of the coordinator or department chair.
MCHT 135 - Intro. to CNC Program and Operations

## MCHT 135 - Intro. to CNC Program and Operations

Credits: 3
This course covers operations on Computer Numerical Control (CNC) Machining Centers and CNC Turning Centers using manual and computergenerated programs to machine products. In a lab setting, specific areas of study include simple and practical programming techniques using CAM software, CNC cutting tools, and mass production procedures. Lab Fee required.

Prerequisite: MCHT 105 with a C or better or permission of the coordinator or department chair.
MCHT 147 - CNC Turning \& Machine Centers

## MCHT 147 - CNC Turning \& Machine Centers

Credits: 3
This course is designed for the learner to utilize CAD to make drawings, generate computer programs using CAM software. In a lab setting, students program and operate CNC vertical machining and turning centers to produce parts to specification. Lab Fee required.

Prerequisite: MCHT 125 and MCHT 135 with a C or better or permission of the coordinator or department chair.
MCHT 218 - Machine Tool Technology III

## MCHT 218 - Machine Tool Technology III

[^3]Prerequisite: MCHT 125 with a C or better or permission of the coordinator or department chair.

## Credits: 3

This course is designed to introduce the learner to utilize CAD to make drawings, and create toolpaths in order to generate programs using CAM software. These programs are used to operate Computer Numerical Control (CNC) Turning and Machining Centers. Lab Fee required.

Prerequisite: MCHT 125 and MCHT 135 with a C or better or permission of the coordinator or department chair.
MCHT 235 - Computer Aided Machining II

## MCHT 235 - Computer Aided Machining II

## Credits: 3

This course is designed to introduce the learner to multi-axis machining. Students use CAM software to create toolpaths in order to generate programs for multi-axis programming. These programs are used to operate Computer Numerical Control (CNC) Machining Centers. Lab Fee required.

Prerequisite: MCHT 147, MCHT 218 and MCHT 225 with a C or better or permission of the coordinator or department chair.
MCHT 240 - Manufacturing Methods

## MCHT 240 - Manufacturing Methods

## Credits: 3

This course is designed to familiarize students, in a lab setting, with current manufacturing processes needed to convert raw materials into quality products. Specific areas of study include product research and development, production planning, and computer automation. Lab Fee required.

Prerequisite: MCHT 147, MCHT 218 and MCHT 225 with a C or better or permission of the coordinator or department chair.

## MCHT 280 - Machine Tool Internship

## MCHT 280 - Machine Tool Internship

Credits: 4
This course is formatted to offer students hands on experience in careers found in the field of Machine Tooling. Students will have the opportunity work in either paid or non-paid positions under the supervision of an approved supervisor.

Prerequisite: MCHT 125 and MCHT 225 with a C or better, or permission of the coordinator or department chair

## Music

MUSC 101 - Music Appreciation

## MUSC 101 - Music Appreciation

## Credits: 3

This course is a study and appreciation of music through directed listening of recordings, films, demonstrations, live performances and readings. The class will focus on the elements of music by exploring examples from a range of musical styles, including classical music, ethnomusical traditions, jazz, and rock. Active class participation and attendance of live performance(s) are required.

## MUSC 102 - Dance I

## Credits: 1

This course consists of level one dance lessons (to be arranged) in tap and jazz. This course gives students a foundation for auditions, performance and choreography with a focus on musical theater. Students are expected to attend performance assemblies to meet the goals of the class and participate in public performances. This course is open to musical theater majors. Additional fees are required.

## MUSC 105 - Chorus I

## MUSC 105 - Chorus I

Credits: 1
This course provides training in style and interpretation of music from all periods of history. It allows students the opportunity to perform in public. (Students may participate on a non-credit basis).

## MUSC 106 - Chorus II

## MUSC 106 - Chorus II

Credits: 1
Continuation of MUSC 105.

## MUSC 107 - Chorus III

## MUSC 107 - Chorus III

Credits: 1
Continuation of MUSC 105 and MUSC 106.

## MUSC 109 - History of Rock and Roll

## MUSC 109 - History of Rock and Roll

## Credits: 3

This course examines the history of rock and roll as it unfolded in the United States, from the days before rock (pre-1955) to the end of the 1960s. Students will explore the music of many artists, with an emphasis on both cultural context and on the music itself. Explore how developments in the music business and in technology helped shape the ways in which styles developed.

## MUSC 110 - Introductory Music Theory

## Credits: 3

This course is a beginning level study of music theory, including: notation (reading and dictation), ear training, keyboard skills and basic harmony. Active class participation is required, and students must have regular access to a piano or keyboard.

## MUSC 111 - Music Theory II

## MUSC 111 - Music Theory II

## Credits: 3

This course is a continued study of music theory, including: notation (reading and dictation), ear training, keyboard skills and basic harmony. Active class participation is required, and students must have regular access to a piano or keyboard. Lab Fee Required.

Corequisite: MUSC 122, MUSC 131
Prerequisite: MUSC 110

## MUSC 112 - Applied Music I - Piano

## MUSC 112 - Applied Music I - Piano

Credits: 1
This course consists of level one piano lessons (to be arranged) as student's primary instrument. Students are expected to attend performance assemblies to meet the goals of the class and participate in public performances. Additional fees are required.

Corequisite: MUSC 110 Introductory Music Theory, MUSC 130 Piano I or MUSC 121 Voice I
MUSC 113 - Applied Music II - Piano

## MUSC 113 - Applied Music II - Piano

## Credits: 1

This course consists of level two piano lessons (to be arranged) as student's primary instrument. Students are expected to attend performance assemblies to meet the goals of the class and participate in public performances. Lab fee is required.

Corequisite: MUSC 111 Music Theory II, MUSC 131 Piano II or MUSC 122 Voice II
Prerequisite: MUSC 112 Applied Music I (Grade of C or higher)

## MUSC 115 - Electronic Music I

## MUSC 115 - Electronic Music I

## Credits: 3

This course is an introduction to electronically generated sound and the hands-on practice of electronic music composition utilizing a Digital Audio Workstation, DAW, and sequencing software Musical Instrument Digital Interface, MIDI. Students will focus on building an appreciation of electronic music styles and techniques through an exploration of electronic music history. Emphasis is on the physical properties of sound, synthesizers, music recording and music arrangement. Lab Fee Required.

## MUSC 116 - Applied Music I - Drums

## Credits: 1

This course consists of lessons (to be arranged) as student's primary instrument or in voice. Students are expected to attend performance assemblies to meet the goals of the class and participate in public performances. Additional fees are required.

Corequisite: MUSC 110 Introductory Music Theory, MUSC 130 Piano I or MUSC 121 Voice I

## MUSC 117 - Applied Music II - Drums

## MUSC 117 - Applied Music II - Drums

Credits: 1
This course consists of level two drum lessons (to be arranged) as student's primary instrument. Students are expected to attend performance assemblies to meet the goals of the class and participate in public performances. Additional fees are required.

Corequisite: MUSC 111 Music Theory II, MUSC 131 Piano II or MUSC 122 Voice II
Prerequisite: MUSC 116 Applied Music I (Grade of C or higher)
MUSC 118 - Applied Music I-Guitar

## MUSC 118 - Applied Music I - Guitar

Credits: 1
This course consists of lessons (to be arranged) as student's primary instrument. Students are expected to attend performance assemblies to meet the goals of the class and participate in public performances. Additional fees are required.

## MUSC 119 - Applied Music II - Guitar

## MUSC 119 - Applied Music II - Guitar

## Credits: 1

This course consists of level two guitar lessons (to be arranged) as student's primary instrument. Students are expected to attend performance assemblies to meet the goals of the class and participate in public performances. Additional fees are required.

Corequisite: MUSC 111 Music Theory II, MUSC 131 Piano II or MUSC 122 Voice II
Prerequisite: MUSC 118 Applied Music I (Grade of C or higher)

## MUSC 121 - Voice I

## MUSC 121 - Voice I

## Credits: 1

This course is the first in a sequence facilitating the development of vocal ability and emphasizes technical exercises, repertoire study, and performances before faculty and peers. Lab Fee Required.

## MUSC 122 - Voice II

## Credits: 1

This course is the second in a sequence facilitating the development of vocal ability and emphasizes technical exercises, repertoire study, and performances before faculty and peers. Lab Fee Required.

Corequisite: MUSC 111, MUSC 135
Prerequisite: MUSC 121

## MUSC 123 - Applied Music I - Violin

## MUSC 123 - Applied Music I - Violin

## Credits: 1

This course consists of level one violin lessons (to be arranged) as student's primary instrument. Students are expected to attend performance assemblies to meet the goals of the class and participate in public performances. Additional fees are required.

Corequisite: MUSC 110 Introductory Music Theory, MUSC 130 Piano I or MUSC 121 Voice I
MUSC 124 - Applied Music II - Violin

## MUSC 124 - Applied Music II - Violin

Credits: 1
This course consists of level two violin lessons (to be arranged) as student's primary instrument.. Students are expected to attend performance assemblies to meet the goals of the class and participate in public performances. Additional fees are required.

Corequisite: MUSC 111 Music Theory II, MUSC 131 Piano II or MUSC 122 Voice II
Prerequisite: MUSC 123 Applied Music I (Grade of C or higher)
MUSC 125 - Applied Music I-Bass

## MUSC 125 - Applied Music I - Bass

Credits: 1
This course consists of level one bass lessons (to be arranged) as student's primary instrument. Students are expected to attend performance assemblies to meet the goals of the class and participate in public performances. Additional fees are required.

Corequisite: MUSC 110 Introductory Music Theory, MUSC 130 Piano I or MUSC 121 Voice I e I
MUSC 126 - Applied Music II - Bass

## MUSC 126 - Applied Music II - Bass

## Credits: 1

This course consists of level two bass lessons (to be arranged) as student's primary instrument. Students are expected to attend performance assemblies to meet the goals of the class and participate in public performances. Additional fees are required.

## MUSC 127 - Applied Music I-Trumpet

## MUSC 127 - Applied Music I - Trumpet

## Credits: 1

This course consists of level one trumpet lessons (to be arranged) as student's primary instrument. Students are expected to attend performance assemblies to meet the goals of the class and participate in public performances. Additional fees are required.

Corequisite: MUSC 110 Introductory Music Theory, MUSC 130 Piano I or MUSC 121 Voice I
MUSC 128 - Applied Music II - Trumpet

## MUSC 128 - Applied Music II - Trumpet

## Credits: 1

This course consists of level two trumpet lessons (to be arranged) as student's primary instrument. Students are expected to attend performance assemblies to meet the goals of the class and participate in public performances. Additional fees are required.

Corequisite: MUSC 111 Music Theory II, MUSC 131 Piano II or MUSC 122 Voice II
Prerequisite: MUSC 127 Applied Music I (Grade of C or higher)
MUSC 130 - Piano I

## MUSC 130 - Piano I

## Credits: 1

This course is first in a sequence facilitating the develop keyboard skills and is required of all music students whose primary instrument is not piano. Students are required to complete additional simultaneously scheduled studio/lab time to meet the goals of the class. Lab Fee Required.

Corequisite: MUSC 110, MUSC 134
Prerequisite: Music Majors or Permission of the Chair
MUSC 131 - Piano II

## MUSC 131 - Piano II

## Credits: 1

This course is second in a sequence facilitating the develop keyboard skills and is required of all music students whose primary instrument is not piano. Students are required to complete additional simultaneously scheduled studio/lab time to meet the goals of the class. Lab Fee Required.

Corequisite: MUSC 111, MUSC 135
Prerequisite: MUSC 130, Music Majors
MUSC 132 - Applied Music I-Tuba

Credits: 1
This course consists of level one tuba lessons (to be arranged) as student's primary instrument. Students are expected to attend performance assemblies to meet the goals of the class and participate in public performances. Additional fees are required.

Corequisite: MUSC 110 Introductory Music Theory, MUSC 130 Piano I or MUSC 121 Voice I
MUSC 133 - Applied Music II - Tuba

## MUSC 133 - Applied Music II - Tuba

## Credits: 1

This course consists of level two tuba lessons (to be arranged) as student's primary instrument. Students are expected to attend performance assemblies to meet the goals of the class and participate in public performances. Additional fees are required.

Corequisite: MUSC 111 Music Theory II, MUSC 131 Piano II or MUSC 122 Voice II
Prerequisite: MUSC 132 Applied Music I (Grade of C or higher)
MUSC 134 - Applied Music I

## MUSC 134 - Applied Music I

## Credits: 1

This course consists of lessons (to be arranged) on student's primary instrument or in voice. Students are expected to attend performance assemblies to meet the goals of the class and participate in public performances. Lab Fee Required.

Corequisite: MUSC 110, MUSC 121, MUSC 131
Prerequisite: Music Majors Only
MUSC 135 - Applied Music II

## MUSC 135 - Applied Music II

## Credits: 1

This course consists of lessons (to be arranged) on student's primary instrument or in voice. Students are expected to attend performance assemblies to meet the goals of the class and participate in public performances. Lab Fee Required.

Corequisite: MUSC 111, MUSC 122, MUSC 131
Prerequisite: Music Majors Only
MUSC 136 - Applied Music III

## MUSC 136 - Applied Music III

## Credits: 1

This course consists of lessons (to be arranged) on student's primary instrument or in voice. Students are expected to attend performance assemblies to meet the goals of the class and participate in public performances. Lab Fee Required.

Corequisite: MUSC 214, MUSC 225, MUSC 230
Prerequisite: Music Majors Only

## MUSC 137 - Applied Music I - Flute

## Credits: 1

This course consists of level one flute lessons (to be arranged) as student's primary instrument. Students are expected to attend performance assemblies to meet the goals of the class and participate in public performances. Additional fees are required.

Corequisite: MUSC 110 Introductory Music Theory, MUSC 130 Piano I or MUSC 121 Voice I

## MUSC 138 - Applied Music II - Flute

## MUSC 138 - Applied Music II - Flute

Credits: 1
This course consists of level two flute lessons (to be arranged) as student's primary instrument. Students are expected to attend performance assemblies to meet the goals of the class and participate in public performances. Additional fees are required.

Corequisite: MUSC 111 Music Theory II, MUSC 131 Piano II or MUSC 122 Voice II
Prerequisite: MUSC 137 Applied Music I (Grade of C or higher)

## MUSC 140 - Electronic Music II

## MUSC 140 - Electronic Music II

Credits: 3
This course is a continuation of Electronic Music I with increased application of sound systems and MIDI systems. Emphasis is to establish the concepts and command of sound production essentials. Students produce recorded final projects. Lab Fee Required.

Corequisite: MUSC 111
Prerequisite: MUSC 110, MUSC 115
MUSC 141 - Applied Music I-Clarinet

## MUSC 141 - Applied Music I - Clarinet

Credits: 1
This course consists of level one clarinet lessons (to be arranged) as student's primary instrument.. Students are expected to attend performance assemblies to meet the goals of the class and participate in public performances. Additional fees are required.

Corequisite: MUSC 110 Introductory Music Theory, MUSC 130 Piano I or MUSC 121 Voice I
MUSC 142 - Applied Music II - Clarinet

## MUSC 142 - Applied Music II - Clarinet

## Credits: 1

This course consists of level two clarinet lessons (to be arranged) as student's primary instrument.. Students are expected to attend performance assemblies to meet the goals of the class and participate in public performances. Additional fees are required.

# MUSC 143 - Applied Music I - Saxophone 

## Credits: 1

This course consists of level one saxophone lessons (to be arranged) as student's primary instrument. Students are expected to attend performance assemblies to meet the goals of the class and participate in public performances. Additional fees are required.

Corequisite: MUSC 110 Introductory Music Theory, MUSC 130 Piano I or MUSC 121 Voice I
MUSC 144 - Applied Music II - Saxophone

## MUSC 144 - Applied Music II - Saxophone

## Credits: 1

This course consists of level two saxophone lessons (to be arranged) as student's primary instrument. Students are expected to attend performance assemblies to meet the goals of the class and participate in public performances. Additional fees are required.

Corequisite: MUSC 111 Music Theory II, MUSC 131 Piano II or MUSC 122 Voice II
Prerequisite: MUSC 143 Applied Music I (Grade of C or higher)
MUSC 145 - Applied Music I - Voice

## MUSC 145 - Applied Music I - Voice

## Credits: 1

This course consists of level one voice lessons. Students are expected to attend performance assemblies to meet the goals of the class and participate in public performances. Additional fees are required.

Corequisite: MUSC 110 Introductory Music Theory, MUSC 130 Piano I or MUSC 121 Voice I

## MUSC 146 - Applied Music II - Voice

## MUSC 146 - Applied Music II - Voice

## Credits: 1

This course consists of level two voice lessons. Students are expected to attend performance assemblies to meet the goals of the class and participate in public performances. Additional fees are required.

Corequisite: MUSC 111 Music Theory II, MUSC 131 Piano II or MUSC 122 Voice II
Prerequisite: MUSC 145 Applied Music I (Grade of C or higher)

## MUSC 150 - Piano Fundamentals I

## Credits: 1

This course is designed to introduce students to the fundamentals of piano playing. Keyboard experience is not required. Group activities focused on literacy and creativity in music through keyboard application. Topics include coordination of hands, ear training, sight reading, transposition, technique and improvisation. Lab Fee Required.

## MUSC 151 - Piano Fundamentals II

## MUSC 151 - Piano Fundamentals II

Credits: 1
This is the second in a series of piano classes. Group activities focused on literacy and creativity in music through keyboard application. Topics include coordination of hands, ear training, sight reading, transposition, technique and improvisation. Lab Fee Required.

Prerequisite: MUSC 150 (Grade of C or Higher)

MUSC 152 - Piano Fundamentals III

## MUSC 152 - Piano Fundamentals III

## Credits: 1

This is the third in a series of piano classes. Group activities focused on literacy and creativity in music through keyboard application. Topics include coordination of hands, ear training, sight reading, transposition, technique and improvisation. Lab Fee Required.

Prerequisite: MUSC 151 (Grade of C or Higher)

## MUSC 155 - Live Sound Production

## MUSC 155 - Live Sound Production

Credits: 3
This course is designed to allow students an opportunity train in live sound support for public address set up and operations, live sound mixing for musical performances such as concerts, theatrical performances and special presentations requiring public address systems. Emphasis is on the theory and physical workings of a mixing console. Lab Fee Required.

## MUSC 160 - Intro. to Aural Comprehension

## MUSC 160 - Intro. to Aural Comprehension

Credits: 1
This course is designed to develop musical ear training skills by engaging in singing, writing, progress demonstrations and utilizing computerbased work stations. Emphasis is on scales, rhythms, intervals and harmonic progressions. Lab Fee Required.

Corequisite: MUSC 110, MUSC 121 or MUSC 130, MUSC 134
Prerequisite: Music Major or Permission of the Department Chair
MUSC 200 - Applied Music III - Piano

## MUSC 200 - Applied Music III - Piano

## Credits: 1

This course consists of level three piano lessons (to be arranged) as student's primary instrument. Students are expected to attend performance assemblies to meet the goals of the class and participate in public performances. Lab fee is required.

Corequisite: MUSC 214 Music Theory III, MUSC 230 Piano III or MUSC 225 Voice III
Prerequisite: MUSC 113 Applied Music II (Grade of C or higher)
MUSC 201 - Applied Music III - Drums

## MUSC 201 - Applied Music III - Drums

## Credits: 1

This course consists of level three drum lessons (to be arranged) as student's primary instrument. Students are expected to attend performance assemblies to meet the goals of the class and participate in public performances. Lab fee is required.

Corequisite: MUSC 214 Music Theory III, MUSC 230 Piano III or MUSC 225 Voice III
Prerequisite: MUSC 117 Applied Music II (Grade of C or higher)
MUSC 202 - Applied Music III - Guitar

## MUSC 202 - Applied Music III - Guitar

## Credits: 1

This course consists of level three guitar lessons (to be arranged) as student's primary instrument. Students are expected to attend performance assemblies to meet the goals of the class and participate in public performances. Lab fee is required.

Corequisite: MUSC 214 Music Theory III, MUSC 230 Piano III or MUSC 225 Voice III
Prerequisite: MUSC 119 Applied Music II (Grade of C or higher)
MUSC 203 - Applied Music III - Violin

## MUSC 203 - Applied Music III - Violin

## Credits: 1

This course consists of level three violin lessons (to be arranged) on student's primary instrument. Students are expected to attend performance assemblies to meet the goals of the class and participate in public performances. Lab fee is required.

Corequisite: MUSC 214 Music Theory III, MUSC 230 Piano III or MUSC 225 Voice III
Prerequisite: MUSC 124 Applied Music II (Grade of C or higher)
MUSC 204 - Applied Music III - Bass

## MUSC 204 - Applied Music III - Bass

## Credits: 1

This course consists of level three bass lessons (to be arranged) as student's primary instrument. Students are expected to attend performance assemblies to meet the goals of the class and participate in public performances. Lab fee is required.

MUSC 205 - Applied Music III - Trumpet

## MUSC 205 - Applied Music III - Trumpet

## Credits: 1

This course consists of level three trumpet lessons (to be arranged) as student's primary instrument. Students are expected to attend performance assemblies to meet the goals of the class and participate in public performances. Lab fee is required.

Corequisite: MUSC 214 Music Theory III, MUSC 230 Piano III or MUSC 225 Voice III
Prerequisite: MUSC 128 Applied Music II (Grade of C or higher)
MUSC 206 - Applied Music III - Tuba

## MUSC 206 - Applied Music III - Tuba

## Credits: 1

This course consists of level three tuba lessons (to be arranged) as student's primary instrument. Students are expected to attend performance assemblies to meet the goals of the class and participate in public performances. Lab fee is required.

Corequisite: MUSC 214 Music Theory III, MUSC 230 Piano III or MUSC 225 Voice III
Prerequisite: MUSC 133 Applied Music II (Grade of C or higher)
MUSC 207 - Applied Music III - Flute

## MUSC 207 - Applied Music III - Flute

## Credits: 1

This course consists of level three flute lessons (to be arranged) as student's primary instrument. Students are expected to attend performance assemblies to meet the goals of the class and participate in public performances. Lab fee is required.

Corequisite: MUSC 214 Music Theory III, MUSC 230 Piano III or MUSC 225 Voice III
Prerequisite: MUSC 138 Applied Music II (Grade of C or higher)
MUSC 208 - Applied Music III - Clarinet

## MUSC 208 - Applied Music III - Clarinet

## Credits: 1

This course consists of level three clarinet lessons (to be arranged) as student's primary instrument. Students are expected to attend performance assemblies to meet the goals of the class and participate in public performances. Lab fee is required.

Corequisite: MUSC 214 Music Theory III, MUSC 230 Piano III or MUSC 225 Voice III
Prerequisite: MUSC 142 Applied Music II (Grade of C or higher)
MUSC 209 - Applied Music III - Saxophone
MUSC 209 - Applied Music III - Saxophone

Credits: 1
This course consists of level three saxophone lessons (to be arranged) as student's primary instrument. Students are expected to attend performance assemblies to meet the goals of the class and participate in public performances. Lab fee is required.

Corequisite: MUSC 214 Music Theory III, MUSC 230 Piano III or MUSC 225 Voice III
Prerequisite: MUSC 144 Applied Music II (Grade of C or higher)
MUSC 210 - Applied Music III - Voice

# MUSC 210 - Applied Music III - Voice 

## Credits: 1

This course consists of level three voice lessons. Students are expected to attend performance assemblies to meet the goals of the class and participate in public performances. Lab fee is required.

Corequisite: MUSC 214 Music Theory III, MUSC 230 Piano III or MUSC 225 Voice III
Prerequisite: MUSC 146 Applied Music II (Grade of C or higher)
MUSC 214 - Music Theory III

## MUSC 214 - Music Theory III

Credits: 3
This course is a continued study of music theory, including: notation (reading and dictation), ear training, keyboard skills and basic harmony. Active class participation is required, and students must have regular access to a piano or keyboard. Lab Fee Required.

Corequisite: MUSC 225, MUSC 230
Prerequisite: MUSC 111

## MUSC 215 - Musical Theater Performance I

## MUSC 215 - Musical Theater Performance I

## Credits: 3

The course is an exploration of musical theatre in a studio setting. Emphasis is on vocal methods and music, including vocal production, vocal technique, music reading and sight-singing, Students will prepare and present as soloists as well as members of small groups and larger ensembles. Students will study the work of the actor/singer/dancer and use their gained knowledge to develop as performers. Theater history and repertoire materials will be prepared for class presentation and critique. Students will experience an audition process either to perform in the college musical when offered, or in a showcase performance at the end of the semester. Lab fee required.

## MUSC 224 - Musical Theater Performance II

## MUSC 224 - Musical Theater Performance II

## Credits: 3

The course is the second level studio course in musical theater. Emphasis is on continued development of vocal methods and music, including vocal production, vocal technique, music reading and sight-singing, Students will prepare and present as soloists as well as members of small groups and larger ensembles. Students will study the work of the actor/singer/dancer and use their gained knowledge to develop as performers. Theater history and repertoire materials will be prepared for class presentation and critique. Students will experience an audition process either to perform in the college musical when offered, or in a showcase performance at the end of the semester. Lab fee required.

MUSC 225 - Voice III

## MUSC 225 - Voice III

## Credits: 1

This course is the third in a sequence facilitating the development of vocal ability and emphasizes technical exercises, repertoire study, and performances before faculty and peers. Lab Fee Required.

Corequisite: MUSC 136, MUSC 214
Prerequisite: MUSC 122
MUSC 230 - Piano III

## MUSC 230 - Piano III

## Credits: 1

This course is third in a sequence facilitating the develop keyboard skills and is required of all music students whose primary instrument is not piano. Students are required to complete additional simultaneously scheduled studio/lab time to meet the goals of the class. Lab Fee Required.

Corequisite: MUSC 136, MUSC 214
Prerequisite: MUSC 131, Music Major
MUSC 245 - Electronic Music III

## MUSC 245 - Electronic Music III

## Credits: 3

This course is designed to allow students an opportunity to pursue a topic advanced in nature and solves difficult technical and artistic issues. Emphasis is on establishing and enhancing technical ability and knowledge of concepts to meet the requirements and demands of a professional within the field of electronic music. Lab Fee Required.

Corequisite: MUSC 214
Prerequisite: MUSC 140
MUSC 250 - Special Topics in Music

## MUSC 250 - Special Topics in Music

Credits: 3
This course focuses on selected topics in Music. Since topics may change each time the course is offered, students should consult the courseoffering schedule each semester.

## Optical Technology

## OPTC 101 - Fundamentals of Optics I

Credits: 3
This course is an introduction to the optics and photonics industry with a focus on utilizing optical technology in devices and scientific research. Exploration into the history of optics provides context for how the study of light has reached the forefront of technological and scientific discovery. Students study terminology and the physical concepts necessary to understand how light is created, manipulated, and measured with the goal of constructing a foundation from which to delve further into the optics industry.

OPTC 107-Standards of Optics

## OPTC 107 - Standards of Optics

## Credits: 3

This course is designed for students to learn military specification/ISO formats and how they are utilized in the industry. Students assess safety protocols relevant to the industry, future laboratories and how to properly format and complete inspection reports.

Prerequisite: Proficiency in Basic English writing, Basic Math, and Algebra.
OPTC 112 - Measurement and Analysis I

## OPTC 112 - Measurement and Analysis I

## Credits: 3

This course introduces students to the fundamentals of metrology theory, error analysis and observation bias. Students analyze technical drawings and use basic metrology tools to evaluate a variety of optics in a lab setting. Lab fee required.

Prerequisite: Proficiency in Basic English writing, Basic Math, and Algebra.

## OPTC 121 - Ray Optics

## OPTC 121 - Ray Optics

## Credits: 3

This course is an introduction to describing light and characterizing optical elements with an emphasis on the ray nature of light. Elements such as lenses, mirrors, and prisms are covered to enable planning, evaluation, and execution of optical setups. In a lab setting, ray tracing is used to analyze optical systems, leading to the discovery of where images are formed, determination of their magnification and orientation, as well as what types of aberrations can affect the image. Lab fee required.

OPTC 140 - Conventional Optics Manufacturing I

## OPTC 140 - Conventional Optics Manufacturing I

Credits: 3
This course provides students the opportunity to learn how to process glass from its raw state to finished precision optics using conventional methods. In a lab setting, students learn proper techniques to create optics using conventional technology. Lab fee required.

## OPTC 210 - Measurement and Analysis II

## Credits: 3

This course is a continuation of Measurement and Analysis I where the concepts will be applied to advanced systems in a lab setting. Students interpret and apply results from fizeau interferometers, white light interferometers, spectrophotometers, profilometers and digital spherometers. Students outline a comprehensive inspection plan based on technical drawings. Lab fee required.

OPTC 217-Optical Materials I

## OPTC 217-Optical Materials I

Credits: 3
This course allows students to learn the fundamentals of optical materials, various techniques of optical coating deposition, and relevant metrology processes. Students analyze environmental conditions.

OPTC 225 - CNC Optics Manufacturing I

## OPTC 225 - CNC Optics Manufacturing I

## Credits: 3

This course allows students to work hands-on with the latest CNC technologies, tools, and methods. Students study the ways and means to create precision spherical elements in a lab setting using CNC machines. Lab fee required.

OPTC 231 - Fundamentals of Optics II

## OPTC 231 - Fundamentals of Optics II

Credits: 3
This course is a continuation of Fundamentals of Optics I. Students explore the wave and quantum nature of light and how these concepts are utilized during design, manufacture, and measurement of optical elements and optical systems. In a lab setting, interference, diffraction, and polarization are covered through experimentation and demonstration, with the goal of providing a basic understanding of how various optical devices operate in order for students to critically examine measurement results. Progressively more complex optical elements such as polarizers, wave plates, diffraction gratings, and thin film coatings are also covered. Lab fee required.

OPTC 240 - Conventional Optics Manufacturing II

## OPTC 240 - Conventional Optics Manufacturing II

Credits: 3
This course allows students to learn how to transform unprocessed glass into a finished precision optic using planetary, continuous, and double sided polishers in a lab setting. Students build upon the learned skills from Conventional Optics Manufacturing I to manufacture optics to laser grade quality. Lab fee required.

## OPTC 247 - CNC Optics Manufacturing II

Credits: 3
This course builds upon the concepts from CNC Optics Manufacturing I. Students explore how to correct optical surfaces using metrology data and advanced CNC software. Advanced optical CNC procedures are covered. Students practice precision aspheric lenses in a lab setting. Lab fee required.

## OPTC 255 - Advanced Optical Systems

Credits: 3
This course combines applications, metrology, alignment, and optical assemblies. Students conduct practical laboratory experiments and advanced metrology in a lab setting with the goal of reinforcing knowledge gained from previous courses. Alignment of single- and multi-element optical systems are covered, as well as various techniques for cementing and mechanically mounting lenses. Throughout the course, real world problems and scenarios are presented, giving the student a true experience in what is expected of them when working in the optical industry. Lab fee required.

## Philosophy

PHIL 110 - Philosophy \& the Meaning of Life

## PHIL 110 - Philosophy \& the Meaning of Life

## Credits: 3

This course is an introduction to philosophical analysis through an examination of the recurring issue of philosophy and the meaning of life. Topics of discussion will include: nature and methodology of philosophy, reality, existence of God, human freedom, and the value of existence.

## PHIL 201 - Comparative Religions

## Credits: 3

This course introduces students to religions of the world and fosters mutual respect and interreligious understanding. Topics include Buddhism (including Zen), Christianity, Hinduism, Islam, Jainism, Judaism, Shintoism and Taoism.

## PHIL 205 - Contemporary Ethical Issues

Credits: 3
This course is an introduction to the study of moral theories and their justification, including an examination of contemporary moral concerns as test cases.

PHIL 250 - Special Topics in Philosophy

## PHIL 250 - Special Topics in Philosophy

Credits: 3
This course focuses on selected topics in Philosophy. Since topics may change each time the course is offered, students should consult the courseoffering schedule each semester.

## Photography

PHOT 109 - Intro. to Digital Photography

## PHOT 109 - Intro. to Digital Photography

## Credits: 3

This course introduces students to the basic concepts of photography through the use and understanding of their digital SLR camera and photo imaging software. Among topics to be covered are exposure control, composition, lighting, lenses, effects of color on photographs, depth of field, and perspective control. Post process topics include creating a contact sheet, cropping, adjusting print exposure, outputting to web or print media, and selective exposure control. Student must provide their own DSLR (Digital Single Lens Reflex) camera.

PHOT 110 - Film Photography I

## PHOT 110 - Film Photography I

## Credits: 3

This art course is designed for the beginning student of black and white photography. Students are introduced to the basic technical skills of operating a 35 mm camera, recording images on film, and using a darkroom to create photographic prints. Critiques, reference to digital technologies, to important photographers, and trips to museums and galleries guide students in understanding the aesthetic implications of their technical decisions in this medium. Students must provide a $35-\mathrm{mm}$ camera with manual settings and additional materials. Lab Fee Required.

## PHOT 112 - Film Photography II

Credits: 3
This course prepares students to graduate with a professional portfolio of work for gallery representation or transfer. Students select and sequence their work, remake photographs as necessary, and mat work for a public portfolio presentation to faculty and peers. Students create a concise artist's statement and a finished portfolio of fine art photography. Lab Fee Required.

# PHOT 120 - History of Photography 

## Credits: 3

This course is an historical survey of fine art photography from the camera obscura to 21 st century digital techniques. The course will emphasize the aesthetics, applications, and social impact of photography on our culture; this course will include the relationship of photography to other visual art forms.

## PHOT 135 - Alternative Processes in Photography

## PHOT 135 - Alternative Processes in Photography

Credits: 3
This studio course introduces the artist to hand coated photographic processes that include cyanotype, gum bichromate, platinum/palladium, vandyke and albumen printing. The fundamental theory and practices of color photography will also be discussed. Methods for the production of enlarged duplicate negatives will be covered. Offered Spring Only. Lab Fee Required.

## PHOT 203 - Documentary/Photojournalism

## PHOT 203 - Documentary/Photojournalism

## Credits: 3

This course explores the similarities of Documentary Photography and Photojournalism in two modules by combining emotional content with factual reportage. Balancing aesthetic content and form with information to produce meaningful documentary work, students learn to build coherent, intelligent, and emotive content relying on instinct and impulse to photograph events. Students learn to identify the consistencies of theme and structure in their work. Classes will include discussions on researching, shooting, editing and sequencing, critiques, and assignments. Students will be assigned approximately twelve documentary/photojournalism assignments. In a lab setting, students will gain proficiency in producing high quality photographic images for newspapers, magazines, and digital publications.

PHOT 205 - Studio Photography

## PHOT 205 - Studio Photography

## Credits: 3

This course enables students to practice lighting and styling using a $4 \times 5$ format camera, achieving mastery of camera movements and control of perspective and sharpness with both $4 \times 5$ and digital imaging. Assignments relate to fine art photography, portraits, and still life as well as to commercial applications. Film and SLR digital cameras are required, $4 \times 5$ camera provided by the lab Lab Fee Required.

## PHOT 240 - Digital Photography II

## PHOT 240 - Digital Photography II

## Credits: 3

This course explores digital photography and the digital manipulation of original photographs by concentrating on specific projects in the studio. These projects include photo montages, high dynamic range (HDR) photographs, depth of field mapping, selective exposure control in post processing, and blending options to extend the range of traditional photographs. OFFERED IN SPRING ONLY Lab Fee Required.

Prerequisite: PHOT 109
PHOT 250 - Spec. Topics in Photography

## PHOT 250 - Spec. Topics in Photography

Credits: 3
This course focuses on selected topics in Photography. Since topics may change each time the course is offered, students should consult the course-offering schedule each semester.

## PHOT 260 - Portfolio Development/Capstone for Photography

## Credits: 3

This course prepares students to graduate with a professional portfolio of work for gallery representation or transfer. Students select and sequence their work, remake photographs as necessary, and mat work for a public portfolio presentation to faculty and peers. Students create a concise artist's statement and a finished portfolio of fine art photography. Studio fee required.

## PHOT 261 - Photography Internship

## Credits: 3

This course is designed for Photography majors who have demonstrated advanced skill levels and for those who have potential to perform professionally in a work environment. Internships include practical work experience in an on or off campus business or project (i.e. professional or commercial freelance photography studios, graphic design businesses, or corporate art departments). Students are required to complete 36 hours in the field. Lab Fee Required.

Prerequisite: PHOT 109, PHOT 110, and PHOT 205

## Physics

## PHYS 100 - Concepts of Physics

Credits: 4
This course will introduce the student to the basic concepts of Physics. Topics include kinematics and dynamics, principles of conservation of energy, heat and selected topics in electricity, magnetism and modem physics.

Corequisite: PHYS 100L
PHYS 105 - Introductory Astronomy

## PHYS 105 - Introductory Astronomy

## Credits: 4

This course provides an introduction to descriptive space science covering the historical development of astronomy and planetology. Basic physical laws are introduced to help explain the tools used in the investigation of solar systems. Appropriate laboratory experiences are provided.

Corequisite: PHYS 105L
Prerequisite: MATH 106 or higher, or Permission of Instructor

PHYS 107 - Introductory Meteorology

## PHYS 107 - Introductory Meteorology

## Credits: 4

This introductory course consists of five areas of concentration-atmospheric components; weather systems; upper air dynamics; satellite and radar interpretation of severe and weather elements; a review of historical weather events and their social and geographical effects; systems examined include hurricanes; severe thunderstorms and the mesosyclone; forms of precipitation; hourly observations; cloud identification; interpretation NCEP/NOAH data for forecast modeling data.

Corequisite: PHYS 107L

## PHYS 108 - The Physics \& Technology of Clean Energy

## PHYS 108 - The Physics \& Technology of Clean Energy

## Credits: 4

This course is designed to explore the approaches to energy that are more sustainable for the earth and its people. Students will learn the design and specific uses of appropriate clean energy systems. Topics include energy, electricity, biofuels, wind energy, hydroelectric power, solar power, connection to the grid and the human and environmental effects of energy use. Lab exercises and field trips will supplement the theory presented. Lab Fee Required.

Corequisite: PHYS 108L
Prerequisite: MATH 017 or MATH 023 or Proficiency on the College Placement Test
PHYS 110 - Physics I

Credits: 4
This course is designed to introduce students to problem-solving techniques in physics. Topics include forces, energy, mechanics, momentum, heat, and kinetic theory. Includes applications to the life sciences and everyday life. Lab Fee Required.

Corequisite: PHYS 110L
Prerequisite: MATH 112 (Grade of C or better)

## PHYS 112 - Physics II

## PHYS 112 - Physics II

## Credits: 4

This course is a continuation of Physics I. Emphasis is placed on showing the connections found in electromagnetism, optics, and modern physics. Includes applications to the life sciences and everyday life. Lab Fee Required.

Corequisite: PHYS 112L
Prerequisite: PHYS 110 (Grade of C or better)

## PHYS 120 - Physics I with Calculus

## PHYS 120 - Physics I with Calculus

Credits: 4
This course will introduce the student to problem solving and laboratory techniques in calculus based physics. Topics include vectors, forces, mechanics, kinematics, fluids, thermodynamics, and waves. Lab Fee Required.

Corequisite: PHYS 120L
Prerequisite: MATH 113, MATH 114 (Grade of C or better) (MATH 114 may be taken concurrently)
PHYS 121 - Physics II with Calculus

## PHYS 121 - Physics II with Calculus

## Credits: 4

This course is a continuation of Physics I with Calculus. Topics include electromagnetism, circuits, electromagnetic waves, optics, and relativity. Lab Fee Required.

Corequisite: MATH 213 (Grade of C), PHYS 121L
Prerequisite: PHYS 120 (Grade of C)
PHYS 205 - Modern Physics

## PHYS 205 - Modern Physics

## Credits: 4

This course covers the modem era of Physical Science from Relativity, quantum properties, Schrodinger's equation, and their applications. It begins where PHYS 121 ends (with Optical Systems) and finishes the student's introduction to basic Physics concepts.

## PHYS 210-Mechanics

Credits: 4
ENGR210 This course studies the equilibrium of particles and rigid bodies subject to concentrated and distributed Newtonian forces. These studies are also applied to particles; rectilinear motion; simple, damped, and driven oscillations; gravitation and central forces; Lagrange's equations and the Hamiltonian.

Corequisite: MATH 220
Prerequisite: PHYS 120 (Grade of C or better)
PHYS 250 - Special Topics in Physics

## PHYS 250 - Special Topics in Physics

## Credits: 4

This course focuses on special topics in Physics. Since the topics may change each time the course is offered, students should consult the courseoffering schedule each semester.

Corequisite: PHYS 250L
Political Science

POLS 101 - Intro. to Political Science

## POLS 101 - Intro. to Political Science

## Credits: 3

This course provides a general introduction to the discipline of political science. The course focuses on the major sub-disciplines of political science including practical theory, international relations, comparative politics, and identity politics. The course is designed to encourage active student participation in the political process.

POLS 105 - American Government

## POLS 105 - American Government

## Credits: 3

This course provides a general introduction to the study of the American Political System. This course focuses on the U.S. Constitutional System, the institutions of government, and means of popular participation. The course is designed to encourage active student participation in the political process.

POLS 106 - State \& Local Government
POLS 106 - State \& Local Government

This course provides a general introduction to the study of sub-national governments within the American political system. The course is designed to encourage active student participation in the political process.

## POLS 109 - Modern Political Ideologies

## POLS 109 - Modern Political Ideologies

## Credits: 3

This course provides a general introduction to the study of political ideologies. Students will compare and contrast various forms of political thinking over the past five centuries. In addition, the material covered in this course will be placed into historical context by discussing the political, economic and social and social impact of the actual practice of these various theories.

POLS 110 - International Relations

## POLS 110 - International Relations

Credits: 3
This course is a study of world politics: the nation-state system, patterns of conflict and cooperation in the international arena and the theories that try to explain these behaviors. International organizations (e.g. monetary fund, the United Nations, etc.), international business and selected foreign policies of particular nation-states will be among the topics included.

POLS 111 - Intro. to the American Legal Sys

## POLS 111 - Intro. to the American Legal Sys

## Credits: 3

This course is an introduction to the fundamental principles of the American Legal System. Topics include the structure of the state and federal court systems, legal terminology, constitutional law decisions affecting every citizen and how to work within the system. Students will visit the Superior Court.

## POLS 223 - Constitutional Law

## POLS 223 - Constitutional Law

## Credits: 3

This course will examine the U.S. Constitution as the framework for government. Leading decisions of the U.S. Supreme Court will be analyzed in the areas of Civil Rights and Civil Liberties with emphasis on the Bill of Rights, the 13th, 14th and 15th amendments.

POLS 250 - Spec. Topics in Political Sci.
POLS 250 - Spec. Topics in Political Sci.

Credits: 3
This course focuses on special topics in Political Science. Since the topics may change each time the course is offered, students should consult the course-offering schedule each semester.

## Psychology

## PSYC 101 - Introduction to Psychology

## Credits: 3

This course is an introduction to the science of human behavior and mental processes. Emphasis is placed on the relationship between the nervous system and behavior, learning, perception, development, motivation, personality, attitude formation and prejudice, psychopathology and psychotherapy.

Prerequisite: Proficient in all Developmental English Courses
PSYC 105 - Psychology of Human Relations

## PSYC 105 - Psychology of Human Relations

Credits: 3
This course focuses on developing skills necessary to maintain and enhance adult relationships. Emphasis is placed on the transactional nature of interactions and the communication techniques needed to achieve intrapersonal and interpersonal satisfaction. Topics include verbal and nonverbal behaviors, perception, listening, emotions, conflict, power, and sexual communication in intimate relationships.

PSYC 109 - Psychology of the Human Lifespan

## PSYC 109 - Psychology of the Human Lifespan

## Credits: 3

This course is the study of the development of the individual from prenatal life through adulthood including biological, mental, emotional, and social patterns of growth.

## PSYC 111 - Child Psychology

## PSYC 111 - Child Psychology

## Credits: 3

This course studies human behavior from prenatal development to puberty. Emphasis is placed upon physical, social, intellectual and personality development during childhood.

Prerequisite: PSYC 101

## PSYC 201 - Abnormal Psychology

## Credits: 3

This course is an introduction to the study of symptoms' etiologies and treatments of mental disorders. Emphasis is placed on understanding psychopathology from the psychoanalytic, behavioristic and humanistic viewpoints.

Prerequisite: PSYC 101
PSYC 203 - Theories of Personality

## PSYC 203 - Theories of Personality

## Credits: 3

This course is a survey of the major theoretical viewpoints concerning the development and maintenance of personality. Psychoanalytic, trait, behavioristic, and humanistic theories will be covered. Emphasis is placed on current research on personality factors.

## Prerequisite: PSYC 101

PSYC 204-Theory \& Practice of Psychological Counseling

## PSYC 204 - Theory \& Practice of Psychological Counseling

## Credits: 3

This course will provide an introduction to counseling theory and practice with an emphasis on the principles of the counseling process including the APA Code of Ethics, methods, assessment, diagnostic categories, client change, and empathy. The learning experience will include individual and/or group projects.

Prerequisite: PSYC 101and PSYC 203
PSYC 205 - Psychology of Gender

## PSYC 205 - Psychology of Gender

Credits: 3
This course examines issues of gender in human development, psychopathology, family structure and social structure. The construction and maintenance of gender is explored from varied theoretical perspectives, including psychoanalytic, ecological, behavioral and object relations theory.

Prerequisite: PSYC 101
PSYC 208 - Business Psychology

## PSYC 208 - Business Psychology

Credits: 3
This course will explore how psychological theory and research are applied to the science and practice of Business Psychology. Psychological theory and research will be used to understand workplace issues including communication, interpersonal dynamics, team-building, job

## PSYC 210 - Social Psychology

## Credits: 3

This course provides an introduction to social psychological theory, research and application. Topics covered include attitude formation and change, social influences/processes, social cognition, moral development, interpersonal attraction, aggression, prejudice, and political psychology.

Prerequisite: PSYC 101
PSYC 212 - Adolescent Psychology

## PSYC 212 - Adolescent Psychology

## Credits: 3

This course studies human behavior from puberty to early adulthood. Emphasis is placed on various theoretical approaches to understanding adolescence.

Prerequisite: PSYC 101, PSYC 111 or Permission of Instructor
PSYC 215 - Psychology of Adult Dev. \& Aging

## PSYC 215 - Psychology of Adult Dev. \& Aging

Credits: 3
This course involves an investigation of the theory and research involved in the study of the psychology of aging. Particular attention is focused on role and identity changes, personality changes, intelligence, sexuality, the psychosocial aspects of retirement, and death and dying.

Prerequisite: PSYC 101
PSYC 220 - Psychology of Human Sexuality

## PSYC 220 - Psychology of Human Sexuality

Credits: 3
This course focuses on the physiological and psychological factors involved in human sexuality. Emphasis is placed on the impact of cultural forces and interpersonal factors in the development of sexual identity.

Prerequisite: PSYC 101
PSYC 222 - Statistics \& Research Methods in Psychology

## PSYC 222 - Statistics \& Research Methods in Psychology

Credits: 4
This course is designed for psychology majors in preparation for further studies in psychology at the 4 -year college level. Psychology students will become acquainted with the history of research methods in psychology and ethical considerations in both animal and human behavioral research, while focusing on the use of quantitative research methods and statistics in psychological research. Students will utilize the Statistical Package for the Social Sciences Lab Fee Required.

Prerequisite: PSYC 101 and Proficiency on Math Placement Test
PSYC 232 - Drugs, Behavior, \& Mod. Society

## PSYC 232 - Drugs, Behavior, \& Mod. Society

## Credits: 3

This course will have a strong emphasis on prevention and education; the psychological, sociological, and health perspective. This includes the study of therapeutic and recreational uses of psychoactive drugs, such as alcohol, nicotine, and caffeine. Emphasis will be on modes of action, behavioral effects, psychological/societal aspects of abuse and dependence, and intervention processes in addiction

Prerequisite: PSYC 101

PSYC 237 - Multicultural Psychology

## PSYC 237 - Multicultural Psychology

Credits: 3
This course introduces students to major theoretical perspectives on the experience and social construction of cultural difference. Drawing on theories from social, clinical, developmental and cognitive psychology, the course provides students with a foundation for understanding the origins and maintenance of various cultures within the United States, while also including global cultural comparisons.

Prerequisite: PSYC 101
PSYC 250 - Special Topics in Psychology

## PSYC 250 - Special Topics in Psychology

Credits: 3
This course focuses on selected topics in Psychology. Since topics may change each time the course is offered, students should consult the courseoffering schedule each semester.

PSYC 280 - Educational Psychology

## PSYC 280 - Educational Psychology

## Credits: 3

This course explores the application of psychological principles to the educational environment. Theories of learning, memory, cognition, and behavior management are used to help the student who is a prospective teacher find an optimal instructional approach.

Prerequisite: PSYC 101

# ROBT 215 - Robotics Enabling Technologies 

Credits: 3
This course covers the theory of operation of transducers, sensors, and data acquisition devices and techniques. Microprocessor-based control of actuators such as stepper motors, dc motors, hydraulic actuators and "muscle wire" as applied to robotics applications is presented. Physical operation of sensors, computer/transducer interfacing techniques, and processing of acquired data is analyzed, as well as the use of that data in the control of external actuators. Lab Fee Required.

ROBT 220 - Integration of Robotics Systems

# ROBT 220 - Integration of Robotics Systems 

Credits: 4
This course integrates the student's understanding of electro-mechanical systems. The student will design, build, and program a robot to perform a designated task agreed to by both the instructor and the student. Lab Fee Required.

## Russian

RUSS 101 - Elementary Russian I
RUSS 101 - Elementary Russian I

Credits: 3
This is an introductory course in Russian emphasizing the fundamentals of speaking, reading, writing, and listening. The course focuses on building basic vocabulary and introducing students to the Russian culture. It is designed for students with no Russian experience.

RUSS 102 - Elementary Russian II

## RUSS 102 - Elementary Russian II

Credits: 3
This course is a continuation of RUSS 101 with an emphasis on the fundamentals of speaking, reading, writing, and listening. The course focuses on building basic vocabulary and continuing the study of Russian culture.

Prerequisite: RUSS 101 (Grade of C or better) or two years of high school Russian (Grade of C or better)

## Supply Chain Management

SCMG 101 - Principles of Supply Chain Mgmt.

Credits: 3
The course surveys the basic concepts of Supply Chain to give students an understanding of the breadth and scope of Supply Chain in the overall business climate. Students explore a comprehensive overview of business and the inter-relationships/inter-dependence of the various business elements.

Corequisite: BUSA 101 Introduction to Business

## SCMG 105 - Purchasing Mgmt. \& Principles

## SCMG 105 - Purchasing Mgmt. \& Principles

## Credits: 3

This course is designed to cover relevant issues including: sourcing, planning, supplier selection, auditing suppliers, bid packages, and competitive bidding. Students are encouraged to develop critical skills required to identify, implement, and manage in order to reduce the total cost of materials (total cost of ownership). Student will explore alternatives to inventory ownership such as supplier consigned, vendor managed inventories and how to articulate these alternatives to senior management.

Corequisite/Prerequisite: BUSA 101 Introduction to Business/SCMG 101 Principles of Supply Chain Management
SCMG 110 - Inventory Management

## SCMG 110 - Inventory Management

## Credits: 3

This course provides an overview of managing inventory within the constantly evolving supply chain environment. Students will explore essentials and strategies for successful inventory management including planning, storing, moving, and accounting for inventory.

SCMG 115 - Shipping, Receiving \& Logistics

## SCMG 115 - Shipping, Receiving \& Logistics

Credits: 3
The course introduces students to best practices in the shipping and receiving function. Topics include: contracting carriers, damaged claims handling, brokers, software, and basic legal procedures.

SCMG 215 - Warehousing Distribution

## SCMG 215 - Warehousing Distribution

Credits: 3
The course content surveys the concepts and theories that drive the effective management of an organization's warehousing and distribution systems. Student will explore functions of a warehouse including design, layout and flow. Particular attention is paid to stock location methodology, inventory record accuracy, problem resolution, and inventory reconciliation.

## SCMG 225 - Performance Indicators and Benchmarking

Credits: 3
The course examines the best practices in the use Key Performance Indicators, Benchmarks, and Dashboards in various industries. The course surveys the need for these functions as well as how to select the functions to be monitored and measured.

## Sociology

SOCA 101 - Intro. to Sociology

## SOCA 101 - Intro. to Sociology

Credits: 3
This course is an introduction to the analysis and description of structures and dynamics of human society. Emphasis is placed on the application of scientific methods of observation and analysis of social groups, intergroup relations, social change, social stratification, and social institutions.

SOCA 115 - Intro. to Society \& Environment

## SOCA 115 - Intro. to Society \& Environment

Credits: 3
This course is the study of the complex and various ways people interact with the environment. This course provides an examination of how people's actions have, usually unforeseen, environmental consequences. This course will be offered during the spring semester.

SOCA 150 - Contemporary Social Issues

## SOCA 150 - Contemporary Social Issues

## Credits: 3

This course will focus on a limited number of controversial and/or problematic social issues. Readings and discussions will center on the major sociological perspective on these bases, including functionalist, conflict and interactionist viewpoints.

Prerequisite: SOCA 101

SOCA 201 - Deviant Behavior

## SOCA 201 - Deviant Behavior

Credits: 3
This course is the study of how social structures deal with deviants and the adaptive behavior of those identified as deviant. The course emphasizes the importance of the role which persons in political power or those who enforce the law play in the labeling of acts and actors as deviant.

## SOCA 202 - The Sociology of Sports

## SOCA 202 - The Sociology of Sports

Credits: 3
Students will analyze the impact of sports on society. Students will focus specifically on how the social institution of sports reinforces race, class, and gender arrangements in the United States and how sports act as a key socializing agent of children.

Prerequisite: SOCA 101 or SOCA 150
SOCA 203-Social Research Methods

## SOCA 203 - Social Research Methods

Credits: 3
This course will teach students to apply the scientific method to the social world. Students will focus on the most widely used methods including ethnography, survey, and experimental designs and carry-out their own research projects. Students will also examine a number of ethical issues in conducting social research.

Prerequisite: SOCA 101 or SOCA 150 or SOCA 115 or ANTH 101 or ANTH 120 ANTH 131 or POLS 101 or POLS 105 or POLS 106 or POLS 109 or PSYC 101 or PSYC 105 PSYC 106 or PSYC 109 or PSYC 110 or PSYC 111 or PSYC 112 or PSYC 215

SOCA 207 - Sociology of Religion

## SOCA 207 - Sociology of Religion

Credits: 3
The aim of this course is to critically analyze the relationship between religion and other social institutions such as the family, school, polity, and economy. Emphasis will be placed on how society uses the conceptualization of the sacred and profane to organize everyday life. Attention will also be given to current debates regarding religion's place in modern American society and international relations.

Prerequisite: SOCA 101 or SOCA 150
SOCA 208 - Sociology of the Family

## SOCA 208 - Sociology of the Family

Credits: 3
Analysis of families in various cultures, with in-depth study of the contemporary United States including historical development and future trends. Topics discussed are romantic love, courtship, marital interaction, divorce, gender roles, and the feminist movement. Special attention is given to the post-modern family.

Prerequisite: SOCA 101
SOCA 215 - Perspectives On Race, Gender, Class and Culture

## and Culture

Credits: 3
This course explores the effects of social structure and of dominant and sub-cultural norms and values on individuals, families and groups. Racism, sexism, homophobia, ageism, class bias and rigid gender roles are examined in depth with focus on the effects of advanced industrial capitalism on these phenomena.

Prerequisite: SOCA 101
SOCA 250 - Special Topics in Sociology

## SOCA 250 - Special Topics in Sociology

Credits: 3
This course focuses on selected topics in sociology. Since topics may change each time the course is offered, students should consult the course offering schedule each semester.

## Spanish

## SPAN 101 - Elementary Spanish I

## SPAN 101 - Elementary Spanish I

Credits: 3
This is an introductory course in Spanish emphasizing the fundamentals of speaking, reading, writing, and listening. The course focuses on building basic vocabulary and introducing students to the Hispanic culture. It is designed for students with no Spanish experience.

## SPAN 102 - Elementary Spanish II

## SPAN 102 - Elementary Spanish II

## Credits: 3

This course is a continuation of SPAN 101 with an emphasis on the fundamentals of reading, speaking, writing, and listening. The course focuses on building basic vocabulary and continuing the study of Hispanic culture.

Prerequisite: SPAN 101 (Grade of C or better) or two years of high school Spanish (Grade of C or better)

## SPAN 201 - Intermediate Spanish I

## SPAN 201 - Intermediate Spanish I

Credits: 3
This course is a continuation of SPAN 102, developing skills in speaking, reading, writing, and listening at the intermediate level.
Prerequisite: SPAN 102 (Grade of C or better) or three years of high school Spanish (Grade of C or better) or its equivalent.

## SPAN 202 - Intermediate Spanish II

Credits: 3
This course is a continuation of SPAN 201 developing skills in speaking, reading, writing, and listening at the intermediate level.
Prerequisite: SPAN 201 (Grade of C or better) or Permission of Instructor.
SPAN 220 - Spanish Conversation \& Comp.

## SPAN 220 - Spanish Conversation \& Comp.

## Credits: 3

This course further develops students' understanding and use of Spanish by clarifying points of grammar and vocabulary. Intensive practice in writing on different levels of usage and style, combined with guided oral practice will be emphasized.

SPAN 250 - Spec. Topics in Spanish

## SPAN 250 - Spec. Topics in Spanish

Credits: 3
This course focuses on selected topics in Spanish. This course will provide an opportunity to expand the modern language offerings into the areas of history, literature, and civilization.

## Theater Arts

THEA 102 - Acting I

## THEA 102 - Acting I

Credits: 3
This is a course that offers an in depth study of character portrayal and scene development with a focus on improving the skills required to perform a role from a script or from improvisation. This course requires student collaboration and attendance at local professional theater productions at an additional cost to the student.

THEA 103 - Acting II

## THEA 103 - Acting II

## Credits: 3

This course is a continuation of Acting I with an emphasis on theory and practice, including class and public performance. Student collaboration and attendance at local theater productions are required. A fee will be collected in each class for ticket cost.

## THEA 106 - Advanced Acting I

## Credits: 3

This is a course that offers an in depth study of character portrayal and scene development with a focus on improving the skills required to perform a role from a script or from improvisation. This course requires student collaboration and attendance at professional theater productions at an additional cost to the student.

THEA 107 - Advanced Acting II

## THEA 107 - Advanced Acting II

Credits: 3
This course is a continuation of Advanced Acting I with an emphasis on theory and practice including class and public performance. This course requires student collaboration and attendance at professional theater productions at an additional cost to the student

THEA 110 - Theater Workshop I

## THEA 110 - Theater Workshop I

## Credits: 3

This course is a practical study of theatrical production by intensive script study and supervised technical projects which culminate in performances for live audiences. Students work as cast or production staff and receive periodic evaluation. This course requires student collaboration and attendance at professional theater productions at an additional cost to the student.

## THEA 111 - Theater Workshop II

## THEA 111 - Theater Workshop II

Credits: 3
This course is a continuation of Theater Workshop I with emphasis on study of theatrical production by intensive script study and supervised technical projects which culminate in performances for live audiences. Students work as cast or production staff and receive periodic evaluation. This course requires student collaboration and attendance at professional theater productions at an additional cost to the student.

THEA 115 - Intro. to Technical Theater

## THEA 115 - Intro. to Technical Theater

## Credits: 3

This course offers students the opportunity to receive real life experiences in technical theater production. During this course, students will be required, in a real production setting, to perform duties such as sound/light board operators, projectionist technical director, stage manager, curtain/fly rail operator, and general technical crew for load-ins/outs, electrical assistants, gaffers and other similar jobs. The successful student will work closely with proven professionals in the field and will be required to perform in a live show setting. This course offers the student the opportunity to sharpen their skills and perform the important tasks to gain employment in the field of study.

## THEA 120 - Performance \& Production I

Credits: 3
This course is a hands-on experience for those accepted for the College's theatre productions, either as a performer or production support personnel. The course content includes, but is not limited to: acting, stage designing, lighting, sound, costumes, makeup, stage management, assistant directing, and understudying.

THEA 121 - Performance \& Production II

## THEA 121 - Performance \& Production II

Credits: 3
This course is a continuation of performance and production I.

THEA 130 - Stage and Theater Make-up

## THEA 130 - Stage and Theater Make-up

Credits: 3
This course is designed for exploration of the history, theory and practice of stage makeup. Students will gain hands-on experience with materials, techniques and application procedures allowing for the development, planning, and execution of character makeup designs for the performing arts. Emphasis is on the requirements of dramatic character, facial anatomy, and period styles. Lab Fee Required.

# THEA 135 - Properties \& Set Augmentation 

Credits: 3
This course is designed to introduce students to materials and techniques in theatrical properties and craft. Students will learn the many facets of being a property master for theatrical productions while focusing on research techniques, problem solving and technical skills applied to a variety of projects. Emphasis will be placed on expanding resource locating and procurement and organizational skills. Lab fee required.

THEA 208 - Theater History I

## THEA 208 - Theater History I

## Credits: 3

This course is a survey of dramatic literature and theatrical history from ancient times through the Renaissance. Students will be introduced to all areas of the theater including: acting, directing, design, and theater architecture.

# THEA 220 - Performance \& Production III 

Credits: 3
This course is a continuation of performance and production II.

# THEA 221 - Performance \& Production IV 

Credits: 3
This course is a continuation of performance and production III.

THEA 230 - Theater and Event Lighting

## THEA 230 - Theater and Event Lighting

## Credits: 3

This course is designed to explore the artistic, conceptual and collaborative aspects of Lighting Design. Emphasis is on technical knowledge of the tools of the trade with application of the final lighting designs. Students will gain hands-on experience with a good portion of class time spent in a theater and on performing arts events. Lab fee required.

THEA 235 - Costume Technology

## THEA 235 - Costume Technology

Credits: 3
This course is designed to introduce the student to costume technology. Students will discover how to properly research and recognize historical costumes as well as costumes for a variety of genres in successful preparation and completion of a custom design. Drawings techniques, design and production skills script analysis, and changing design will be explored. Lab fee required.

THEA 240 - Set Design and Construction

## THEA 240 - Set Design and Construction

## Credits: 3

This course is designed to introduce students to the principles and practices of set design. Students explore script analysis, research to design conceptualization and process transformed into working sketches, material selections, and translated into construction. Student will be able to apply the design process and the skills learned in the use of equipment and tools to complete a scenic design for a production. Lab Fee Required.

## THEA 245 - Stage Management

## Credits: 3

This course provides an introduction to the elements of play production and direction. Students explore planning, management, and technical aspects of production. The directing process will also be covered through script analysis, readings and scene work. Emphasis will be on the process of direction and management in play and character analysis, conceptualizing, casting, rehearsing, preforming, and precisely communicating with actors, designers and all members of a production. Students will gain practical experience working in a production. Lab fee is required.

Prerequisite: THEA 102, THEA 130, THEA 135, THEA 230, THEA 235, and THEA 240
THEA 250 - Spec. Topics in Performing Arts

## THEA 250 - Spec. Topics in Performing Arts

## Credits: 3

This course offers students the opportunity to receive real life experiences in technical theater production. During this course, students will be required, in a real production setting, to perform duties such as sound/light board operators, projectionist technical director, stage manager, curtain/fly rail operator, and general technical crew for load-ins/outs, electrical assistants, gaffers and other similar jobs. The successful student will work closely with proven professionals in the field and will be required to perform in a live show setting. This course awards the student the opportunity to sharpen their and perform the important tasks to gain employment in their field of study.

THEA 260-Technical Theater Internship

## THEA 260-Technical Theater Internship

## Credits: 3

This course is designed to have the Technical Theater student gain practical experience and enhance class learning. The student spends a total of 135 hours.

Prerequisite: All THEA technical courses or permission of the Program Coordinator

## Welding

WELD 101 - Welding Safety

## WELD 101 - Welding Safety

Credits: 1
This course will familiarize students with the knowledge on welding safety procedures, normal operating procedures; while also covering safe operation and hazards associated with welding.

## Credits: 3

This course covers weld print reading commonly utilized in the welding industry. Print reading to be covered includes at least: the American Welding Society (AWS) welding symbols, sketching, view representation, orthographic projection, measurement, structural steel materials, weld joint configuration and detailing, basic layout, and pipe system design. Lab Fee Required.

Prerequisite: Proficiency on the English and Basic Math portion of the Placement Test
WELD 110 - Thermal Cutting and Oxyfuel Welding

# WELD 110 - Thermal Cutting and Oxyfuel Welding 

## Credits: 3

This course acts as an introduction on various types of thermal cutting and oxyfuel welding and brazing procedures currently used in the industry. Training in the course follows the American Welding Society (AWS) standards of acceptance. Lab Fee Required.

Prerequisite: Proficiency on the English and Basic Math portion of the Placement Test
WELD 115 - Shielded Metal Arc Welding I

# WELD 115 - Shielded Metal Arc Welding I 

## Credits: 3

This course covers equipment and proper setup of said equipment; while introducing students to electrodes, and electrode selection used in shielded metal arc welding (SMAW). Instruction in this course follows the American Welding Society (AWS) standards of acceptability and teaches student to develop hands on skills necessary to generate quality single and multiple pass welds in all positions while utilizing commonly used filler materials including low hydrogen, non-low hydrogen, and iron powder electrodes. Lab Fee Required.

Prerequisite: Proficiency on the English and Basic Math portion of the Placement Test
WELD 120 - Welding Metallurgy

## WELD 120 - Welding Metallurgy

Credits: 2
In this course students will gain the knowledge of basic metallurgical principles in relation to fusion welding. Welding Metallurgy will also include the process, both the physical and mechanical properties, metal type, carbon equivalency, choice of filler metal, heat input (Joules), and the byproduct of heat on the weld zone (HAZ) along with the effects of heat and stress relieving applications within the welding field. Lab Fee Required.

Prerequisite: WELD 101, WELD 105, WELD 110, WELD 115
WELD 125 - Shielded Metal Arc Welding II

## WELD 125 - Shielded Metal Arc Welding II

## Credits: 3

This course covers equipment and proper setup of said equipment; while going more in depth on electrodes and electrode selection used in shielded metal arc welding (SMAW). Instruction in this course follows the American Welding Society (AWS) standards of acceptability and teaches students to develop the hands on skills necessary to generate quality single and multiple pass welds, in all positions, utilizing increasing diameter electrodes of the low hydrogen and non-low hydrogen filler metals frequently used in the field following the structural steel welding code. Students will weld joints to replicate butt-beam to beam, beam to column splicing, heavy plate and heavy equipment welding. Students learn the skills in the AWS D1.1 Structural Steel Welding Code with low hydrogen electrodes, unlimited plate thickness, and with or without backing in all positions. Lab Fee Required.

## WELD 130 - Flux Cored Arc Welding

# WELD 130 - Flux Cored Arc Welding 

## Credits: 3

This course includes proper equipment selection, setup, proper choice of electrodes, and gas selection used in flux cored arc welding (FCAW) and submerged arc welding (SAW). Instruction in the course follows the American Welding Society (AWS) standards of acceptability and teaches students to develop the hands on skills necessary to generate quality single and multiple pass welds in all positions utilizing flux cored electrode wires with and without the presence of shielding gases on medium to heavy plate. Lab Fee Required.

Prerequisite: WELD 101, WELD 105, WELD 110, WELD 115
WELD 135 - Gas Metal Arc Welding

## WELD 135 - Gas Metal Arc Welding

## Credits: 3

This course includes proper equipment selection and setup, electrode selection, gas selection and techniques used in the gas metal arc welding (GMAW) processes on steel, stainless steel and aluminum. Instruction in this course follows the American Welding Society (AWS) standards of acceptability to develop the hands on skills necessary to generate quality single and multiple pass welds in all positions on all thicknesses of metal plate. Lab Fee Required.

Prerequisite: WELD 120, WELD 125, WELD 130

## WELD 140 - Welding Fabrication

## WELD 140 - Welding Fabrication

## Credits: 3

This course provides instruction on both the creation of schematics and construction of welding projects. The creation of schematics and planning of the project will include blueprints and estimated cost of time, labor and supplies needed. Testing of projects will be used to check correctness and soundness of the created welds. Methods for testing will include both visual and non-destructive methods. Lab Fee Required.

Prerequisite: WELD 130
WELD 201 - Basic Pipe Welding

## WELD 201 - Basic Pipe Welding

## Credits: 3

Instruction in this course will cover the welding of both light and heavy walled pipe. Welding will be completed in all positions using shielded metal arc welding (SMAW) and methods used for fit-up and layout. All welding in this course will follow practices that are permitted by the American Society of Mechanical Engineers (ASME) Section IX and the American Petroleum Institute (API) 1104 and the American Welding Society (AWS) Lab Fee Required.

Prerequisite: WELD 135, WELD 140, WELD 201

## WELD 202 - Pipe Welding II

## Credits: 3

Instruction in this course will cover the welding of both light and heavy walled pipe. Welding will be completed in all positions using gas tungsten arc welding (TIG) and gas metal arc welding (MIG) methods used for fit-up and layout. All welding in this course will follow practices that are permitted by the American Society of Mechanical Engineers (ASME) Section IX and the American Petroleum Institute (API) 1104 and the American Welding Society (AWS). Lab Fee Required.

## WELD 205 - Gas Tungsten Arc Welding

# WELD 205 - Gas Tungsten Arc Welding 

## Credits: 3

Instruction in this course will cover welding of both light and heavy walled pipe in all positions using shielded metal arc welding (SMAW) while also utilizing methods needed for fit-up and layout, and following steps approved by the American Society of Mechanical Engineers (ASME) Section IX and the American Petroleum Institute (API) 1104 and the American Welding Society (AWS). Lab Fee Required.

Prerequisite: WELD 135, WELD 140, WELD 201
WELD 206 - Gas Tungsten Arc Welding II

# WELD 206 - Gas Tungsten Arc Welding II 

## Credits: 3

Instruction in this course will cover welding of both light and heavy walled pipe in all positions using gas tungsten arc welding (GTAW) while also utilizing methods needed for fit-up and layout, and following steps approved by the American Society of Mechanical Engineers (ASME) Section IX and the American Petroleum Institute (API) 1104 and the American Welding Society (AWS). Material thickness to include 20 gauge steel up to a maximum of $ل$ ل plate. Lab Fee Required.

## WELD 225 - Ornamental Ironwork

## WELD 225 - Ornamental Ironwork

## Credits: 3

Instruction in this course concentrates on welding skills necessary to fashion and manufacture an assortment of ornamental iron forms utilizing tools and equipment that include: forge, anvil, hammers, bending and shaping equipment, oxyfuel welding and cutting, plasma cutting, shielded metal arc welding (stick), and gas metal arc welding (wire). Students are instructed in safe work practices, which are followed. Individual instruction is also encouraged to help critique and improve skills to help meet the student's creative ends. Lab Fee Required.

Prerequisite: WELD 135, WELD 140, WELD 201

## WELD 230 - Creative Welding

## WELD 230 - Creative Welding

## Credits: 3

Instruction in this course emphasizes techniques necessary to produce and manufacture a plethora of forms, utilizing oxyfuel welding and cutting, plasma cutting, shielded metal arc welding (stick), and gas metal arc welding (wire). Students are instructed in safe work practices, which are

# WELD 280 - Welding Technology Internship 

Credits: 3
This course is formatted to offer students hands on experience in careers found in the field of welding. Students will have the opportunity work in either paid or non-paid positions under the supervision of an approved supervisor. Lab Fee Required.

Prerequisite: WELD 135, WELD 140, WELD 201

## Women's Studies

WMST 101 - Women In Contemporary Society

# WMST 101 - Women In Contemporary Society 

## Credits: 3

This is an introduction to the theoretical study of women's lives as they vary within a culture and across cultures. Differences according to sex, gender, race, class, ethnicity and age will be examined. Through a feminist lens, this course examines how gender intersects with ethnicity, class, race and sexuality, and age. A primary focus of the course is on the social construction of gender over the life course by looking at women in both the United States and women in other cultures. Women's lives within economic, political, and social structures will be examined. An overview of issues affecting women's lives, including sexuality, reproduction, work, family, health, poverty and violence will be provided.

## WMST 110 - Women In Business

## WMST 110 - Women In Business

## Credits: 3

This interdisciplinary course examines topical issues related to women in business, enabling students to acquire valuable assets and tools for competing successfully in the business world. Topics include demographics, legal rights, sexual harassment, career vs. family, career pathing, negotiating skills, networking, mentors, and office politics.

WMST 207 - Literature by Women

## WMST 207 - Literature by Women

## Credits: 3

ENGL 207 This course will explore the writing of 19th, 20th, and 21st century women authors, poets and dramatists with an emphasis on the diversity of women's voices, and on the impact of the inclusion of their works on the literary canon.

Prerequisite: ENGL 102 (Grade of C or better)

# WMST 250 - Special Topics in Womens Studies 

## Credits: 3

This course focuses on selected topics in Women's Studies. Since topics may change each time the course is offered, students should consult the course-offering schedule each semester.

## Massage Therapy

## MTHS 110 - Massage Therapy Techniques I

# MTHS 110 - Massage Therapy Techniques I 

## Credits: 4

This course is the first of a two-semester hands-on technique series that provides the foundation skills for Massage Therapy (MT). This course focuses on theory and standards important to the practice of massage therapy. It presents the history of massage therapy around the world. It comprehensively covers techniques and sequencing for Swedish massage (SWM) (a basic approach to massage) and introduces neuromuscular massage (a more technical approach). The foundations of Swedish massage modality are taught with an emphasis on technique and development of palpation skills. Other modalities covered are energy work, chair massage, and hot stone.

MTHS 112 - Massage Therapy Techniques II

## MTHS 112 - Massage Therapy Techniques II

Credits: $\mathbf{4}$
This course, the second of a two-semester hands-on technique series, offers comprehensive coverage of Neuromuscular Massage Therapy. In addition to systematic assessments, protocols and sequencing for all parts of the body, the course will cover breathing dynamics, detailed postural assessment, introductory kinesiology, sports massage techniques, lymphatic drainage methods, and integration of different modalities in clientcentered Massage Therapy setting.

MTHS 135 - Supplemental Modalities I

## MTHS 135 - Supplemental Modalities I

Credits: 3
This course exposes students to various supplemental therapies available in the field of massage therapy. Students will learn the fundamentals of these modalities. Examples of current modalities are T'ai Chi, aromatherapy, reflexology, canine massage, geriatric, oncology, child and infant/pregnancy massage.

MTHS 137 - Supplemental Modalities II

## MTHS 137 - Supplemental Modalities II

Credits: 3
This course exposes students to various modalities of therapy available in the field of bodywork. It covers the fundamentals, applications, and

MTHS 210 - Massage Therapy Clinical

## MTHS 210 - Massage Therapy Clinical

## Credits: 2

This course provides exposure and experience in applying Massage Therapy principles, protocols and techniques in a professional MT setting. Students will learn the various aspects of running a massage therapy business.

## MTHS 212 - Supplemental Modalities Clinical

## MTHS 212 - Supplemental Modalities Clinical

## Credits: 2

This course implements the principles and techniques of the specific modalities learned in Supplemental Modalities I and Supplemental Modalities II courses in a clinical setting. Examples of current modalities are Tai Chi, aromatherapy, reflexology, canine massage, geriatric, oncology, child and infant/pregnancy massage, and advanced neuromuscular technique, Asian bodywork and Reiki.

## Campus Map and Directory

- Directory
- Directions
- Campus Map

| Department | Direct Lines | Building | Room |
| :---: | :---: | :---: | :---: |
| Academic Affairs | 973-300-2150/2332 | Administration Bldg. | B301 |
| Accessibility Services | 973-300-2153 | Administration Bldg. | B206 |
| Adult Basic Education \& High School Equivalency Program | 973-300-2158 | Administration Bldg. | B102 |
| Admissions: admissions@sussex.edu | 973-300-2223 | Administration Bldg. | B204 |
| Advising \& Counseling Center advising@sussex.edu | 973-300-2207 | Administration Bldg. | B206 |
| Art Studio | 973-300-2228 | Art Gallery |  |
| Athletics | 973-300-2230/2231 | Academic \& Athletic Bldg. |  |
| Bursar's | 973-300-2106 | Administration Bldg. | B203 |
| Billing, All Payments \& Payment Plans, Account Reconciliation |  |  |  |
| Campus Life Office | 973-300-2200 | Student Center | D105a |
| Campus Store | 973-300-2767 | Student Center |  |
| EOF Program | 973-300-2347 | Student Center | D114 |
| ESOL | 973-300-2158 | Administration Bldg. | B102 |
| Faculty Area | 973-300-2165/2166 | Administration Bldg. |  |
| Financial Aid: finaid@sussex.edu | 973-300-2225/2227 | Administration Bldg. | B212 |
| Foundation Office | 973-300-2121 | Performing Arts Center | A327 |
| IT Services | 973-300-2333 | Administration Bldg | B106 |
| Library | 973-300-2162/2292 | Library \& Science Bldg. |  |
| Marketing Dept. | 973-300-2355 | Student Center | D318/319 |
| Registrar: registrar@sussex.edu | 973-300-2218/2215 | Administration Bldg. | B217 |
| FERPA, Transcripts, Student Records |  |  |  |
| Security (Student ID) | 973-300-2222/2103 | Student Center | D116 |
| Student Gov't Assoc. | 973-300-2304 | Student Center | D112 |
| Student Services | 973-300-2201 | Administration Bldg. | B211 |
| Transcript Information | 973-300-2216 | Administration Bldg. | B217 |


| Testing Center/Tutoring | $973-300-2155$ | Administration Bldg. | B317 |
| :--- | :--- | :--- | :--- |
| Veteran Services | $973-300-2109$ | Student Center | D110b |
| Welcome Center | $973-300-2100$ | Administration Bldg. |  |

## Sussex County Community College • One College Hill Rd, Newton, NJ 07860

From the South via Route 15: Route 15 N. to Rt 517, Sparta/Franklin Exit; Left at light onto Rt 517/Newton- Sparta Rd; Follow 5 mi. into From the East via Route 80: Route 80 W . to exit 25; Rt 206 N. into Exit; Left at light onto Rt 517 Newt
Newton; Left at light; Bear right onto 206 N.; Left at light onto Mill St.; Newton; Road changes to Spring St.; Bear right onto Rt 206 N.; Left at Left at light onto Swartswood Rd.; First right onto College Hill Rd. light onto Mill St.; Left at light onto Swartswood Rd.; First right onto College Hill Rd.
From the Northeast via Rt 94: Route 94 S. to 206 S. to Newton; Right From the Southeast via Rt 94: Rt 94 N. to Newton; Left at light; Bear on North Park Drive; Left onto Rt 519; Right at light onto Swartswood right onto 206 North; Left at light onto Mill St.; Left at light onto Rd.; First right onto College Hill Rd.

## Campus Map

A. Health Sciences and Performing Arts: Classrooms, SCCC Foundation, PAC Theater Academic Building New: Classrooms, Conference Area, Lecture Hall, Makerspace, Robotics Lab
B. Administration Building: Academic Affairs, Accounts Payable, Admissions, Bursar, Classrooms, Executive Offices, Financial Aid, IT Services, Learning Resources, Purchasing, Registrar, Student Services, Student Success Ctr, Testing Center, Welcome Center
C. Art Gallery: Art Studios, Classrooms, Faculty Offices
D. Student Center: Adjunct Faculty Offices, Campus Life, Campus Store, Classrooms, EOF, Game Room, HR, Facilities, Marketing, Security, Skylanders Cafe, Student Center Theater, Student Government Assoc, Veterans Office/Resource Center, Writing Center
E. Academic \& Athletics Building: Athletics, Classrooms, CC Business Learning Ctr, Degree UP, ESports, Faculty Offices, Fitness Center, Graphic Arts Lab, Human Performance Lab, Gymnasium, Shipping \& Receiving

## H. Horton Mansion

L. Library and Science Building: Classrooms, Faculty Offices, Library, Science Classrooms \& Labs

## R. University Center: Classrooms, Optics Center

## V. Studio 20/Media Center: Classrooms, Studio 20

Section 504 and Title IX Continuous Notice of Non-Discrimination: Sussex County Community College (SCCC) does not discriminate in admissions or access to, or treatment, or employment on the basis of race, color, national origin, sex, disability, or age in its programs and activities.

## Admissions

- Applying to Sussex
- Chargeback
- County and State Residency Requirements
- Declaration of Major
- Immunization Requirements
- International Students
- Matriculation/Enrollment Status and Classification
- Summer and Winter Sessions
- Testing

Academic Building (B) •973.300.2223/2253
Sussex County Community College has an open enrollment policy. Admission to the College is open to all high school graduates, those holding a High School Equivalency (HSE), or other persons 18 years or older. Admission and registration are available on a rolling basis.

Eligible high school students may take Sussex classes through our Concurrent Enrollment Program and Jump Start Program.
Students under the age of 18 will be required to obtain a signed, parental-enrollment consent form in order to take classes.

## Applying to Sussex

An Application for Admission is available online at sussex.edu/apply, from the Admissions Office or can be mailed upon request.

Applications are reviewed for admission to the College on an ongoing basis. Whether you wish to take a single course or enroll in full-time study, all new students must submit an application.

## Applicants must:

- Provide proof of immunization per the New Jersey law. (Note: students taking less than 12 credits are not required to comply with immunization standards.)
- Submit high school or other college transcripts or High School Equivalency (HSE) certificate.

After applying, we recommend that all students apply for financial aid.

## Chargeback

Sussex will provide a chargeback authorization at a New Jersey community college for Sussex County residents interested in pursuing a program not available at Sussex or any of its contracting institutions. Forms are available online.

## County and State Residency Requirements

Any resident of Sussex County who is a high school graduate or is 18 years of age or older may apply for regular admission to Sussex. New Jersey residents who do not live in Sussex County may attend Sussex and receive chargeback assistance through their home counties if the community college in their county does not offer the program they wish to pursue. Students from out-ofcounty may also attend by paying the out-of-county tuition rate.

## Declaration of Major

All students pursuing a degree or a certificate are encouraged to declare a major at the point of admission. Students may change majors by filing a Declaration of Major Form online or available in the Registrar's Office, B217. Students cannot change a major online. Students are not required to declare a major but students must declare a major to be eligible for financial aid.

## Immunization Requirements

New Jersey State law requires that all full-time community college students provide proof of the following immunizations (immunization certificates required):

- 2 doses of the measles vaccine
- 1 dose of the mumps vaccine
- 1 dose of the rubella vaccine
- 3 doses of the Hepatitis B vaccine
- 2 doses of the Meningococcal vaccine (new for Fall 2020 incoming students)

Students born prior to 1957 are exempt from the measles, mumps, and rubella requirements only and need to present proof of age (i.e., copy of driver's license or birth certificate).

## Hepatitis B Vaccine

New Jersey State law also requires that all new, full-time, degree-seeking students enrolling at a public or private institution of higher education in this state shall be vaccinated for Hepatitis B (Three [3] doses). This includes students born prior to 1957.

## Meningococcal Vaccine

As of June 15, 2020, New Jersey State law now requires that all full-time, degree-seeking students enrolling at a community college of higher education in this state shall be vaccinated for Meningitis (Two [2] doses). This includes students born prior to 1957.

## Exemptions

- Religious Exemption (J.S.A. 26:1A-9.1 and N.J.A.C. 8:57-4.4): Students whose religious principles prohibit injections may request a religious exemption. An essay of explanation is required.
- Medical Exemption (J.A.C. 8:57-4.3): Students may request a medical exemption if the vaccine is medically contraindicated; a statement by a licensed physician is required. Please refer to the form created by the State of New Jersey for medical professionals to complete for a medical exemption: https://www.nj.gov/health/forms/imm-53.pdf
- Philosophical and moral objections are not accepted by the State of New Jersey.

For more information, please visit sussex.edu/current-students/immunization-record or contact the Registrar's Office at (973) 300-2218.

## International Students

Sussex County Community College is a Student and Exchange Visitor Program (SEVP) approved school and welcomes international students.
International students hold an F-1 student visa and must be enrolled full time, for at least 12 credit hours, during the fall and spring semesters' and must maintain a cumulative grade point average of 2.0 or better at all times.

International students are not eligible for financial aid but may qualify for scholarships through the College's Foundation. They may utilize the College's academic support services, Advising and Counseling Center, and are welcome to participate in clubs, and all student activities.

## Matriculation/Enrollment Status and Classification

Any student, full-time or part-time, enrolled in a degree or certificate program is considered to be matriculated.
A student registered on the tenth day of classes (the official College recording date) for 12 or more credits is considered full-time. A student with 11 credits or less is designated as parttime. (Federal financial aid regulations may impose additional definitions.)

Students attending college for the first time are designated as first-time freshmen and, thereafter, freshmen through the first 32 credits. Students with 33 or more credits are classified as sophomores.

## Summer and Winter Sessions

Sussex offers one winter and three summer sessions. Current students, eligible high school students and students from other colleges can enroll in classes during these sessions.

This opportunity allows students to progress more rapidly through their programs, make up classes they may have missed or transfer credits to other colleges. For more information, contact the Advising and Counseling Center or visit the sussex.edu.

## Testing

Administration (B) Building •973.300.2155

## College Placement Testing

Sussex is committed to each student's academic success. The testing policy is designed to give all students an opportunity to succeed by beginning in the appropriate courses that will maximize learning.

Sussex does not require an entering student to take the College Placement Test in the subject areas of reading, writing, computation, or algebra, however, the College-level Mathematics Placement Test, Advanced Algebra and Functions, will be required to show proficiency in order to enroll in precalculus or calculus courses unless one of the following waiver conditions is met:

1. The student has earned a college degree.
2. The student is taking Sussex courses that are approved for personal enrichment.
3. The student meets a special program standard or exception.

Results of Placement Tests do not affect admission to Sussex but are used as a measure of skill competency, along with other measures, for appropriate placement into college-level coursework.

Based on Placement Test results, students will be eligible to register for Sussex courses, based on the chart Placement Using Sat, Act or Accuplacer Scores.

## CLEP and Challenge Exams

Many students come to Sussex with in-depth knowledge they have acquired through independent or prior study, cultural or special interest, or have skills or knowledge gained from internships and/or professional experience. Challenge Exams and CLEP Exams enable a student to forgo introductory courses, moving them to classes in their major or prospective career areas. Satisfactory scores allow students to save time, shortening the path to their goals. Not every course is appropriate for a Challenge or CLEP Exam. There is a nonrefundable proctoring fee for each CLEP Exam.

A maximum of $50 \%$ of the credits required for a degree (A.A., A.S. or A.FA.) or certificate program or up to 39 credits for an A.A.S. degree may be granted for CLEP, Challenge Exams, and transfer credit or any combination thereof.

Applications for most Challenge Exams including the Challenge Exam for COMS 110 can be obtained from the Advising and Counseling Center. To schedule the Pre-Calculus Challenge Exam, please call the Testing Center. Sussex is a national CLEP Testing Center.

## High School Equivalency (HSE) Test

The High School Equivalency Test is administered each month. Tests are offered on Mondays and Saturdays to accommodate participants. Any New Jersey resident, 18 years or older, who does not have a high school diploma is eligible to take the exam. For students less than 18 years, please contact HSE Program Coordinator (973) 300-2158.

## Licensing Exams in the Medical Field

Information on licensing exams for health science certificates is available from the Health Science department.

## Proctoring for Outside Institutions

Exams are proctored for students doing distance learning with other institutions. There is a proctoring charge, payable through the Bursar's Office. Visit the Testing Center page for more information.

## Thomas Edison University Examination Program

The Thomas Edison Credit-by-Examination Program (TECEP) enables students to earn college credits for knowledge gained through work experience. Sussex is a TECEP testing center. TECEP brochures can be obtained by writing to:

Thomas Edison College
101 W. State Street, Trenton, NJ 08625

## Fees

- Lab and Course Fees
- Residency Requirement
- Refund Policy
- Methods of Payment


## REQUIRED FEES

## General Fee

$\$ 40$ per credit
The General Fee covers the cost of incidental services associated with matters pertaining to student welfare, campus life, and the collegiate environment. This fee is non-refundable.

## Student Services Fee

Supports Student Government Association, which supports clubs, organizations, and committees chartered through the SGA. Any activities that are sponsored by the SGA are available to all students (not charged for Winter/Summer sessions).
Technology Fee
$\$ 25$ per credit
Covers all technology that the college offers to the students including technology, wireless connections, library, and more.

## ADDITIONAL FEES

| Accuplacer (Placement) Test Fee | \$10 per test |
| :--- | :--- |
| Administrative Withdrawal Fee |  |
| Charged per course that a student is registered for but does not attend. Non-attendance is provided by the instructor. |  |
| Course Materials Fee | $\$ 50$ per course |
| The course material fee covers some of the cost of materials provided to students during the semester. | $\$ 3$ per course |
| Lab Fee | See chart - |
| Charged to the student in conjunction with courses listed in the course descriptions for use of any materials for labs, i.e.: computer, |  |
| science, automotive, technology, etc |  |
| Late Payment Fee |  |
| A non-refundable late payment fee is charged to all students failing to pay by the prescribed date. | $\$ 50$ |
| Online Course Fee <br> Covers the extra time that the instructor must take to work with online students along with the technology that goes with it. <br> Returned Check Fee <br> A check that is returned to Sussex from a bank for insufficient funds. <br> Transcript Fee (the first one is free) <br> Cover the paperwork and the cost of sending the transcript. The first transcript is free. | $\$ 100$ per |

## Lab and Course Fees

## Course Fee

| 1 credit course lab fee | $\$ 46$ |
| :--- | :--- |
| 3 credit course lab fee | $\$ 140$ |
| 4 credit course lab fee | $\$ 186$ |
| 5 credit course lab fee | $\$ 232$ |
| Automotive Technology | $\$ 140$ |
| Diesel Technology | $\$ 140$ |
| Exercise Science | $\$ 46$ |
| Building Construction, Cosmetology, Culinary Arts, Hospitality, Machine Tool Technology, and | $\$ 186$ |
| Welding | $\$ 180$ |
| Medical Assistant | $\$ 140$ |

## Residency Requirement

In order to qualify for in-county status regarding tuition, a student is required to present evidence of his or her permanent Sussex County residence at the time of application.

## Refund Policy

Students who withdraw from classes, in which they have been officially registered, offered by Sussex or one of its contracting institutions, shall be eligible for a refund in accordance with the refund schedule listed below provided the withdrawal procedure has been followed. (See Withdrawal from Classes Under Registration).

Students may file a Withdrawal Form (available in the Advising and Counseling Center) at the Office of the Registrar or in writing via their Sussex student email to registrar@sussex.edu. Requests must include the student's name, Student ID number, semester, course, and the student's signature.

Please see the Academic Calendar for refund and withdrawal dates.

## Methods of Payment

Students are encouraged to pay their semester bill online thru the student portal, my.sussex.edu, using their Student ID number and password. Online payments may be made by credit card or debiting a checking account (E-check). An installment payment plan is also available online for a $\$ 35$ enrollment fee. Students may also pay their bills by mail or in person at the Bursar's Office.

Students receiving financial aid should check their my.sussex portal for awards and missing information. Any difference between the tuition and fee bill and financial aid award must be paid by the tuition due date prior to the start of each semester.

## Financial Aid

- Student Portal
- Changes in Financial Circumstances and Unusual Situations - Request for Professional Judgment
- Other Aid
- Federal Financial Aid Programs
- State Financial Aid Programs
- New Jersey Scholarships and Grants
- Financial Aid Criteria
- Degree Programs
- Federal Student Aid Return Policy
- Institutional Charge Policy
- Charges - Educational Costs
- Additional Financial Aid Information


## Administration Building (B)•973.300.2225

Sussex County Community College recognizes that many families need assistance in meeting their educational costs. The College's financial aid programs assist students who would be unable to attend without financial help.

The College expects that students and their parents will contribute to the extent of their abilities toward meeting their educational costs. All students are encouraged to complete the Free Application for Federal Student Aid (FAFSA).

Financial aid is available to those who demonstrate need. Need is defined as the difference between what it costs to attend Sussex and what a student may reasonably be expected to contribute. Unless otherwise designated, all assistance offered by or through Sussex is awarded on the basis of financial need and satisfactory academic progress.

Sussex participates in all federal and New Jersey state aid programs. These programs include federal and state grants, as well as low-interest loans and campus employment opportunities. Students applying for financial aid are considered for all programs for which they are eligible.

## When to Apply

Students should complete a FAFSA for each year after October 1st but before April 15th to be considered for maximum grant aid.

## How to Apply for Financial Assistance

Follow the steps outlined below. The Financial Aid Office offers FAFSA Workshops for students who need assistance. Check the website for scheduled dates. Please allow enough time before the start of the semester to avoid missed deadlines.

1. Complete a Free Application for Federal Student Aid (FAFSA).
a. The FAFSA is available online at StudentAid.gov.
b. FAFSA Workshops are held once a week to assist with the FAFSA Application. Register online at sussex.edu/fafsaworkshops
c. Use your FSA ID and password to sign for the student (and parent if applicable). Create your FSA ID and password at StudentAid.gov.
d. Print a copy of the confirmation page for your records.
e. The Sussex School Code is $\mathbf{0 2 5 6 8 8}$.
2. If requested by the Financial Aid Office, provide an official final high school transcript, or High School Equivalency (HSE) Test. (faxes not accepted).
3. Eligibility for assistance is determined as a result of information submitted to the Federal Student Aid Processing Center on the Free Application for Federal Student Aid (FAFSA).

The Processing Center calculates an Expected Financial Contribution (EFC). The EFC is provided on the Federal Student Aid Report (SAR).

After a student receives their Student Aid Report, he or she will be notified through their Sussex email if they have been selected for federal verification. If the student is selected for verification they will be required to do the following:

1. Complete the appropriate Verification Worksheet available on the Financial Aid website at sussex.edu/financialaidforms.
2. Submit a copy of the students and their parent's (if parental information was required) signed Tax Return or IRS generated Tax Return Transcript to the Financial Aid Office. Transcripts can be printed by accessing your records at www.irs.gov
3. Students should submit all other documentation as requested to the Financial Aid Office.

## Student Portal

We strongly encourage students to use the My.Student Portal to view both their financial aid awards on their College Financing Plan as well as missing documents needed to complete their financial aid file. The student portal is available from my.sussex.edu.

Most of the required forms are available for download at sussex.edu/financialaidforms.

## Changes in Financial Circumstances and Unusual Situations Request for Professional Judgment

Students should notify the Financial Aid Office of any changes in their financial circumstances and unusual situations that may occur. Examples are loss of a job, reduction of non-taxable income, disability or death of a parent or spouse, separation or divorce, etc. All may have an effect on the students need for assistance. If the student's circumstances have changed, updates may be required to their application. Submit a request by completing the Request for Professional Judgment Form located on our website. In all cases, third party documentation is required.

## Other Aid

Students are required to notify the Financial Aid Office and/or Bursar's Office when any outside financial assistance such as scholarships and/or third party funding is given to the student.

## Federal Financial Aid Programs

There are several Federal programs that may be available for those who qualify, to help reduce the cost of education. The programs include grants, work study, and loans.

## Federal Pell Grant (Pell)

The processed FAFSA will determine a student's eligibility for a Pell Grant. The grant value is dependent upon the FAFSA analysis and is sensitive to the course load taken. The grant could range from $\$ 652$ to $\$ 6,095$ annually. The grant could range from $\$ 672$ to $\$ 6,495$ annually.

## Federal Supplemental Educational Opportunity Grant (SEOG)

This grant requires no additional application and is awarded to students via random selection, who show exceptional need. Awards range from $\$ 100$ to $\$ 600$ annually. Award amounts vary depending on the availability of funds.

## Federal Work Study (FWS)

Federal Work Study is designed to provide employment for needy students. Earnings for services are paid on the 15th and last day of the month by automatic deposit and do not appear as a credit against school charges. Eligibility for the program is determined by the Financial Aid Office
and priority is given to students demonstrating the most financial need.
Funding for FWS is provided by a yearly allocation from the federal government. Students may not earn more than the amount stated on their Work Authorization Form.

Students select an employment location from our job listings. FWS is part of the student's financial aid package, they will be referred to Human Resources for employment location and the date he or she will start to work. Employment follows the academic calendar and usually averages 10 to 20 hours per week. The College pays, but is not limited to paying, the prevailing minimum wage.

As part of the FWS, students may be able to participate in the Community Service Learning (CSL) program. Work is usually performed at an offcampus location, but must be in the public interest at a non-profit, community-based employer. In the CSL program students are employed in positions which are designed to directly improve the quality of life for community residents, particularly low-income individuals, or to solve particular problems related to their needs in areas such as health care, childcare, literacy training, education, and counseling.

As with all FWS students, the College determines if eligibility requirements have been met and matches the student to the work location. Supervisors schedule duties and work hours. In no case may the student exceed the budgeted amount of earnings set by the Financial Aid Office. Work hours in the CSL program could be up to the maximum of 20 hours per week. The employment contract is for one semester and may be renewed for a following semester as long as the student is enrolled.

## William D. Ford Federal Direct Loan Program (Direct Loan)

The loan may be used to help cover costs not met by grant assistance. Subsidized maximum loan amounts for dependent students are $\$ 3,500$ for the freshman year (one to 32 collegelevel credits earned) and $\$ 4,500$ for the sophomore year ( 33 or more college-level credits earned). An additional $\$ 2,000$ in an un-subsidized loan is available for dependent students.

Independent students may borrow more. Loans are not recommended and are to be used only if all other options are exhausted.
Students must complete the following before a loan can be awarded and disbursed.

1. FAFSA: StudentAid.gov
2. Entrance Counseling: studentloans.gov
3. Master Promissory Note: studentloans.gov
4. Sussex Direct Student Loan Request Form: sussex.edu/studentservices/financialaid/forms

Subsidized: A loan for which a borrower is not responsible for the interest while in an in-school, grace, or deferment status. Subsidized loans include Direct Subsidized, Direct Subsidized Consolidation Loans, Federal Subsidized Stafford Loans and Federal Subsidized Consolidation Loans. If you are a firsttime borrower on or after July 1, 2013, there is a limit on the maximum period of time (measured in academic years) that you can receive Direct Subsidized Loans. This time limit does not apply to Direct Unsubsidized Loans or Direct PLUS Loans. If this limit applies to you, you may not receive Direct Subsidized Loans for more than 150 percent of the published length of your program. This is called your "maximum eligibility period." Your maximum eligibility period is generally based on the published length of your current program. You can usually find the published length of any program of study in your school's catalog.

Unsubsidized: A loan for which the borrower is fully responsible for paying the interest regardless of the loan status. Interest on unsubsidized loans accrues from the date of disbursement and continues throughout the life of the loan. Unsubsidized loans include: Direct Unsubsidized Loans, Direct PLUS Loans, Direct Unsubsidized Consolidation Loans, and Federal Unsubsidized Stafford Loans, Federal PLUS Loans, and Federal Unsubsidized Consolidation Loans.

| Dependent Students |  |  |  |
| :---: | :---: | :---: | :---: |
| Academic Level | Annual Limit Subsidized | Annual Limit Additional Unsubsidized | Total Annual Limit |
| 1st year (1-29 credits earned) | $\$ 3,500$ | $\$ 2,000$ | $\$ 5,500$ |
| 2nd year (30+ credits earned) | $\$ 4,500$ | $\$ 2,000$ | $\$ 6,500$ |

Note: Additional Unsubsidized Loan funds of up to $\$ 4,000$ per year, (not included in chart) may be available for students whose parents are denied a Parent Loan for Undergraduate Students (PLUS)

| Independent Students |  |  |  |
| :---: | :---: | :---: | :---: |
| Academic Level | Annual Limit Subsidized | Annual Limit Additional Unsubsidized | Total Annual Limit |
| 1st year (1-29 credits earned) | $\$ 3,500$ | $\$ 6,000$ | $\$ 9,500$ |
| 2nd year (30+ credits earned) | $\$ 4,500$ | $\$ 6,000$ | $\$ 10,500$ |

## Points to Remember:

- Exit Counseling is required before permanently leaving the campus (graduation or transfer to another college), dropping to less than halftime during a semester or taking a semester off. Visit StudentAid.gov to complete.
- Students have several repayment options to repay the loan. Payment schedules are set up with a servicer prior to repayment of the loan. Loans are made in the student's name only. It will be the students responsibility to repay their loan. It is recommended that all other avenues of assistance be explored before considering a Direct Loan


## Typical Monthly Payments

The Sample Repayment Amounts chart is a projection of the approximate amount of monthly installments over different periods of time required to amortize various levels of indebtedness.

| Sample Repayment Amounts |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | at 5.6\% |  | at 6.8\% |  | at 6.8\% |  |
| Total Borrowed | Monthly Payment | \# of Payment | Monthly Payment | \# of Payment | Monthly Payment | \# of Payment |
| \$2,500 | \$50.00 | 57 | \$50.00 | 58 | \$50.00 | 59 |
| \$5,000 | \$54.51 | 120 | \$55.51 | 120 | \$57.54 | 120 |
| \$7,500 | \$81.76 | 120 | \$83.26 | 120 | \$86.31 | 120 |
| \$10,000 | \$109.02 | 120 | \$111.02 | 120 | \$115.08 | 120 |

## Student Loans Exit Counseling

Requirement All students who have borrowed funds through the Federal Stafford Student Loan Program are required to complete Exit Counseling upon graduation, transfer or enrollment dropping below half-time. Exit Counseling may be accomplished online at StudentAid.gov. Students should contact their servicer if they are experiencing difficulties in repaying their loan. Students have many options available including deferring payments. Please note that a deferment of both principal and interest is available to students in Peace Corps service, Domestic Volunteer Service Act service or Community Service at a tax exempt organization.

## Parent Loan for Undergraduate Study (PLUS)

This is a loan to enable parents with good credit to borrow for their children who are enrolled in college on at least a halftime basis. Loans are at variable interest rates and could be for amounts up to the cost of education, minus any financial assistance for which the student is eligible.

## State Financial Aid Programs

Regulations are subject to change. Contact the Financial Aid Office for details.

## NJ Tuition Aid Grant

State grants are available to full-time students based on need. Grants range from $\$ 1,276$ to $\$ 3,206$ annually.

## NJ Part-time Tuition Aid Grant

This state program is for students who take between 6 and 11 credits. Awards range from $\$ 610$ to $\$ 2,130$ annually depending on course load. As with all state aid, a Free Application for Federal Student Aid must be filed by the state deadlines.

## Educational Opportunity Fund Grant

EOF grants are available to students from educationally and economically disadvantaged backgrounds who meet eligibility requirements. Award amounts vary depending on enrollment status, college costs and financial need. EOF grants are renewable annually based upon continued eligibility. Applicants must also contact the campus EOF director to apply for admission into the program. The college will determine the value of the grant.

## NJ STARS

NJ CLASS is a state loan program for students and their families who are either NJ residents or are an out-of-state resident attending a NJ college. Please reference the NJHESAA website at njgrants.org for up-to-date information and eligibility.

# New Jersey Scholarships and Grants 

State Aid Deadlines (N.J. Residents only)

- Received TAG in the prior academic year - April 15
- Did not receive TAG in the prior academic year - September 15


## Governor's Industry Vocations Scholarship (NJ-GIVS) for Women and Minorities.

This scholarship pays up to $\$ 2000$ per year or up to the cost of tuition in an eligible certificate or degree program, less any federal, state or institutional financial aid. Funding is limited and awards are made on a first-come, first-served basis. To receive an award all eligibility must be met.

## Law Enforcement Officer Memorial Scholarship (LEOMS)

This is a state grant for dependent children of New Jersey law enforcement officers killed in the line of duty. Must be enrolled full time in an undergraduate degree program. The award amount cannot exceed an amount equal to the recipients' annual cost of attendance that is not covered by any other scholarship, grant, benefit or assistance administered by HESAA.

## NJ Volunteer Firefighters and Rescue Squad Program

This program is to aid volunteer firefighters and rescue squad members, their spouses, and dependent children. The value of the assistance is $\$ 600$ annually, but may not exceed $\$ 2,400$ over a four year period. Confirmation and eligibility must be provided through municipal letter. The program is for tuition costs only and the student is responsible for fees and books.

## New Jersey World Trade Center Scholarship

This scholarship is for eligible dependent children and surviving spouses of New Jersey residents who were killed in the terrorist attacks on September 11, 2001 or later died from injury or exposure to the site. Students must be enrolled full-time and is limited to 8 years from the date of graduation or eight years from the date of the death of the spouse.

## Survivor Tuition Benefits (STB)

This program is for eligible children and surviving spouses of New Jersey firefighters, emergency service workers or law enforcement officers killed in the line of duty. Students must be enrolled at least half time and will cover the cost of tuition only.

Financial Aid Criteria
expenses, and supplies may be covered with any remaining assistance.
Aid Disbursement: Fall and spring semester aid will be disbursed once attendance is confirmed for all classes. Summer aid will be disbursed once attendance is confirmed for all classes. First-time, first-year student loan borrowers will have their loan disbursement delayed for 30 days. Students who have single semester loans will receive two disbursements. Aid generally is electronically transferred to the College from federal, state, and private aid programs and from both federal and private loan programs. Using the College computer system, aid is released to the Bursar's Office for application against account balances. Credit balances are sent to the student by check, mail or by direct deposit.

# Satisfactory Academic Progress for Financial Aid Recipients 

In compliance with Final Program Integrity Rules published October 29, 2010, Sussex has adopted a policy concerning the Satisfactory Academic Progress (SAP) requirements for financial aid recipients. Federal and state regulations impose limits on how long a student may continue to receive Federal and State aid in order to make up deficiencies in meeting SAP standards.

A review of satisfactory academic progress is completed at the end of each semester/payment period. Summer terms are considered a semester/payment period; therefore satisfactory academic progress will be evaluated at the end of the summer session as well if the student enrolls and attends summer session(s). The evaluation period will be based on attendance in all prior semester(s) and will include all classes attempted whether federal aid was received or not.

Each student who receives either federal or state assistance (including student/parent loans) must make satisfactory academic progress toward the attainment of his or her degree or certificate as a condition of receiving financial aid.

To be considered making satisfactory academic progress a student must have a 2.0 CGPA (Cumulative Grade Point Average), and successfully complete a certain percentage of their credits (see chart)*. Students must keep within a maximum time frame which would be limited to no more than $150 \%$ of the published length of the program for undergraduate study. Please note that remedial and repeated coursework are counted in the cumulative GPA. This is why the cumulative GPA on a student's transcript may not match the cumulative GPA derived from the financial aid calculation.

Credits Attempted
0-12
13-18
Completion Rate
50\%
60\%
67\%

## Remedial Coursework

Remedial coursework is included in both the SAP completion rate and in the GPA calculation. Students may receive financial aid for developmental credits up to a maximum of 30 credit hours. ESOL courses do not count in this 30 credit hour limitation.

## Repeated Coursework

If a student receives an " F " the first time he or she takes a course they may attempt the course again utilizing financial aid, in order to gain a passing grade. If a student has passed an attempted course with a " D " they make take the course utilizing financial aid once more to improve their "D" grade.

## Repeated Coursework and Enrollment Status

Repeated courses may include any repetition of the course in a student's enrollment status for a term as long as the student has never passed the course. If the student passes the course, Sussex may include one repetition after passing the course. Any second or subsequent repetition of the passed course may not be included in the student's enrollment status for purposes of the Title IV, HEA, programs.

## Transfer Credit

Sussex will count transfer credit hours that are accepted toward a student's educational program as both attempted and completed hours.

Students seeking second degrees and students with double majors are monitored like any other students under this policy. Students that change their major more than twice may affect their maximum timeframe. Coursework from a previous major will not count toward attempted credits.

If or when the student exceeds the maximum time frame allowed for their respective programs, students may appeal if they have mitigating circumstances. All transfer hours accepted by Sussex will be included when determining maximum timeframe eligibility.

## New Terminology

Financial Aid Warning is a status assigned to a student who fails to make satisfactory academic progress at a school that evaluates academic progress at the end of each payment period, and chooses to allow students who fail progress standards to continue to receive aid. This is for one semester.

Financial Aid Probation is a status assigned to a student who fails to make satisfactory academic progress and who has appealed and has had eligibility for aid reinstated. This is for one semester.

No Aid Status (Suspension) is a status assigned to a student who fails to make satisfactory academic progress after a semester of warning. The student may appeal this status. See appeals process below.

Academic Plan is a plan of action that will help the student achieve minimum satisfactory academic progress. The Academic Plan is the result of the appeals process.

## The Process

## Warning

Students not making satisfactory academic progress after their first semester will be placed on a Warning and notified accordingly. A Warning allows a student to continue to receive Title IV and State aid automatically. This Warning period lasts for only one semester.

If after the Warning period the student still does not meet SAP standards, the student loses financial aid eligibility but has the right to appeal. Sussex may choose to reinstate federal and state eligibility based on the appeal.

## The Appeals Process

The circumstances under which a student would be permitted to submit an appeal are: death of a relative, injury or illness of the student, or other special circumstances.

A student will be required to submit an appeal form along with a letter explaining why the student failed to make SAP, what has changed in the student's situation that would allow the student to demonstrate satisfactory academic progress at the next evaluation and should include any supporting documentation.

An appeal may be approved only if the school has determined that the student will be able to meet SAP standards after the subsequent semester/payment period.

## Academic Plan

Part of the successful appeals process will be the development and acceptance of an Academic Plan. The Academic Plan is set up to help the student meet the minimum standards for academic progress.

At the end of the semester of probation, the Financial Aid Office will determine if the student is meeting the minimum standards for satisfactory academic progress.

1. If the student is meeting the minimum standards for satisfactory academic progress the student will no longer be considered on a probation status for financial aid.
2. If the student is not meeting the minimum standards for satisfactory academic progress, the Financial Aid Office will determine if the student met the terms of his/her academic plan.
a. If the terms of the plan are met, the student will be eligible to continue on a probation status for financial aid.
b. If the terms of the plan are not met, the student will be ineligible for financial aid until the student is meeting the minimum standards of satisfactory academic progress on a self-pay basis.

## Probation

Once the appeal is granted and an academic plan is created, the student is then placed on Financial Aid Probation. A student on Financial Aid Probation may receive federal and state funds for one payment period. If after the one semester of Probation the student still does not meet SAP standards, the student will lose financial aid eligibility, however, if the terms of the academic plan are met, the student will be eligible to continue on a probation status for financial aid.

## Regaining Financial Aid Eligibility

- A student who has lost financial aid eligibility may regain eligibility after taking classes at his/her own expense (selfpay) and meeting minimum requirements of 2.0 GPA and a completion rate in accordance with the completion rate chart within the $150 \%$ time frame.
- It is the student's responsibility to notify the Financial Aid Office when these conditions have been met.
- All classes (including those taken at other institutions) will be taken into consideration for reinstatement purposes.
- Students who exhaust the $150 \%$ time frame may appeal if they have mitigating circumstances.


## How to Keep Financial Aid Eligibility

| What Happens | Your Financial Aid Status | What you need to do |
| :---: | :---: | :---: |
| If your GPA drops below a 2.0 | Warning - You may continue to receive <br> financial aid for one semester | Raise your GPA to a 2.0 or higher. |

## Completion Rate Worksheet:

|  | Enter your hours | Sample |  |  |  |
| :--- | :--- | :--- | :---: | :---: | :---: |
| Total Credit Hours Earned |  |  |  |  | 25 |
| divided by |  | $/$ |  |  |  |
| Total Credit Hours Attempted | $=$ | 35 |  |  |  |
| Equals |  |  |  |  |  |
| Completion Rate |  | $71.4 \%$ |  |  |  |

## Degree Programs

A student (i.e., one who is not taking developmental courses) must complete his or her associate degree program after attempting no more than $150 \%$ of the total hours required in the program.

All hours attempted including repeated course work are counted whether or not financial aid was received.
Federal Financial Aid Review is completed at the end of each semester.

## Federal Student Aid Return Policy

The Higher Education Act of 1998 has revised the way the College must manage the Return of Federal Aid Funds whenever the student stops attending all classes, officially withdraws from all classes, or is dismissed while classes are in progress. For courses that span an entire semester (Full Term Fall and Spring semester courses), federal funds may only be fully utilized after the student completes the first $60 \%$ of the term (in days), any withdrawals or stop-outs within the first $60 \%$ of the term will necessitate an award adjustment. Students who withdraw from courses delivered in modules (Early Finish, Delayed Start, Late Start, and all Summer sessions), must complete an equivalent portion of the modules in which they are enrolled. The exact calculation will depend upon the student's combination of modules. Contact the Financial Aid Office for more information when withdrawing from courses delivered in modules.

Should the student find that he or she cannot complete the term, he or she must immediately notify the Financial Aid Office PRIOR TO WITHDRAWAL. Failure to attend classes or to officially WITHDRAW IN WRITING will result in the student being billed for tuition and fees. The student's financial aid may be reduced or withdrawn and the student may jeopardize their eligibility for future assistance.

If it is necessary for Federal Aid to be returned, it will be accomplished in the following order:

1. Unsubsidized Stafford Loan
2. Subsidized Stafford Loan
3. Federal Plus Loan
4. Pell Grant
5. Supplemental Educational Opportunity Grant
6. Other Title IV Programs (Refunds are not required for the Federal Work Study Programs.) Note: If no formal letter of withdrawal has been filed, the College will use the last documented attendance date as the ending date of instruction.

## The following example is provided for clarification:

Example: You are a full-time, credit hour student, and, through circumstances beyond your control, you stop attending classes. (You must notify the Financial Aid Office of your withdrawal.) You attended classes for 70 days of a 125 calendar day semester. This means that you are entitled to use $56 \%$ of your Federal Aid to pay your bill ( $70 / 125=56 \%$ ). If you had received a Federal Pell Grant of $\$ 1500, \$ 840$ could be used to pay against your bill and $\$ 660$ would be the required return to the Federal Aid Program.

Institutional Charge Policy
Students who withdraw, drop out or are expelled from the College during either Fall or Spring semesters will have their tuition bill adjusted according to the following schedule:

1. After the first (1st) day of class, through to the end of the second (2nd ) week of class, $100 \%$ refund (effective Spring 1 Please check with the Bursar's Office to be sure of the date.) of tuition charged.
2. After third (3rd) week of class, no refund of tuition.
3. After the second (2nd) week of class, no refund of tuition.

Summer and winter terms have abbreviated refund periods. Please see the published Academic Calendar for actual refund dates.

## State funds will be returned to the appropriate programs in the following order:

1. NJ Tuition Aid Grant Program (TAG).
2. NJ Part-time Tuition Aid Grant Program.
3. NJ STARS Program.

After Federal and State aid program funds have been returned, refunds will be made to any off-campus scholarship/grant programs and/or Sussex County Community College programs. If a credit balance remains on account after this process has been completed, a pass-through of funds will be made to the student to cover non-billed educational expenses.

## Charges - Educational Costs

Direct Costs - Amounts that must be paid to the College. (See Tuition and Fees).

| COST OF ATTENDANCE |  |  |
| :--- | :---: | :---: |
| Dependent Students (based on 24 credits) |  |  |
|  | In County | Out of County |
| Tuition | $\$ 3,360$ | $\$ 5,040$ |
| Fees | $\$ 2,064$ | $\$ 2,064$ |
| Books | $\$ 1,481$ | $\$ 1,481$ |
| Room and Board | $\$ 4,155$ | $\$ 4,155$ |
| Transportation | $\$ 2,100$ | $\$ 2,520$ |
| Miscellaneous | $\$ 2,400$ | $\$ 2,400$ |
| Total | $\$ 15,560$ | $\$ 17,660$ |


| COST OF ATTENDANCE |  |  |
| :--- | :---: | :---: |
| Independent Students (based on 24 credits) |  |  |
|  | In County | Out of County |
| Tuition | $\$ 3,360$ | $\$ 5,040$ |
| Fees | $\$ 2,064$ | $\$ 2,064$ |
| Books | $\$ 1,481$ | $\$ 1,481$ |
| Room and Board | $\$ 5,342$ | $\$ 5,342$ |
| Transportation | $\$ 2,100$ | $\$ 2,520$ |
| Miscellaneous | $\$ 2,400$ | $\$ 2,400$ |
| Total | $\$ 16,747$ | $\$ 18,847$ |

Figures were developed for full-time students and show annual budgets for a nine month school year.
These in-state/in-county budgets are provided for your information. Your actual budget for school costs may vary. The budgets for out-of-county, out-of-state, and Pennsylvania students are significantly different. If you have questions about your cost of education, you're encouraged to contact the Financial Aid Office.

## Award Revisions

Financial aid awards may be adjusted due to changes in the students enrollment status, academic progress, governmental allocations, etc. If a change becomes necessary, he or she will be notified and a new award notice provided.

The student may request a review of his or her award by calling the Financial Aid Office to make an appointment. If the student feels that they have a unique situation that was not addressed or they just wish to talk, please be sure to call. Students are encouraged to contact the Financial Aid Office if they have any questions as to how their assistance affects their bill. (In exceptional circumstances, special payment arrangements may be made by contacting the Bursar's Office. All checks should be made payable to Sussex County Community College and not to any individual).

## Additional Financial Aid Information

Full details about federal and state assistance programs can be found at StudentAid.gov and Financial Aid Programs for NJ Students at www.njgrants.org.

Students are encouraged to refer to the Financial Aid portion of the website.
Sussex offers limited financial assistance through the generosity of outside donors. The process requires separate application to the Sussex Foundation. Essays and interviews are normally required. Awards are directed to students in specific academic areas and are issued to students with a strong Sussex achievement record. Award amounts vary. Interested students are urged to contact the Advising and Counseling Center for more information.

## General Education Requirements

All degree programs at Sussex require the student to complete a certain number of general education courses in addition to specific courses that comprise the student's major program of study. Among other things, general education courses provide college graduates with the knowledge and skills needed to communicate well, use technology, understand scientific developments and function effectively as members of an educated society.

In New Jersey, all community colleges require students to complete a variety of general education courses in the categories listed below. Each degree program at Sussex is carefully designed to include the appropriate number and type of general education courses and it is important for the student and the advisor to adhere closely to the prescribed curriculum so that all of the general education requirements are met by the time of graduation. Specific courses that can be used to meet general education requirements in each category are listed on the following pages. Questions about general education requirements should be directed to the student's academic advisor.

- Written and Oral Communication in English
- Mathematics
- Science
- Technological Competency or Information Literacy
- Social Science
- Humanities
- Historical Perspective
- Global and Cultural Awareness (Diversity)
- Liberal Arts Electives


## Foundation Courses

Sussex County Community College requires the following courses to be taken at key points in a student's two-year College experience:
Foundations for Success is a three-credit course designed specifically for incoming Sussex Freshmen. All students are required to take this course within their first or second semester. Foundations for Success is part of a comprehensive program that initiates students into the rigor of college academics and the responsibility of college student life. Instructors are trained to facilitate topics that have proven to be vital to entering college students. The course provides an introduction into the intellectual, social and emotional transition of going from high school to college, or from the workforce into college life.

This is a student-centered course covering numerous strategies to encourage students to become active and empowered learners and to make the most of their college experience. Students will obtain information about college life and develop strategies and techniques to enhance success in their academic, personal and professional lives. The course is infused with opportunities to understand, practice and implement critical thinking. Students will also gain practical information to help prepare to transfer to a four year university or enter the workforce directly. National research demonstrates that there is a positive correlation between participation in a first year seminar course and higher graduation rates, higher grade point averages and engagement in campus life. Topics covered are transitioning to college, careering, time management, college information/technology resources, financial management, wellness, academic planning, diversity, campus/community involvement, transferring to a four year college, etc.

The Capstone courses are designed specifically for sophomores with 45 credits or more who are approaching graduation. The Capstone program offers students the opportunity to work with an Sussex professor to prepare for transfer to a four year school or to enter the workforce and find a position in their chosen field. There are seven different, onecredit, Capstone courses for students to choose from, depending upon their declared major:

- College Capstone for Liberal Arts
- College Capstone for Business, Science and Technology
- College Capstone for Criminal Justice
- College Capstone for Film Study
- College Capstone for Computer Science and Information Systems
- College Capstone for Biological and Clinical Studies
- College Capstone for Math, Physical Science \& Engineering


## General Information

- History of Sussex County Community College
- Title IX and Section 504 Compliance
- Sussex County Board of County Commissioners
- Sussex County Community College Board of Trustees
- Administrators
- Deans
- Academic Department Chairpersons
- Academic Program Coordinators
- Lead Faculty
- Program Supervisors
- Counselors \& Advisors
- Foundation Board
- Accreditation
- Mission, Vision, and Goals
- College Core Values
- Fast Facts


## History of Sussex County Community College

Sussex County Community College was authorized as a College Commission by the New Jersey State Board of Higher Education in 1981, and we opened our doors in 1982. In 1988 Sussex achieved Candidacy for Accreditation status with the Middles States Association of Colleges and Schools. The College was founded as a Comprehensive College in 1992 and received full accreditation in 1993.

In 1989, College leaders had the foresight to purchase land and buildings that were originally the home of Don Bosco College. The 167-acre property was an educational institution with existing classrooms, office space, three ponds, and a campground. The campus has since become a

Since 1998, Sussex has grown beyond expectations in student numbers and academic and career programs, personnel, and buildings.

## Title IX and Section 504 Compliance

Sussex County Community College does not discriminate in admissions or access to, or treatment or employment on the basis of race, color, national origin, sex, disability, or age in its programs and activities. The following persons have been designated to handle inquiries/complaints regarding non-discrimination policies: Title IX: James Gaddy, Director of HR, 973-300-2306, jgaddy@sussex.edu, Student Center, Rm D313, Sussex Campus and Section 504: Pamela Cavanagh, ADA Coordinator/Student Support Advisor/Counselor, Administration Bldg, Rm B206 Sussex Campus, 973-300-2153, pcavanagh@sussex.edu.

# Sussex County Board of County Commissioners 

Anthony Fasano, Director
Chris Carney, County Commissioner
Dawn Fantasia, Deputy Director
Herbert Yardley, County Commissioner

## Sussex County Community College Board of Trustees

Dr. Tyler Morgus, Chair<br>Dr. Paul Crowley, Vice Chair<br>Kurt Gewecke, Secretary<br>E. Jane Brown, Treasurer<br>Dr. Gayle Carrick, Member<br>David Castner, Member<br>Dr. Thomas E. Digby, Member<br>Maryanne Fox, Member<br>James Hofmann, Member<br>John Santillo, Member<br>Candice Smith, Member<br>Iliana Mendoza Cobos, Student Alumna Representative

## Administrators

Jon Connolly, Ph.D., President
Kathleen Okay, Ed.D., Senior Vice President of Academic \& Student Affairs
Cory Homer, Ph.D., Vice President of Student Success and Institutional Effectiveness
Sherry Fitzgerald, M.F.A., Associate Vice President of Academic Affairs and Dean of Arts and Humanities
James Gaddy, M.S., Chief Operating and Human Resources Officer
Nancy Gallo, J.D., Dean of Professional Studies, Social Sciences, and STEM
John Kuntz, M.A., Dean of Student Affairs \& Director of Athletics
Jason Fruge, B.A., Dean of Technical Occupations

## Deans

Sherry Fitzgerald, M.F.A., Dean of Arts and Humanities
Jason Fruge, B.A., Dean of Technical Occupations
Nancy Gallo, J.D., Dean of Professional Studies, Social Sciences, and STEM
John Kuntz, M.A, Dean of Student Affairs and Director of Athletics

## Academic Department Chairpersons

# Academic Program Coordinators 

Mary DeHart, Ed.D., Math
Susan Discorfano-Catania, Cosmetology
Debra Gianuzzi, D.M.A., Music and Musical Theater
Lee Lezorisak, M.B.A., Legal Studies
Deborah Lanza, M.A., Foundations for Success
Naomi Miller, M.S.W., L.S.W., Co-Program Coordinator, Human Services
Gwendolyn Frederico-Malone, Co-Program Coordinator, Human Services
Jumana Hablawi, M.S., Sciences and Science Labs Coordinator
Salvatore Paolucci, M.B.A., Business, Accounting, Economics, and Supply Chain
Robert Reeber, M.S., Computer Information Systems
Leonard Sheehy, Ed.D., Robotics Program and Makerspace Coordinator
Joanne Taylor, Ed.D., Education, and Child Development Specialist
Vincent Vitale, TV, Radio \& Communications

## Lead Faculty

Melanie Arpaio, M.A., Psychology
Peter Schoch, M.S., Engineering/Physics
Leonard Sheehy, Ed.D., Chemistry

## Program Supervisors

Erin Collins, M.A., Agricultural Business and Horticulture Science
Jason Fruge, B.A., Automotive, Building Construction, Diesel Service, Machine Tool Technology, Optics Technology, and Welding Martin Kester, Culinary Arts, Food and Beverage Management, and Hotel \& Restaurant Mgmt.
Brian Lake, M.S., Optics Technology
Susan Melik, M.D., RMA, CCMA, Medical Assistant and Allied Health Programs
Nicholas Lionetti, M.S., CEP, CSCS, Exercise Science

## Counselors \& Advisors

Jamie Borger, M.S., Acting Director of Advising \& Student Success Pamela Cavanagh, M.Ed., Accessibilities Coordinator/Advisor Alyssa Hoekstra, M.A., LPC, ATR-BC, Advisor/Personal Counselor Robert Pohl, M.A, Academic Advisor

## Foundation Board

Stan Kula, Executive Director<br>Christine Trusio, Development Assistant<br>Roger Thomas, Chair<br>Ann Bain, Secretary<br>Jim Caristia, Treasurer<br>Dr. Jon Connolly, SCCC President<br>William Curcio, SCCC Board of Trustees Chair<br>Maryanne Fox, SCCC Board of Trustees Liaison<br>Dr. Howard Burrell, Member<br>John Carafello, Member

## Accreditation

Sussex County Community College is accredited by The Middle States Association of Colleges and Schools 3624 Market Street, Philadelphia, PA 19104 Phone: 215-662-5606 • www.msche.org

The Middle States Commission on Higher Education is an institutional accrediting agency recognized by the U.S. Secretary of Education and the Council for Higher Education Accreditation.

## Mission, Vision, and Goals

Mission: Sussex County Community College provides a dynamic college experience to a diverse community of students that supports the economic prosperity of the region through lifelong learning, and high-quality academic and occupational programs, in an accessible and supportive environment to ensure student success.

Vision: Sussex County Community College will be a leader in NJ Higher Education as a premier provider of 21st-century learning opportunities, professional training, and skills development to meet the needs of the people of our community in a globally competitive environment.

## College Core Values

Sussex County Community College is a student-centered and community-focused institution committed to:

- Student Centeredness

Putting students first.

- Academic Excellence

Ensuring a quality academic experience.

- Integrity

Acting with transparency and ethics in all that we do.

- Quality Workplace

An environment that attracts and maintains the highest quality faculty and staff.

- Innovation

Building on successes, investing in technology, and embracing change.

- Diversity

Creating an environment that cultivates civility and respect.

- Environmental and Fiscal Stewardship

Respecting our responsibility to the community.

## Fast Facts

Sussex County Community College is a welcoming and friendly place where students are our top priority. The College is known for academic excellence and a nurturing environment. Learning takes place in well-equipped classrooms, around a naturally beautiful campus, and throughout the community. Sussex offers many of the amenities and advantages of a large institution combined with the unparalleled benefits of a smaller college.

Sussex has become the college of choice for nearly 2,500 students from Sussex County, New Jersey, and several counties in Pennsylvania. Graduates consistently find employment or successfully transfer to other colleges and universities for further education.

Newton Campus: 167 Acres with 3 Ponds, 12 Buildings
Instructional Facilities: 38 Classrooms; 9 Health Sciences Classrooms/Labs; 14 Computer Labs; 5 Science Labs; 4 Art Studios; Dark Room; Graphics Lab; Performing Arts Center; Theater; Broadcasting Studio; Gymnasium; Business Learning Center Instructional Programs: 24 Associate Degree Programs with 46 Degree Options, 11 Professional Certificates, 1 Health Science Certificate, 16 Certificates of Achievement
and Community Education Training Certificates and Career Programs.
Course Delivery Systems: Courses are offered on the main campus, McGuire Technical Education Center, and at various locations throughout Sussex County. Courses can also be taken from home via online courses, ITV courses, or telecourses. Hybrid courses, combining online and classroom work, are also available.

Satellite Location: Vernon Township High School
Fall 2021 Student Profile: Total: 2,164
Full-time: 1,255 (58\%)
Male: 1,077 (49.8\%)
Part-time: 909 (42\%)
Female: 1,029 (47.4\%)
Not Reported: 58 (2.8\%)

## Placement Using Sat, Act or Accuplacer Scores

| PLACEMENT USING SAT, ACT OR ACCUPLACER SCORES <br> Based on placement testing results students will be eligible to register for Sussex courses as follows: |  |  |
| :---: | :---: | :---: |
| English \& Reading | Score | Initial Placement |
| SAT - Evidenced Based Reading and Writing ACT - English <br> Accuplacer-WritePlacer <br> OR <br> Accuplacer-WritePlacer <br> Accuplacer-Sentence Skills <br> Accuplacer-Reading Comprehension | 450 or higher 23 or higher 6 \& Above 5 \& Scores for: 88 or higher OR 83 or higher | College-Level Courses: <br> ENGL101 English Composition I, or any college-level course without an additional prerequisite |
| Accuplacer-WritePlacer Accuplacer-Sentence Skills \& Reading (SS\&R) | 4 or $5 \&$ Combined Scores in SS\& $R$ 119-169 | Critical Reading \& Writing II ENGL011 Reading/Writing |
| Accuplacer-WritePlacer \& Reading Accuplacer-Sentence Skills | $\begin{aligned} & 4 \& \text { below and } \\ & 117 \text { or below } \end{aligned}$ | Critical Reading \& Writing I ENGL009 Reading \& Writing I |
| Many Science, Business and Computer Science courses also require |  |  |
| Mathematics | Placement Score | Initial Placement |
| SAT - Mathematics <br> ACT - Math <br> Accuplacer-Elementary Algebra | 500 or higher 23 or higher 76 or higher | College Level Mathematics: MATH104 Contemporary Math OR MATH106 Concepts OR MATH210 Statistics |
| Accuplacer-Mathematics Accuplacer-Mathematics | $\begin{aligned} & 0-68 \\ & 69 \text { or higher } \end{aligned}$ | Developmental Mathematics: MATH010 Basic Mathematics MATH015 Introductory Algebra I OR MATH023 Basic Algebra |
| Elementary Algebra | $\left\lvert\, \begin{aligned} & 20-47 \\ & 48-75 \end{aligned}\right.$ | MATH015 Introductory Algebra I and MATH017 Algebra II <br> MATH023 Basic Algebra |
| College-Level Mathematics | $\begin{array}{\|l} \hline 0-49 \\ 50-68 \\ 69 \text { or higher } \\ \hline \end{array}$ | MATH040 Intermediate Algebra MATH110 Pre-Calculus I MATH113 Calculus I |
| ** In addition to a CLM score of 69 and above, students should have one semester of Trigonometry for MATH113 OR should take MATH112, Pre-calculus II before beginning MATH113. <br> Please Note: Testing criteria is subject to change. Please consult with a counselor for current information. |  |  |

## Registration

- Adding and Dropping Courses
- Course Delivery Methods
- Family Education Rights and Privacy Act (FERPA) Record
- Graduation
- Transcript and Transfer Information


## Adding and Dropping Courses

Courses may be added only through the first five days of the fall and spring semesters and dropped through the first ten days of the fall and spring semesters, or equivalent time for summer, short term, and winter term (see the Academic Calendar for the exact dates each semester). Students can add and drop courses through the student portal until the end of the $100 \%$ refund period. Students may complete an official Add/Drop form and submit this form to the Registrar's Office, email from their Sussex email account, or withdraw by mail or fax with a request bearing an original signature. The postmark on such written notification will be used to determine the percentage of the refund if any. dropped courses are removed from the transcript and thus do not count towards enrollment, financial aid, deferrals, health insurance, and athletic eligibility.

Add/Drop days are pro-rated for sessions less than a full fall or spring semester.
Students who neglect to follow official procedures and who stop attending classes will be assigned the grade of "F.N." at the end of the semester or term. To avoid unnecessary costs and penalties, students are advised to discuss all Add/Drop procedures with their advisor. Students may withdraw from a class during the published withdrawal period but withdrawal procedures must be strictly followed. No refunds are available past the posted refund policy deadline.

Students receiving financial aid must stop in the Financial Aid Office to determine if the drop/withdrawal will have any effect on aid.

## Withdrawal from Classes

A student planning to withdraw/drop from Sussex classes must do so in writing. Any student who does not withdraw/drop-in writing before the posted refund calendar dates (see Academic Calendar for the exact date each semester) will be liable for payment of full tuition and fees. Failure to attend class does not constitute an official withdrawal. Students may email from their Sussex email account or withdraw by mail or fax with a request bearing an original signature. The postmark on such written notification will be used to determine the percentage of refunds, if any. Full payment of tuition and fees and an "F.N." grade may result if written notification is not provided to the Registrar's Office.

Withdrawal Forms are available in the Advising \& Counseling Center and must be filed in the Registrar's Office.
For students utilizing financial aid (grants, loans, scholarships), it is strongly encouraged that you check with the Financial Aid Office to determine the effect on your financial aid status before making a withdrawal.

## No Shows (Administrative Withdrawal)


#### Abstract

Students who are "No Shows" (defined as not attending class throughout the first ten days of a semester, or equivalent for a shorter term, as indicated by the faculty on the tenth-day roster or equivalent roster), will be dropped from the class. This drop will be the same as a studentinitiated drop and will not appear on the student's transcript. The student will be notified via email.


A dropped class may affect the enrollment status of a student (i.e., dropping from full-time to part-time). A student who fails to notify the College of non-attendance will be charged a $\$ 50$ per course Administrative Withdrawal fee.

Reinstatement to a class from which a student has been dropped as a "No Show" will require the student to contact the faculty member for approval to be reinstated. The faculty member must email registrar@sussex.edu to acknowledge the student is attending the course.

Reinstatement requests must be emailed to the Registrar's Office registrar@sussex.edu by the date indicated on the "No Show" notification letter from the Registrar.

## Medical Appeal

Students who withdraw from all classes due to severe medical circumstances may qualify for a $50 \%$ tuition credit (fees not included) or a $50 \%$ cancellation of tuition debt (fees not included). Financial aid students should contact the Financial Aid Office to review the impact on their aid. Please go to the Registrar's Office (B217) for the most updated policy and procedures.

## Deadline for submission of medical documentation:

Fall semester: May $31 \quad$ Winter semester: May 31
Spring semester: August 31

## Summer semesters (all): December

 31- In-person Courses: Taught with an instructor and students in a classroom setting at a specified campus location.
- Hybrid Course: A course with both in-person instruction AND online instruction (students must log in to CANVAS on a computer for part of the course).
- Online Courses: Provides students with maximum flexibility with their weekly schedule. Proctored exams may be required, either inperson or remotely on camera using Honor Lock services. (Asynchronous).
- Remote Delivery Courses: A course offered at a specific day and time using technology and live instruction via CANVAS LMS using a computer. May require exams proctored on camera through Honor Lock services. Similar feel to an in-person class experience than online courses. (Synchronous).
- Remote Hybrid Courses: A course with live instruction (students must $\log$ in to CANVAS on a computer for part of the course, and then EITHER an entirely online instruction OR in-person instruction at a specified campus location.


## Graduation

## All students MUST apply for Graduation

Students anticipating graduation MUST file a graduation application (whether or not you are planning on participating in the commencement ceremony) available at the Registrar's Office or on sussex.edu/graduation. There is a $\$ 50$ Application. Beginning January 2022, there will be no fee.

There are three graduation dates per year, January, May, and August. Only one commencement ceremony is conducted and that is held in May. Students wishing to participate in the May ceremony must apply by March 1st.

## APPLICATION DEADLINES

- January graduates: Apply by December 1st
- May graduates: Apply by March 1st
- August graduates: Apply by July 1st

Students are strongly urged to file their applications early in the preceding semester. Students filing early will have a documented review of their credentials and any outstanding coursework to guide them through the registration process.

## Graduation Requirements:

- Students are subject to the academic requirements set forth in the catalog/check sheet in use during the year they entered the College. When a student declares or changes their program/ major the requirements of the program/major that are in effect at that time will apply, as set forth in the College Catalog.
- Students will be invited to the May commencement ceremony of the year they apply. Students who apply late may miss the opportunity to participate in the May commencement ceremony. Students participating in the May ceremony will become graduates upon successful completion of all program requirements.
- Degree candidates are required to satisfy all prerequisites courses.
- Students must complete all required course work with no less than a cumulative 2.0 average.
- Students must fulfill all graduation requirements, including the Foundations for Success and the Capstone Course for their program.
- Students should check with their advisors or the Advising \& Counseling Center to determine specific responsibilities.

Students with outstanding obligations to the College will not receive transcripts or a diploma until such obligations have been satisfied. Outstanding obligations may also prevent a student from registering for classes.

## Academic Distinction at Graduation

Honors are conferred upon a degree completion to students who have demonstrated outstanding work throughout their Sussex career.
The awards are based on the following scale:

| Highest Honors | $3.90-4.00$ grade point average |
| :--- | :--- |
| High Honors | $3.75-3.89$ grade point average |
| Honors | $3.50-3.74$ grade point average |

To be eligible upon degree completion, a student's academic record must show no repeated college credit courses, at least $50 \%$ of the degree requirements must be earned at Sussex and no grades below "C." This is notated on the transcript.

Certificate and Certificate of Achievement candidates do not qualify for honors at graduation.

Annually, Sussex County Community College informs students of the FERPA Act of 1974, as amended. This Act was designed to protect the privacy of educational records.

FERPA affords students certain rights with respect to their education records.

## These rights include:

1. The right to inspect and review the student's education records within 45 days of the day the College receives a request for access.

Students should submit to the Registrar written requests that identify the records they wish to inspect. The College official will make arrangements for access and notify the student of the time and place where the records may be inspected. If the records are not maintained by the Registrar, that official shall advise the student of the correct official to whom the request should be addressed.
2. The right to request the amendment of the student's education records that the student believes are inaccurate or misleading.

A student should submit a written request to the College official responsible for the record, clearly identify the part of the record they want to be changed, and specify why it is inaccurate or misleading. If the College decides not to amend the record as requested by the student, the College will notify the student of the decision and advise the student of his or her right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.
3. The right to consent to disclosures of personally identifiable information contained in the student's education records, except to the extent that FERPA authorizes disclosure without consent.

One exception, which permits disclosure without consent, is disclosure to school officials with legitimate educational interests. A school official is a person employed by the College in an administrative, supervisory, academic or research, or support staff position (including law enforcement unit personnel and health staff); a person or company with whom the College has contracted (such as an attorney, auditor, or collection agent); a person serving on the Board of Trustees; or a student serving on an official committee, such as a disciplinary or grievance committee, or assisting another school official in performing his or her tasks.

A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibility. Upon request, the College may disclose education records without consent to officials of another school in which a student seeks or intends to enroll.

Sussex has designated certain information in the education records of its students as directory information for the purposes of FERPA. Directory information will be released at the discretion of the College and without the consent of the student unless the student informs the Office of the Registrar in writing within the first ten class days that any or all such information about him or her is not to be made public without his or her written consent.

The following is considered directory information at Sussex: name, address, major, sports participation, height and weight of the sports team members, dates of attendance, full or part-time enrollment status and degrees, honors, and awards received. Information will be made available to the parents of a student only when written permission is received from the student.
4. The right to file a complaint with the U.S. Department of Education concerning alleged failures by Sussex County Community College to comply with the requirements of FERPA. The name and address of the Office that administers FERPA is:

> Family Policy Compliance Office
> U.S. Department of Education
> 400 Maryland Avenue, S.W. $\operatorname{Washington,~DC~20202-4605~}$

Copies of a more detailed policy statement may be obtained at the Registrar's Office.

## Transcript and Transfer Information

## Transcripts

A transcript is the official record of a student's academic performance. Students may request official transcripts to be sent to other institutions, for scholarships, and to employers. Students may also request an unofficial transcript for their personal use. Students enrolled may also access their records and print out an unofficial transcript through the password-protected student portal at my.sussex.edu.

Transcripts can be sent electronically from the website at sussex.edu/transcript and click on Request Your Transcript. You will be brought to the National Student Clearinghouse site to complete the request for a transcript. There is a $\$ 5.50$ fee for all transcript requests. If you do not want to request your transcript electronically, you can request a paper transcript to be mailed. The transcript request form is located on our website at sussex.edu/transcript. Transcripts cannot be faxed or emailed.

Normally, official transcripts are sent directly from the Registrar's Office to the other college. Sussex may provide, under special circumstances,
an official transcript in a sealed envelope marked "Official transcript issued in a sealed envelope. Void if the seal is broken," provided the name of the receiving institution is submitted with the request.

## Transfer Credit Procedure (Transferring to Sussex)

Students seeking transfer credit to Sussex should follow the procedure outlined below:

1. A student wishing to transfer credits to Sussex must submit an Application for Admission, have official transcripts from previous colleges sent directly to the Registrar's Office, and be registered for classes. Upon registration, an official evaluation will be done and a report will be sent to their Sussex student email.
2. Sussex will accept a maximum of $50 \%$ of the credits required for a degree (A.A., A.S. or A.F.A.) or certificate or up to 39 credits for an A.A.S. degree earned at other institutions, by experiences and/or by examination (CLEP, A.P., or Challenge) in order to complete requirements for a degree from SCCC. If science and computer courses are older than eight (8) years, students will be required to repeat them. (For the PCCC Nursing Program there is a five-year limit on science courses, from the date of the course completion.)
3. These credits will be entered in the Credits Earned column of the transcript and will not affect a student's quality point average.
4. Transfer credits earned at other institutions are entered on the transcripts only after a student has been accepted and matriculated in a curriculum.
5. A minimum grade of " C " or its equivalent is required for transfer credit to be applicable to a student's certificate or associate degree curriculum.
6. Special accredited courses and other training will be evaluated (i.e., Ponsi, banking, A.C.E., military) on an individual basis.
7. International students must have their foreign transcripts translated and evaluated into U.S. equivalents by a National Association of Credential Evaluation Services (NACES) member.

## Transferring from Sussex

At Sussex, we prepare students to transfer to the top colleges and universities in New Jersey and across the nation. As a result, more than $70 \%$ of Sussex graduates continue their education. Students who plan to transfer should work closely with the Transfer Counselor.

## Statewide Transfer Agreement

Students can seamlessly transfer their academic credits from a completed community college Associate in Arts (A.A.) or Associate in Science (A.S.) degree to a baccalaureate degree program at New Jersey's public four-year colleges and universities. The NJ Chapter 175 establishes a statewide transfer agreement that provides the seamless transfer of these academic credits. The law guarantees that the transfer-designed associate degrees (A.A. and A.S.) earned at any of the state's 18 community colleges "shall be fully transferable and credited as the first two years of a baccalaureate degree program at the four-year public institution of higher education in the State to which a student is admitted." The full statewide transfer agreement approved by the transfer legislation can be found on the N.J. Transfer website.

While the law does not cover New Jersey's private colleges and universities, many of those institutions have established policies that allow community college graduates to transfer with full junior standing for A.A. and A.S. degree holders from N.J. community colleges. The law does not provide any guarantees of admission and students must select an appropriate associate degree for their particular major. Students must also fulfill any prerequisite courses required for admission.
N.J. Transfer allows students to see how their community college credits will transfer to many public and private New Jersey four-year colleges and universities. Under the Student tab, choose Transcript Evaluation.

Students who plan to transfer to another institution should work closely with the Transfer Counselor to ensure that their courses and majors meet the standards of the Agreement.

## Transfer Articulation Agreements

[^4]
## Tuition

## Auditing Classes same as regular fees.

Sussex County, NJ and Pike County, PA residents 65 years and older are entitled to free tuition and fees for eligible college-level courses offered by Sussex. College lab fees are paid by the applicant at the time of registration for applicable classes. In lieu of a full waiver, Sussex requests a minimum $\$ 50$ donation per class toward "Student Scholarships".

## These conditions apply:

a. the class must be eligible for the senior citizen free tuition (enrollment excludes trade or field experience courses, as well as some Lab courses);
b. paid enrollment warrants the course being conducted;
c. there must be sufficient space available in the class; and
d. registration for the course must occur only during the final two business days before the start of the semester. Applicants who opt to register earlier are not eligible for free tuition.

Applicants may take the course for college credit or may choose to audit the course. Applicants must register in person during the specified registration time and present proof of eligibility.


[^0]:    ** Technical Studies credits may be earned for corporate, industrial, or military training programs after review by a faculty assessor of related

[^1]:    Credits: 3
    Numerical methods provide a way for the engineer to translate the language of mathematics and physics into information that may be used to make engineering decisions. Often, this translation is implemented so that calculations maybe done by computers. The types of problems

[^2]:    Credits: 3
    This course explains all aspects of domestic violence, sexual violence and abuse from a feminist perspective. Completion of this course may be considered as the volunteer and/or staff training required by Domestic Abuse \& Sexual Assault intervention Services D.A.S.I

[^3]:    Credits: 4
    This course is an upper level technical course designed to give learners advanced knowledge and practical experiences required to be employed in the machining field. Areas covered include the application of cutting tools, cutting fluids, types of cutting tool, precision measuring and inspection, basic metallurgy and surface grinding procedures. Advanced setup and machining operations are studied and practiced on lathes, mills, and grinders. The lab portion of the course is designed to allow students the opportunity to develop machining skills through practical experience and repeated performances to become more proficient in the machine tool trade. Lab Fee required.

[^4]:    Sussex has established Transfer Articulation Agreements with many private four-year colleges and some of the public colleges for specific programs of study. Those colleges include Cedar Crest College, Centenary College, Drew University, College of Saint Elizabeth, Fairleigh Dickinson University, East Stroudsburg University, Felician University, John Jay College of Criminal Justice, Montclair State University, Marywood University, New Jersey Institute of Technology, Ramapo College, Rutgers University-Newark, Suny Canton, Suny Cobleskill, and William Paterson University. For the academic programs that Sussex offers, see Transfer Agreements.

