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Classroom

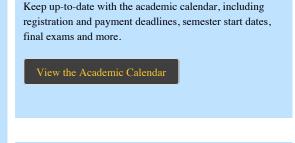
## College Catalog



## Degree and Certificate Programs

For each program, you will find information on entry requirements, required and elective courses, potential career and/or transfer opportunities, expected learning outcomes and graduation requirements. You can access the listing of academic programs here. Academic advisors and counselors are available to help you learn more about programs that are aligned with your interests, work skills and personal goals.

View Degree and Certificate Programs





## Course Offerings

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Proper course selection begins with knowing what a course is about and how it will fit into your academic program. You can find the course descriptions here.

**Explore Course Offerings** 



## Student Support Services

Academic Calendar

Take advantage of the College's many student support services, including Academic Advising, the Assessment Center, the Career Services Center, the Center on Disability, the Center for Male Engagement, the Child Development Center, Counseling, the Library, Learning Labs, the Student Academic Computer Center, the Veterans Resource Center and the Women's Outreach and Advocacy Center.

View Student Support Services



## Transfer Opportunities and Specialized

## Offerings

The College's specialized programs include programs for high school students, transfer opportunities, study abroad,



## Admissions Information

Here is everything you need to know about the admissions process...applicant categories, part-time and full-time enrollment status, residency requirements, advanced

degree programs at the Regional Centers and shared programs with area colleges.

View our Specialized Programs

placement, the placement test, prior learning assessment, veterans education benefits and more.

View the Admissions Process



## College Policies and Procedures

Learn about your responsibilities as a student, from registration procedures and attendance, grading and changing your student information to the College's policy on academic standards and progress, Commencement and more.

View the College's Policies and Procedures

Community College of Philadelphia's Catalog is published online annually. Information about courses and programs may be modified throughout the year. Students should always consult with an academic advisor or counselor to ensure that the most current information is available when making academic decisions.

## **Archived Catalogs**

 $\underline{College\ Catalog\ 2015\text{--}2016}\ |\ \underline{College\ Catalog\ 2014\text{--}2015}\ |\ \underline{College\ Catalog\ 2013\text{--}2014}\ |\ \underline{College\ Catal$ 

## Academic Calendar

## College Calendar 2017-2018

The academic year begins in September and ends in August of the following year. The major semesters, fall and spring, are 15 weeks in length. The fall semester begins in September, and the spring semester begins in January. Summer terms are held between May and August.

This calendar reflects major term dates and activities scheduled primarily at the Main Campus and the Regional Centers. <u>Term start and end dates</u>, <u>refund periods</u>, the <u>final day to drop course</u>(s) without penalty of "F" grade(s), and <u>deadlines to change "I" grades</u> vary for all terms.

The College is closed on Sundays and, additionally, on Fridays and Saturdays during the summer.

View the previous College Calendar from April through August 2017.

## College Calendar 2017-2018

September 2017	Event
September 4, Monday	Labor Day - College Closed
September 5, Tuesday	Fall 2017 (15-week) term begins

October 2017	Event
October 3, Tuesday	Fall 2017 (10-week) term begins
October 16, Monday	Priority web registration begins for eligible students for Spring 2018
October 23, Monday	Registration begins for continuing students for Spring 2018
October 31, Tuesday	Deadline to submit application for financial aid reinstatement for Spring 2018 semester  Deadline to submit all required financial aid documents and resolve all financial aid issues to hold Spring 2018 classes

November 2017	Event
November 13, Monday	Priority deadline to submit application for academic reinstatement for Spring 2018 semester
November 23-25, Thursday- Saturday	Thanksgiving Holiday — College closed

December 2017	Event
	Professional Development Day (Potential Emergency Closing make-up day)
December 5, Tuesday	Deadline for full payment of tuition and fees for all students registered by this date for Spring 2018 semester

December 6, Wednesday	Professional Development Day/Study Day (Potential Emergency Closing make-up day)
December 9, Saturday	Final day of classes for Fall 2017 semester
December 11-16, Monday-Saturday	Final examinations, Fall 2017 semester
December 15, Friday	Final day to resolve all outstanding financial aid issues for Fall 2017 semester
December 18, Monday	Deadline for faculty submission of grades for Fall 2017 (15-week and 10-week) terms
December 22, Friday	Winter Break — College closed at noon
December 23-30, Saturday-Saturday	Winter Break — College closed

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January 2018	Event
January 1, Monday	New Year's Day Holiday — College closed
January 5, Friday	Final deadline to submit application for academic reinstatement for Spring 2018 semester
January 15, Monday	Martin Luther King, Jr. Holiday — College closed
January 16, Tuesday	Spring 2018 (15-week) term begins

February 2018	Event
February 13, Tuesday	Spring 2018 (10-week) term begins

March 2018	Event
March 5-10, Monday-Saturday	Spring Break — College Closed
March 14, Wednesday	Deadline to submit application for financial aid reinstatement for Summer 2018  Deadline to submit all required financial aid documents and resolve all financial issues to hold Summer 2018 classes
March 19, Monday	Priority web registration begins for eligible students for Summer/Fall 2018
March 26, Monday	Registration begins for continuing students for Summer/Fall 2018

April 2018	Event
April 11, Wednesday	Deadline for full payment of tuition and fees for all students registered by this date for Early Summer 2018
April 17, Tuesday	Priority deadline for Fall 2018 for financial aid
April 23, Monday	Final day of classes for Spring 2018 semester

April 24-25, Tuesday-Wednesday	Professional Development Day (Potential Emergency Closing make-up day)
April 26, Thursday	Professional Development Day/Study Day (Potential Emergency Closing make-up day)
April 27-30, Friday-Monday	Final examinations, Spring 2018 semester

May 2018	Event
May 1-3, Tuesday-Thursday	Final examinations, Spring 2018 semester
May 1, Tuesday	2018-2019 PHEAA grant filing deadline for all renewal applicants
	Final day to resolve all outstanding financial aid issues for the Spring 2018 semester
May 5, Saturday	Commencement
May 6, Sunday	Deadline for faculty submission of grades for Spring 2018 (15-week and 10-week) terms
May 7, Monday	Summer four-day work week begins — College closed on Fridays
May 14, Monday	Early Summer 2018 7-week (term code 7A) and 14-week (term code 14A) terms begin
May 28, Monday	Memorial Day Holiday — College Closed

June 2018	Event
June 12, Tuesday	Deadline for full payment of tuition and fees for all students registered by this date for Late Summer 2018
June 26, Tuesday	Final day of classes for Early Summer 2018 7-week (term code 7A) term
June 27-28 , Wednesday-Thursday	Final examination days for Early Summer 2018 7-week (term code 7A) term
June 30, Saturday	Deadline for faculty submission of grades for Early Summer 2018 7-week (term code 7A) term

July 2018	Event
July 2-3, Monday-Tuesday	No classes for 14-week (term code 14A) term
July 3, Tuesday	Deadline to submit application for financial aid reinstatement for Fall 2018 semester  Deadline to submit all financial aid documents and resolve all financial aid issues to hold Fall 2018 classes  Priority deadline to submit application for academic reinstatement for Fall 2018 semester
July 4, Wednesday	Independence Day Holiday — College closed
July 5, Thursday	No classes for 14-week (term code 14A) term
July 10, Tuesday	Late Summer 2018 7-week (term code 7N) term begins

August 2018	Event
August 1, Wednesday	2018-2019 PHEAA grant filing deadline for all new applicants
August 2, Thursday	Final deadline to submit application for academic reinstatement for Fall 2018 semester
August 7, Tuesday	Deadline for full payment of tuition and fees for all students registered by this date for Fall 2018 semester
August 17, Friday	End of summer four-day work week — College closed
August 21, Tuesday	Final day of classes for Early Summer 2018 14-week (term code 14A) and Late Summer 2018 7-week (term code 7N) terms
August 22-23 , Wednesday-Thursday	Final examination days, Early Summer 2018 14-week (term code 14A) and Late Summer 2018 7-week (term code 7N) terms
August 24, Friday	Deadline to settle all outstanding financial aid matters for the current year (2017-2018); all aid will be canceled after this date
August 25, Saturday	Deadline for faculty submission of grades for Early Summer 2018 14-week (term code 14A) and Late Summer 2018 7-week (term code 7N) terms

## Academic Divisions

The curricula at Community College of Philadelphia are administered by one of three academic divisions:

- Business and Technology
- Liberal Studies
- Math, Science and Health Careers

These divisions provide clusters of programs with similar interests, requirements, content or orientation—some carrying their own professional or academic accreditation—and offer associate's degrees or certificates.

Learn more about the College's other divisions that support the College's mission through academic, credit and noncredit offerings, as well as student support services and resources:

- Division of Access and Community Engagement
- <u>Division of Educational Support Services</u>
- Division of Flexible Learning Options and Academic Technology
- <u>Division of Workforce Development and Economic Innovation</u>

## Division of Business and Technology

## Departments and Academic Programs

- Department of Business Administration
  - Accounting
  - Automotive Technology
  - o Business General
  - Culinary Arts
  - Hospitality Management
  - Technical Studies
- Department of Computer Technologies
  - Computer Information Systems IT
  - Computer Science
  - · Cyber Security
  - Network Technology Management and Administration
- Department of Marketing and Management

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## Division of Liberal Studies

## Departments and Academic Programs

- Department of Architecture, Design and Construction
  - Architecture
  - Building Science
  - Computer Assisted Design Technology
  - Construction Management
  - Facilities Management
  - Interior Design
- Department of Art
  - Art and Design
- Department of English
  - Communication Studies
  - English
  - Mass Media
  - Theater
- · Department of Foreign Languages
  - International Studies

- · Department of History, Philosophy and Religious Studies
  - Liberal Arts
  - Liberal Arts: Honors Option
  - Liberal Arts: Social/Behavioral Science
  - Religious Studies
- Department of Music
  - Music
  - · Sound Recording and Music Technology
- Department of Photographic Imaging
  - Digital Video Production
  - Photographic Imaging
- · Department of Psychology, Education and Human Services
  - ASL/English Interpreting
  - Behavioral Health/Human Services
  - Education
    - Early Childhood
    - Middle Level
    - Secondary, Math/Science Option
    - Secondary, Humanities/Social Studies Option
  - Psychology
- Department of Social Science
  - Digital Forensics
  - Fire Science
  - Justice
  - Paralegal Studies

## Center for International Understanding

The Center for International Understanding supports the College's mission to help students achieve an increased awareness and appreciation of a diverse world where all are interdependent. It encourages and supports the integration of international content into courses and curricula, as well as student and faculty experiential learning abroad. The Center also promotes dialogue, analysis and the exchange of ideas in the broader College community by bringing together faculty, staff and students with others who have rich international experience. The Center collaborates with businesses, nonprofit organizations and other educational institutions to create organizations and partnerships for community college students, faculty and staff. Reaching out to the College's students, as well as the wider public audience, the Center strives to create a truly informed and global citizenry. To learn more, visit us online.

## The Fox Rothschild Center for Law and Society

The Fox Rothschild Center for Law and Society provides a supportive, intellectual and practical framework to explore significant societal and law-related issues including citizenship, civics and re-entry. Through service learning and research, the Center will engage the College and larger community in its endeavors to foster a rich learning environment for student achievement; to sustain faculty development and enrichment; to facilitate interdisciplinary collaboration; to be a resource to professionals and other academic institutions; to stimulate innovation; and to develop strong connections throughout the wider community.

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## Division of Math, Science and Health Careers

## Departments and Academic Programs

- Department of Allied Health
  - Clinical Laboratory Technician
  - Dental Studies
  - Diagnostic Medical Imaging
  - Health Care Studies
  - Health Services Management
  - Respiratory Care Technology
- · Department of Biology
  - Biology
- Department of Chemistry
  - Chemistry
- Department of Foundational Mathematics
- Department of Mathematics
  - Mathematics
- Department of Nursing
  - Nursing
- Department of Physics
  - · Applied Science and Engineering Technology
  - Engineering Science

### Center for Science and Engineering Education

The Center for Science and Engineering Education supports the College's mission by enhancing programs of study in science and career technologies to provide a coherent foundation for college transfer, employment and lifelong learning. It also assists in preparing students to be informed citizens in regard to issues of public concern that are based on scientific advances and technological innovations.

The Center enhances opportunities for students to explore career options in a science-related field and promotes interdisciplinary collaboration to strengthen offerings in physical science, natural science and related technologies. The Center promotes a broader understanding of science and emerging technologies and their impact on society. Therefore, it seeks to increase student involvement in science and scientific research. The Center also provides professional development opportunities for faculty both in scientific content areas and in pedagogy through partnerships and synergistic new areas/fields of education and training, and explores current trends in science and technology education. For more information, please visit us online.

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#### Division of Access and Community Engagement

Community College of Philadelphia's Division of Access and Community Engagement (DACE) offers special programs and services to the adult literacy and developmental student population, the local high school student population, and many other community partners and residents in our city. Serving as one of the College's earliest points of access to higher education for the Philadelphia community, the work of DACE clearly focuses on community engagement, educational equity and student success, and strongly aligns with the mission and vision of the College.

### Adult Education Programs

- Adult Basic Education (ABE)
- English as a Second Language (ESL)
- High School Equivalency Test Preparation Classes (HSE)
- Keystone Education Yields Success (KEYS)
- Lifelong Learning Programs and Workshops

#### Programs for High School Students

- Advance at College Dual Enrollment
- Advanced College Experience (ACE)
- Gateway to College
- TRIO Upward Bound

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## Division of Educational Support Services

Community College of Philadelphia is committed to providing comprehensive academic support programs and services to all students. The College's Division of Educational Support Services provides students with a wide range of academic programs and support services designed to meet their specific needs. The division ensures opportunities for a successful learning experience and achievement of academic excellence.

#### Departments/Programs/Services

- Academic Advising
- Assessment Center
- Center on Disability
- Developmental Education Program
- Learning Labs
- Library
- Student Academic Computer Centers
- TRIO Student Support Services

#### Division of Flexible Learning Options and Academic Technology

The Division of Flexible Learning Options and Academic Technology's primary mission is to enhance education through technology and creative expansion of learning opportunities. It includes the department of <u>Academic Computing</u>, which provides assistance to faculty in the use of information technology; Multimedia Services, which provides multimedia technology support and service to the entire College community; <u>CCPTV</u>, the College's cable television station; <u>Online Learning</u>.

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#### Division of Workforce Development and Economic Innovation

The Division of Workforce Development and Economic Innovation (WEI) is the leading provider of workforce development solutions and corporate training in the region. The division is the link between the College's academic assets and the business community, providing a robust entrepreneurial culture that catalyzes small business development and entrepreneurship, helping to strengthen businesses while fostering strong relationships for our students and the college.

#### WEI is comprised of the following areas:

Corporate Solutions, the single point of contact for a comprehensive selection of educational programs and training services to businesses, governmental agencies and nonprofit

organizations. Corporate Solutions program delivery systems include: Corporate College, Contract Training, Continuing Professional Education, Center for Small Business Education Growth and Training, and the Workforce Testing Center. To learn more about Corporate Solutions' programs and services, contact us at 215-496-6158 or <a href="mailto:csinquiry@ccp.edu">csinquiry@ccp.edu</a>.

Goldman Sachs 10.000 Small Businesses is a program for small businesses that links learning to action. Through the program, participants will gain practical skills in topics such as negotiation, marketing and employee management that can immediately be put into action. In addition, participants will receive the tools and professional support to develop a strategic and customized growth plan that will take their business to the next level.

The <u>Career Services</u> Center offers comprehensive career services to all Community College of Philadelphia students and alumni. The center provides assistance in developing successful strategies to find employment through individual appointments and workshops on résumé and cover letter writing, interview preparation, job search strategies and career decision making and planning. Career Services works with employers to provide on-campus recruiting and interviewing, job fairs and <u>College Central</u> to connect CCP students to local employment opportunities. The center is located in C1-34 of the Center for Business and Industry. For more information, please call 215-496-6176.

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## **Admissions Information**

- Admissions Process
- Applicant Categories
  - New Student
  - Transfer Student
  - Readmit Student
  - International Student
  - Guest/Visiting Student
  - Currently Enrolled High School Student or Home School Student (Dual Enrollment Advance at College)
  - Senior Citizen
- Enrollment Status Part Time or Full Time
- Residency Requirement
- College Placement Test
  - Scheduling a Placement Test
- Advanced Placement
- Prior Learning Assessment
- Act 48 Continuing Professional Education for Certified Educators
- Veterans Education Benefits
  - Chapter 31 Vocational Rehabilitation

## **Admissions Process**

In order to enroll in classes at the College, you must first apply and receive your acceptance information. To apply, click here.

Applicants are eligible to apply to the College by meeting the following requirements:

- · A diploma from an accredited high school or
- A state equivalency diploma (GED®).

Applicants who are 18 years of age and older, and have not earned a high school diploma or state equivalency diploma (GED®), may be eligible for admission and may qualify for a Commonwealth Secondary School Diploma by means of the General Education Development (GED®) test. An applicant may also earn the Pennsylvania Commonwealth Diploma upon enrollment and completion of 30 college-level credits. Students in the latter category must request that a transcript of their academic record be sent to the Pennsylvania Department of Education. Applicants without a high school diploma (GED®) are not eligible for financial aid.

### **Placement Testing**

Placement levels – in writing, reading and math – are used to determine if students will be placed into college-level courses or if they first need to enroll in developmental classes or pre-college workshops. Placement can be determined in <u>various ways</u>. To learn more, review the admission process.

The College reserves the right to require applicants to take developmental classes or to limit the number of courses in which they may enroll based on placement test results.

#### **Select Program Admission**

There are certain programs of study that have additional entrance requirements. Applicants planning to enter one of these select programs of study must follow the prescribed steps for admission in each program. Applicants must first complete all course prerequisites, take applicable tests and/or submit requested materials as part of the admission process for select programs. As a result of the steps that must be completed before entry into a select program, an applicant will be placed into a non-select program of study at the time of acceptance to the College. The admission process for select programs is competitive, space may be limited and only qualified students will be admitted.

## Applicant Categories

Applicants who want to earn an associate's degree, academic certificate or proficiency certificate at the College are considered degree-seeking students. Certificates prepare students for a variety of opportunities, including workplace preparation. Academic certificates require two semesters of college-level English and one semester of college-level math. All coursework transfers seamlessly into the College's associate's degree programs.

Proficiency certificates are short-term, focused course offerings that are primarily developed to prepare students for employment. Students may also continue their education, since all credits earned through the proficiency certificates transfer seamlessly into an academic certificate or associate's degree program in a related field.

Applicants must choose a degree program, academic certificate or proficiency certificate with a requirement of 16 or more credits to be eligible for financial aid.

#### New Student

Applicants who have never attended a college or university (including Community College of Philadelphia), and who possess or are about to obtain a high school diploma or state equivalency diploma (GED®), should apply to the College as new students. Detailed instructions on getting started at the College are available by visiting our Getting Started page.

#### Transfer Student

Applicants who have attended another college or university with earned college credits should apply for admission as transfer students.

Applicants are responsible for having their prior earned college credits evaluated prior to course registration to avoid duplication. Transfer credits are granted for courses in which the applicant earned a grade of "C-" or better unless otherwise specified by the program requirements. View the <u>Transfer Student page</u> for more details.

#### Readmit Student

Applicants who have previously attended Community College of Philadelphia and have not taken credit-level courses in two or more years are eligible for admission as readmit students and must complete an admission application online to update their student records.

Applicants who only took noncredit courses at the College are not considered readmit students and should apply as new students following the New Student Process.

#### **International Student**

International students who are eligible to study in the United States are also eligible for admission to the College. Community College of Philadelphia is authorized to issue Form I-20 and other immigration documentation to qualified students who wish to study in the United States and earn a degree. All applicants must complete all admission requirements by July 1 for the fall semester and November 1 for the spring semester. International students holding an F-1, J-1 or any non-immigrant visa cannot be classified as legal residents of Philadelphia or Pennsylvania. Visit our International Student page for more information.

## Guest/Visiting Student

Guest/visiting students are those applicants who do not plan to earn a degree from Community College of Philadelphia, and:

- are attending another college and taking courses that will be transferred to their home institutions, or
- are only taking courses for personal or professional enrichment.

Guest/visiting students must prove that they have taken the required prerequisites to enroll for courses. A college transcript showing evidence of completed coursework is required to show proof of required prerequisites. A copy of a college diploma from a regionally accredited institution can also be used for courses requiring certain English and/or math requirements.

Upon completion of the admission application, applicants will receive an email with instructions to activate their <u>MyCCP</u> account and can take advantage of web registration for desired courses. Visit our <u>Guest Student page</u> for more details.

Guest/visiting students are not eligible to receive financial aid from Community College of Philadelphia. Students who are attending another college and taking courses that will be transferred to their home institutions may contact their home school's Office of Financial Aid to inquire about consortium agreements.

Students who are only taking courses for personal or professional enrichment and have more than 30 credits are encouraged to meet with a counselor and enroll in a degree program.

Students interested in transferring credits from Community College of Philadelphia back to their home school should get prior approval to ensure the courses they take will be accepted when transferred back to their home school.

## Currently Enrolled High School Student or Home School Student (Dual Enrollment — Advance at College)

Applicants who are enrolled as 11th or 12th grade students in high school, including home school students, may apply to enroll for classes at Community College of Philadelphia for the purpose of earning college credits prior to high school graduation. Eligible students must possess the academic skills, as evidenced by the College's placement test, needed to meet the challenges of college-level courses. For further information, visit our <u>Advance at College</u> page.

In extraordinary cases the College may grant admission to applicants who have completed at least the eighth grade, and demonstrate academic skill and maturity necessary for college work. Prior to acceptance, applicants must demonstrate an ability to benefit from instruction in a collegiate setting as evidenced by the College's placement test, submit a portfolio for appropriate subject areas and interview with the director of Admissions. Applicants must place at college-level on the placement test and are not allowed to take developmental courses. The goal of the interview with the director of Admissions is to discuss expectations of college faculty, coursework and awareness of mature content in subject areas. Applicants must be accompanied by a legal guardian or parent when attending the admissions interview.

#### Senior Citizen

Applicants who are at least 65 years old and residents of Philadelphia can register for one tuition-free credit course per semester on a space-available basis. An online admission application must be completed. Course registration will begin two weeks prior to the start of the semester. Noncredit courses are not included in this offer. A Senior Citizen Registration fee is charged for seniors who participate in this program. View <u>tuition and fee</u> information.

### Enrollment Status—Part-Time or Full-Time

For financial aid determination, enrollment verification and other reasons, students are classified based upon the number of credits for which they are enrolled in a semester.

- 12 credits or more full-time status
- 9-11 credits three-quarter status
- 6 8 credits half-time status
- 1 5 credits less than half-time status

A student who wants to enroll in 18 credits or more in a regular semester or more than 8 credits in a summer term must request the approval of the vice president for Academic and Student Success or designee.

## Residency Requirement

The College establishes its residency policy in accordance with the Pennsylvania Code, Title 22, Education Chapter 35.

Tuition rates at Community College of Philadelphia are determined by a student's domicile. Domicile is the place where one intends to and does, in fact, permanently reside.

## Commonwealth of PA Residency

To establish Commonwealth residency, one must demonstrate continuous residence in the Commonwealth for a period of twelve (12) months prior to the first day of one's first semester at Community College of Philadelphia.

## Philadelphia Residency

First preference for admission to the College, and particularly to select programs of high demand, is given to Philadelphia residents. To qualify as a legal resident of Philadelphia, an applicant must meet all of the following requirements:

- 1. Must be a citizen or a permanent resident alien of the United States or be admitted on an immigrant visa to the United States.
- 2. Must have resided in Pennsylvania for at least 12 months prior to the first day of one's first semester at Community College of Philadelphia.
- 3. Must have resided in Philadelphia for at least three months prior to the first day of one's first semester at Community College of Philadelphia.

The College will require at least two items of documentary evidence. Documentation that provides convincing evidence toward meeting the residency policy requirement include the following:

Important Note: Name and Philadelphia address must be present on all documents and all documents must be dated at least three months prior to the first day of one's first semester at the College.

- 1. Current apartment lease or mortgage from the permanent independent residence.
- 2. Copy of a city/state tax bill. Special attention shall be given to payment of Commonwealth taxes on income earned during periods of temporary absence from this Commonwealth.
- 3. Copies of bank statements, automobile registration, or other registered Philadelphia property dated at least three months prior to the first day of one's first semester at the College.
- 4. Current Pennsylvania driver's license or state ID.
- 5. High school transcript showing a Philadelphia home address.
- 6. Pay stubs with Philadelphia home address showing payment of Philadelphia wage taxes.

Cases shall be decided on the basis of documentation submitted, with qualitative rather than quantitative emphasis. The determination of residency in each case is one of the subjective intentions of the student to reside indefinitely in this Commonwealth and in Philadelphia.

#### **International Students**

International students holding an F-1 or J-1 visa cannot be classified as legal residents of Philadelphia or Pennsylvania.

## Tuition Rates for United States Veterans, United States Military and Civilian Personnel, and Their Dependents

United States Veterans

All eligible veterans of the United States Armed Forces and their spouses and dependents will receive the in-county, Philadelphia residency rate for tuition.

Active Military and Civilian Personnel assigned to active duty station or Department of Defense Facility in Pennsylvania

All active United States military personnel, including their spouses and dependents, who are assigned to an active duty station in Pennsylvania and reside in Pennsylvania will receive the in-county, Philadelphia residency rate for tuition. This provision remains in effect for each member, spouse or dependent while continuously enrolled at the College, even, if there is a subsequent change in the permanent duty station of the member to a location outside of Pennsylvania.

All active United States civilian personnel, including their spouses and dependents, who reside in Pennsylvania or who are employed or transferred to a United States Department of Defense facility in Pennsylvania and reside in Pennsylvania will receive the in-county, Philadelphia residency rate for tuition. This provision remains in effect for each member, spouse or dependent while continuously enrolled at the College, even, if there is a subsequent change in the assigned employment of the member to a location outside of Pennsylvania.

## All Active Military Personnel-Distance Learning

All active military personnel, including the spouses and dependents will receive the in-county, Philadelphia residency rate for tuition for distance (on-line) courses.

#### Eligibility and Verification

For veterans to be eligible, they must have served in the United States Armed Forces, including reserve component or National Guard, and must have been discharged or released from service under conditions other than dishonorable.

Veterans and active military and civilian personnel must verify their affiliation with the United States Armed Services. Spouses and dependents must verify the veteran, military or civilian member's status with the United States Armed Services and provide proof of dependent status.

## Change of Residency

Change of residency for tuition and mailing purposes is the sole responsibility of the student. Any changes made to residency after the last day of the term's refund period (15-week during fall/spring, 7-week during summer) will be reflected in the following semester. For refund dates see the Enrollment Guide or the College Catalog.

Students attending the College for the first time may challenge their permanent residency classification by completing and submitting a Residency Statement and Documentation form to the Office of Records and Registration prior to beginning classes.

Continuing students may challenge their permanent residency classification by completing and submitting a Residency Statement and Documentation <u>form</u> at any enrollment counter before the last day of the term's refund period (15-week during fall/spring, 7-week during summer).

## College Placement Requirement

Placement levels – in writing, reading and math – are used to determine if students will be placed into college-level courses or if they first need to enroll in developmental classes or pre-college workshops.

Placement is satisfied by one of the following ways:

- Providing evidence of earning a college degree or completion of college-level English or math with a grade of "C" or higher at an U.S. accredited college or university.
- Providing evidence of receiving a minimum SAT score of 560 in English Reading & Writing and 510 in mathematics, or a minimum ACT score of 21 in English and 17 in mathematics.
- Providing evidence of receiving a minimum IBT (internet based TOEFL) score of 77 overall and a 20 in writing within the last two years.
- Providing evidence of receiving a minimum IELTS score of 6.0 overall and a 6.0 in writing within the last two years.
- Taking a free placement test at the College's Main Campus or one of our Regional Centers.

Learn more about the placement test at www.ccp.edu/placement-tests. Students may schedule their placement test online through their MyCCP account.

Note: Students will need to take the English as a Second Language (ESL) version of the test if they have lived in the U.S. less than five years and English is not their first language. The College will schedule the ESL placement test and then notify students about their scheduled date and time to test.

All documents (transcripts and test scores) submitted for placement should be directed to:

Community College of Philadelphia 1700 Spring Garden Street Transfer Credit and Placement Office, MG-17 Philadelphia, PA 19130

or emailed to: traneval@ccp.edu

## STUDENTS MUST SATISFY THE PLACEMENT REQUIREMENT IF:

- They want (or are required) to enroll in an English or mathematics course.
- They want to enroll in more than one course (or 4 credits) at the Main Campus or a Regional Center.

The College's placement test scores are valid for two years. Students must be retested after a two-year period unless they have successfully satisfied the placement requirement as noted above. Admissions tests for select programs and placement tests for specific courses are also administered.

## Scheduling a Placement Test

If you need to request accommodations due to a documented disability, contact the Center on Disability before you schedule your placement tests. You can schedule and/or change your placement test through <u>MyCCP</u> after submitting your application for admission. Follow these steps to set up your user name, password and placement test:

- Go to MyCCP.
- Click on "How do I get a username and password?" (You will need your student ID and Social Security or portal access number [for non-U.S. citizens who do not have a Social Security number] to get started.)
- After logging in, go to Banner Self Service and click on "Student Services."
- Select the "Schedule Placement Test" option and follow the instructions.

If you cannot keep your test appointment, you may reschedule it through MyCCP or by calling the Admissions Information Center at 215-751-8010. You can find a complete

description of the placement test here.

#### Advanced Placement

Students entering the College may take waiver examinations in some courses. Success in such tests will permit students to enroll in more advanced courses. Students should contact the appropriate department head for further information.

## Prior Learning Assessment

Community College of Philadelphia helps students succeed by awarding college credit for their learning achieved outside the traditional college classroom. Credit is awarded for learning that matches a particular course in your program of study. Course credit based on prior learning is given at the discretion of the department offering the course. Not all departments offer these options.

#### Ways to Earn College Credit for Prior Learning

#### **Technical Studies Program**

The Applied Studies program is designed for students who seek a degree that recognizes work and experience as part of college learning. Refer to the <u>Technical Studies</u> page for more information.

#### **Credit By Exam**

Students may receive credit for some courses by taking a standardized exam, such as CLEP, or a departmental challenge exam. Learn more about the credit by exam options.

#### **Evaluation of Noncredit or Alternative Learning**

Professional training programs such as the police academy, military training, noncredit courses, and other career and technical programs may be eligible for college credit. Refer to <u>PLA for Veterans</u> or Evaluation of Noncredit Learning for more information. Students may also develop a portfolio for individual assessment of college-level learning for some courses. Prior authorization must be obtained from the academic department in which the course is taught <u>via College Credit Fast Track</u> in order to pursue this assessment.

### Act 48 - Continuing Professional Education for Certified Educators

The Commonwealth of Pennsylvania, on November 23, 1999, passed into law Act 48. This law addresses requirements for professional education planning and requires all certified educators (teachers, principals and superintendents), every five years, to earn six college credits, six continuing professional education credits, or 180 clock hours of continuing professional education, or any combination of collegiate studies, continuing professional education courses, or learning experiences equivalent to 180 hours.

Act 48 regulations recognize collegiate credits from accredited institutions of higher education as appropriate for professional education purposes. Community College of Philadelphia is considered an approved higher educational institution by the Department of Education for providing continuing professional education credits or hours.

Individuals requiring Act 48 certification should complete an Act 48 Certification Form, which may be obtained at Enrollment Central on the ground level of the Bonnell Building at the Main Campus or at any of the three Regional Centers.

#### Veterans Education Benefits

Veterans must be certified to receive VA benefits. To be certified, the Application for VA Benefits (VA Form 1990) must be completed and students must be registered for classes. Alternatively, students may file the veterans application (VONAPP) online at <a href="http://vabenefits.vba.va.gov/vonapp/">http://vabenefits.vba.va.gov/vonapp/</a>. Veterans should apply early each semester to allow the College and the Veterans Administration time to process benefits. To apply, submit your Community College of Philadelphia Veterans Benefits Registration form along with a Notice of Basic Eligibility, Certificate of Eligibility or form DD-214 to the School Certifying Official located on the Main Campus at Enrollment Central on the ground level of the Bonnell Building.

Veterans must also report any changes in registration by completing a Community College of Philadelphia Veterans Benefits Registration form and submitting it to the School Certifying Official in Enrollment Central on the ground level of the Bonnell Building. Changes include selecting additional courses, dropping a course, changing to a different course or withdrawing from school.

All students except those receiving benefits under Chapters 31, 33 and 35 must report attendance on a monthly basis to the VA. Attendance should be reported the last day of each month by calling 1-888-442-4551 or on the Web at <a href="https://www.gibill.va.gov">www.gibill.va.gov</a> and selecting "Verify Attendance."

## Chapter 31 - Vocational Rehabilitation

All Chapter 31 Veterans need to be certified for their program of study by the local Veterans Administration Office. The local VA office address is:

#### **Veterans Administration**

5000 Wissahickon Avenue Philadelphia, PA 19101 1-800-827-1000

For more information about veterans education benefits, see the <u>Veterans Education Benefits</u> section and the VA website at <u>www.gibill.va.gov</u>. You can also contact the Veterans Resource Center, located on the ground level of the Bonnell Building, Room BG-43, for more information and services to help you achieve your goals at the College. For more

To receive assistance completing the veteran's certification and veteran's scholarship forms, students may visit Enrollment Central, located on the ground level of the Bonnell Building or send an inquiry via email.

information, email Veterans Resource Center.

## College Costs

You will find the following College information on this page:

- Tuition and Fees
- Other Costs
- Making Payments
- Direct Deposit
- Fulfillment of Financial Obligations
- Refund Policy
- Tax Incentives
- Financial Aid
- Financial Aid Withdrawals, Refunds and Repayment Policy
- Alternative Funding Sources
- Veterans
- Scholarships and Awards

#### **Tuition and Fees**

The Board of Trustees sets tuition and fees and reserves the right to change them without notice. Tuition varies based on residency; Philadelphia residents pay \$159 per credit hour; other Pennsylvanians pay \$318 per credit hour plus a \$10 nonresident capital fee per credit; and non-Pennsylvanians pay \$477 per credit hour plus a \$20 nonresident capital fee per credit. Some courses have additional fees; check the individual course descriptions for this information.

Tuition and Fees for a Philadelphia Resident

Number of Credits	Tuition	Technology Fee	General College Fee	Cost
1	\$159	\$30	\$4	\$193
2	\$318	\$60	\$8	\$386
3	\$477	\$90	\$12	\$579

Sample Tuition and Fees for a Philadelphia Resident with a 13-credit load:

Course	Number of Credits	Tuition	Technology Fee	General College Fee	Additional Course Fee	Cost
ENGL 101	3	\$477	\$90	\$12		\$579
PSYC 101	3	\$477	\$90	\$12		\$579
MATH 118	3	\$477	\$90	\$12		\$579
BIOL 106	4	\$636	\$120	\$16	\$150	\$922
Total	13	\$2,067	\$390	\$52	\$150	\$2,659

## Tuition Deposit: \$50

An applicant accepted or readmitted for full-time status by the College may be required to remit a \$50 nonrefundable deposit within a specified timeframe for Allied Health curricula. The applicant's letter of acceptance will specify the date.

This deposit ensures the applicant a place at the College and will be credited to the initial semester's tuition charge. If the student fails to register for that semester, the tuition deposit will not be refunded but may be applied to subsequent registrations within that academic year only.

#### Fees

General College Fee: \$4 per Credit

To fund the cost of student publications, intramural and intercollegiate athletics, student clubs and organizations, and other special services and activities for students, there is a general College fee for credit courses.

#### Technology Fee: \$30 per credit

A fee of \$30 per credit is charged to defray the institutional operating and equipment costs associated with providing student access to technology in academic and student support services and in instructional programs.

#### Course Fees

Some courses offered by the College are subject to course fees. These include courses with laboratory costs, clinical instruction costs or additional instructional hours. The course fees range from \$85 to \$345 per course. The applicable course fee, if any, is shown at the end of the course descriptions in the <u>Course Descriptions section of the Catalog</u>.

#### Online Learning Course Fee: \$35

A fee of \$35 will be assessed for any section of a course that is offered as an online course. Students should consult course offerings for each semester to identify which courses are available in an online course delivery format.

#### New Student Processing Fee: \$60

Students registering for the first time to take credit courses will be charged a one-time new student processing fee. The fee will be included in the first semester bill. This fee is nonrefundable as of the first day of the semester.

#### Nonresident Capital Fee

\$10 per credit for Pennsylvania residents outside Philadelphia.

\$20 per credit for students who do not meet the State's residency requirement.

The College's capital costs are funded by the city and state. The capital fee is charged to students in circumstances where the student is a nonresident and therefore capital support from the city or state is not provided.

#### Late Registration Fee: \$30

A \$30 late registration fee will be charged to previously enrolled students who register after the payment deadline for credit courses during the fall and spring semesters.

#### Credit by Examination Fee: \$129

This fee is charged for each course in which a student has applied for credit on the basis of examination. The fee is based on the tuition rate for one credit hour, and is nonrefundable.

#### Prior Learning Assessment Fee: \$129

This fee is charged for each course in which a student has applied for credit on the basis of learning achieved outside the traditional college classroom. The fee is based on the tuition rate for one credit hour, and is nonrefundable.

#### Lost Identification Card Fee: \$10

A replacement fee of \$10 will be charged for each replacement of the College photo identification card.

#### Noncredit Student Identification Card Fee: \$10

Students enrolled only in noncredit courses may be issued a College Identification Card upon request and upon payment of a \$10 Photo Identification Card Fee.

#### Senior Citizen Registration Fee: \$153

This fee is charged to students who take advantage of the tuition-free course. This fee is nonrefundable as of the first day of the semester.

#### Academic Transcript Fee

Electronic transcripts can be requested through the National Student Clearinghouse (NSC) for \$3.75 (\$1.75 delivery and \$2.00 processing fees) for each transcript. Requests for printed transcripts can be made in person at the Main Campus or through the NSC. The fee for printed transcripts delivered by mail or for pickup by noon the next business day is \$10.00; orders made through the NSC will incur an additional \$2.00 processing charge. Express and international mail requests will incur additional US postal service charges.

#### Returned Check Fee: \$25

A penalty of \$25 will be assessed for all checks and electronic checks (e-checks) issued to the College but not paid on presentation to the bank. A replacement for the returned check must be presented in the form of cash, certified check or money order. The student will be given five business days to replace the payment. Students with two (2) or more returned items may be placed on a cash only basis with the College.

## Other Costs

Although the tuition for Philadelphia residents is relatively low, students should be aware of the need to plan ahead and anticipate all costs for the period of enrollment. The basic budget for one semester at the College should include, in addition to the appropriate tuition and fees, the following estimates\*:

- Books and Supplies \$1,200
- Transportation \$1,500
- Meals \$1,300

## Making Payments

<sup>\*</sup>Actual cost will vary by student and by program of study.

A Community College of Philadelphia bill will be emailed to each student prior to the beginning of each semester. If the bill is not received, it is the student's responsibility to obtain it from the Bursar's Office. The College does not mail billing statements.

The fastest way to pay your bill is online by logging into MyCCP. We accept e-check payments at no cost; enjoy the convenience of paying your bill online directly from your checking and/or savings account. Bank debit card holders can make payments with e-check by using their checking account and routing number.

We also accept all major credit and debit cards (American Express, Discover, MasterCard and VISA). Students will be assessed a convenience fee if paying by credit or debit card. Effective August 25, 2017 the convenience fee is 2.75% of your payment amount (4.25% for international students). To pay your bill online, log into MyCCP, click on the Student tab at the top of the page, click on the Financial Services channel and select "Pay My Bill".

Checks and money orders can be mailed. Please make your payments payable to Community College of Philadelphia, include your J# (student ID) on the memo line of your check or money order, and mail your payment to: Bursar's Office, Community College of Philadelphia, 1700 Spring Garden Street, Philadelphia, PA 19130. In-person payments are only accepted at the Main Campus Bursar's Office, Room BG-38. We accept cash (in person only), checks, money orders, credit and debit card payments (online and in person).

Checks or money orders that are returned to the College by the bank must be repaid within five business days, or the student will be administratively withdrawn from the College.

#### Payment Plan

The College offers a tuition payment plan to those students who have a balance due of \$561 or greater. The cost to enroll is a non-refundable \$35 fee and the first installment payment (additional payments may be required depending on when students enroll). The plan is available for fall, spring, and summer terms. To enroll in the plan log into MyCCP, click on the Student tab at the top of the page, click on the Financial Services channel and select "Enroll in a Payment Plan". Specific payment plan information can also be found on this page. For additional questions, please contact the Bursar's Office at 215-751-8130 or via email.

## Direct Deposit

As part of the College's efforts to provide students with a more efficient refund process, the College has implemented the student refund direct deposit option. This service provides students with the convenience of receiving a refund from financial aid and/or other sources of funds on their student account directly into their bank account. Go green and get refunds processed up to 70% faster than by paper check by signing up for direct deposit. To sign up, please log into MyCCP, click on the Student tab at the top of the page, click on the Financial Services channel and select the "Student Direct Deposit Enrollment Authorization" form.

## Fulfillment of Financial Obligations

If any student has not met his or her full financial obligations, the College reserves the right to withhold any of its services from the student until the obligations are met. These include, but are not restricted to, transcripts, library services, letters of recommendation, registration, counseling and additional services.

## Refund Policy

It is the student's responsibility to submit an official drop form or drop classes via the web, even in cases of non-attendance. Students who drop prior to the start of the term will not incur any charges other than fees that are considered nonrefundable. The first day of the term marks the beginning of the refund policy regardless of the first scheduled class day for any particular student. Students who drop during the equivalent first three weeks (first 20 percent) of the term will be charged 50 percent for tuition and applicable fees and will be financially responsible for the charges incurred. Students who drop classes during the equivalent fourth week and thereafter will be charged 100 percent of tuition and applicable fees and will be financially responsible for the charges incurred.

Students who receive financial aid are subject to federal refund policies and calculations as described in the provisions of the Higher Education Amendments of 1998. Recipients of grants and loans who fully withdraw or drop on or before the 60 percent point of the term will be required to return all or a portion of their financial aid proceeds to the College and/or the Federal Government. See the Financial Aid Withdrawals, Refunds and Repayment Policy section for more information.

#### Important:

To assist students with changes to their schedules, the College permits students to do an even exchange. An even exchange is both dropping and adding a course with the same number of credit hours within the same term (15A, 10A, 7A, 7B, etc.), and prior to the end of the refund period. Students who drop a course after a term starts and prior to the end of the refund period will be responsible for 50% of the tuition for the course that was dropped.

Students who drop a course after a term starts and prior to the end of the refund period and add a course in a different term will be responsible for 50% of the tuition for the course that was dropped and 100% of the tuition for the course that was added. For example, dropping a 15-week Biology 106 course and adding a 10-week Biology 106 course would result in a 50% tuition charge for the 15-week course and a 100% tuition charge for the 10-week course. Students with documented extenuating medical complications, or personal emergency or situation such as the death of a close relative, can use the Special Request Form for Student Financial Account Adjustment (available in the Electronic Forms section of MyCCP) to petition to receive the 50% tuition for the course that was dropped. Adding a course after the first course meeting requires signature(s) from the professor and/or department head as per registration policy.

Refund policies are in keeping with the regulations of the State Board of Education of the Commonwealth of Pennsylvania (Section 35.30).

#### Tax Incentives

Federal tax laws provide special benefits to help students and parents pay for college. For example, a tax credit allows you to subtract an amount from the taxes you owe:

Taxes owed	\$6,000	

Less tax credit	- <u>\$1.000</u>			
Taxes owed	\$5,000			
A tax <b>deduction</b> allows you to subtract an amount from the income on which you must pay taxes:				
Gross income	\$25,000			
Less tax deduction	- <u>\$1.000</u>			
Taxable income	\$24,000			

Below are brief summaries of the tax incentives most likely to benefit adult, nontraditional students. Not all students or parents will qualify for these tax credits. Be sure to obtain a complete explanation of these tax incentives and consult with your tax advisor before you make financial decisions or use them in filing your federal income taxes. The College issues annual 1098T statements for tax purposes by January 31 each year.

#### American Opportunity Tax Credit

The American Opportunity Tax Credit (AOTC) helps with the cost of higher education expenses such as tuition, certain fees and course materials for four years. The credit reduces the amount of tax you owe dollar for dollar by the amount of the AOTC for which you qualify, up to a maximum of \$2,500. If the amount of the AOTC is more than the tax you owe, up to 40 percent of the credit (a maximum amount of \$1,000), may be refunded to you.

#### Lifetime Learning Credit

The Lifetime Learning Credit is for qualified tuition and related expenses paid for eligible students enrolled in an eligible educational institution. This credit can help pay for undergraduate, graduate and professional degree courses--including courses to acquire or improve job skills. There is no limit on the number of years you can claim the credit. It is worth up to \$2,000 per tax return.

#### Student Loan Interest Deduction

The maximum interest deduction is \$2,500. The loans must have been used to pay qualified costs of attendance, including room and board.

#### Loan Forgiveness

For certain curricula, there are loan forgiveness programs available. Students need to research these programs carefully, as there are often strict criteria associated with loan forgiveness programs. For more information, visit <a href="www.studentloans.gov">www.studentloans.gov</a>.

## Financial Aid

Community College of Philadelphia participates in the following federal and state-funded programs: Federal Pell Grant, Federal Supplemental Educational Opportunity Grant, Federal Work-Study Program, Pennsylvania Higher Education Assistance Agency (PHEAA) State Grant, William D. Ford Direct Student Loans (Direct Loans), and Federal Parent Loan for Undergraduate Students (PLUS).

## Financial Aid Eligibility

Students must be enrolled for at least 6 credits to be eligible for loans and the PHEAA State Grant. Students may receive a Federal Pell Grant for fewer than 6 credits. In addition, to be eligible for financial aid, students must have earned either a high school diploma or GED®. To maintain financial aid eligibility, students must make academic progress as outlined in the College's <u>Policy on Academic Standards and Progress</u> (Academic Progress, Academic Probation, and Dropped for Poor Scholarship).

Read all the provisions of this policy carefully before registering for classes. If you have any questions, please contact the Counseling Center, Room BG-7, at 215-751-8169.

#### Applying for Financial Aid

Students applying for financial aid must do so for each academic year. Students should file the Free Application for Federal Student Aid (FAFSA) via the Web at <a href="www.fafsa.gov">www.fafsa.gov</a>. This application is used to apply for the Federal Pell Grant, the PHEAA State Grant and Federal Direct Loans. Use Community College of Philadelphia School Code 003249 when filing your FAFSA. In addition to completing the FAFSA, students applying for the Direct Loans must also complete a Master Promissory Note (MPN) and an entrance counseling session at <a href="www.studentloans.gov">www.studentloans.gov</a>.

Since the application process for all of the above grants and loans takes about four to eight weeks, students are advised to file early rather than merely by the deadlines that follow. Students needing assistance should e-mail the Office of Financial Aid.

Filing Deadlines for 2017-2018 Federal Pell Grant: All applicants – June 30, 2018

PHEAA State Grant:

 $Renewal\ applicants-May\ 1,2017$ 

New applicants - August 1, 2017

 $Federal\ Supplemental\ Educational\ Opportunity\ Grant\ and\ Federal\ Work-Study:$ 

All applicants - April 15, 2017

These deadlines are for applications that are complete. All required documentation must also be submitted to the Office of Financial Aid by the above-listed deadlines.

We cannot guarantee that there will be Work-Study funds available for students applying after these dates, but we will continue to review late applications until all funds have been awarded

#### William D. Ford Direct Student Loans (Direct Loans)

In addition to accepting the awarded loans online in <u>MyCCP</u> a student must complete a Master Promissory Note (MPN) and an entrance counseling session at <u>www.studentloans.gov</u>. This must be done at least four weeks before payment deadline.

#### PHEAA State Grant

Pennsylvania students who file their 2017-2018 Free Application for Federal Student Aid (FAFSA) by May 1, 2017, for renewals and August 1, 2017, for new students will be automatically considered for the PHEAA State Grant. Students must meet a number of eligibility requirements. For example, according to Pennsylvania State Grant regulations, a student must have no more than 50 percent of his or her total enrolled credits per semester in distance education courses to maintain Pennsylvania State Grant eligibility. For more information click here.

#### Summer Aid

Information concerning summer aid is available at the Office of Financial Aid in early spring.

Study abroad students who need loans should consider taking the loans during the spring semester.

For detailed information and applications, please contact the Office of Financial Aid.

#### Adjustments to Financial Aid

Attendance is required in all classes for which a student is registered. Students are responsible for dropping any courses they do not plan to attend. If a student never attends a class, the financial aid award will be adjusted to reflect only those classes the student attends. Financial aid for students attending more than one term within a semester (15A, 10A, 7A, 7B, etc.) may have their aid reduced if they drop classes that were included in their earlier disbursements. These adjustments may affect a student's current and future financial aid eligibility. Students may also have to repay any overpayments.

Furthermore, the federal regulations state that students may receive federal funds for the maximum of 30 semester credits of developmental classes, except for English as a Second Language courses. Therefore, if a student has attempted 30 credits of developmental coursework, the student will not be able to receive federal funds for additional developmental courses. Also note that once a student has earned a passing grade, financial aid can only be applied one more time for that class.

## Financial Aid Withdrawals, Refunds and Repayment Policy

Financial aid is awarded to a student under the assumption that the student will attend school for the entire period for which the assistance is awarded. When a student withdraws or merely stops attending, the student may no longer be eligible for the full amount of aid that the student was paid or scheduled to receive. Course withdrawals after the term begins will have a negative impact on students' academic progress standing and future financial aid eligibility. The Office of Financial Aid is required by federal statute to recalculate federal financial aid eligibility for students who withdraw, stop attending, drop out, are dismissed or take a leave of absence. Up through the 60 percent point in each payment period or period of enrollment, a pro-rata schedule is used to determine the amount of Title IV funds the student has earned at the time of withdrawal. After the 60 percent point in the payment period or period of enrollment, a student has earned 100 percent of the federal aid he or she was scheduled to receive during the period.

Unearned aid is returned in the following order:

- Unsubsidized Federal Direct Loans
- Subsidized Federal Direct Loans
- Federal Direct Parent (PLUS) Loans
- Federal Pell Grants for which a return of funds is required
- Federal Supplemental Educational Opportunity Grants for which a return of funds is required
- Other assistance under this Title for which a return of funds is required (e.g., LEAP)

Cautionary Note: Withdrawals may have a negative impact on students' academic progress standing and future aid eligibility.

## Alternative Funding Sources

Many business enterprises, labor union locals, churches and faith-based organizations, and community groups award scholarships for collegiate studies. Parents of prospective students are encouraged to ascertain from employers and union offices what benefits may be available for their dependents. Students who are employed are sometimes eligible for financial assistance by their employers.

For information on scholarships and awards presented by an employer, contact the employer's Human Resources Office.

## Veterans

Scholarships for Veterans, Spouses and Dependents

Post-9/11 GI Bill

Effective August 1, 2009, veterans may be eligible for new benefits under this bill if they served at least 90 aggregate days on active duty after September 10, 2001, and are still on active duty or were honorably discharged or released. Veterans may also be eligible if they were honorably discharged from active duty for a service-connected disability and served 30 continuous days after September 10, 2001. Basic benefits may include cost of tuition and fees, monthly housing allowance, and books and supplies. Since the new law contains many major differences from the current Montgomery GI Bill, veterans are advised to visit <a href="https://www.gibill.va.gov">www.gibill.va.gov</a> for additional information about the major changes contained in the

law.

Other programs and benefits are also available for veterans, spouses and dependents. Please visit the Veterans Resource Center located on the ground level of the Bonnell Building, Room BG-43; email; or visit the Veterans section on the College's website.

Community College of Philadelphia complies with all regulations established by the Veterans Administration for students enrolled under VA programs, as required by Title 38, United States Code, Section 3675. Men or women eligible for assistance under the GI Bill or other VA programs should apply directly to the nearest VA office.

## Scholarships and Awards

Community College of Philadelphia supports commitment to community college education through the development of a viable student scholarship and award program. Individuals, organizations and corporate donors are invited to establish awards or scholarships, in accordance with applicable College policies, for students enrolled at the College or for use by the College's students upon transfer to other colleges and universities.

The Community College of Philadelphia Foundation has established many student scholarship programs to recognize the accomplishments of our students and encourage lifelong learning for all who may benefit. These scholarship programs support students by providing financial assistance for tuition, books or other costs associated with attending college. There are also scholarships and awards available to high school students who will begin their studies at the College.

Currently, the College Foundation and the Office of Institutional Advancement administer more than 120 student scholarship and award programs. There are scholarships and awards available based on a student's program of study, academic achievement, community/volunteer service and leadership.

For a complete listing of the scholarships and awards for which Community College of Philadelphia students are eligible, click here.

For more information on Community College of Philadelphia scholarships and awards, please contact the Office of Institutional Advancement, Annex-7th Floor, or 215-751-8214.

## College Information

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- Vision
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- · History of the College
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#### Mission Statement

Community College of Philadelphia is an open admission, associate's degree-granting institution that provides access to higher education for all who may benefit. Programs of study in the liberal arts and sciences, career technologies and basic academic skills provide a coherent foundation for college transfer, employment and lifelong learning. The College serves Philadelphia by preparing students to be informed and concerned citizens, to be active participants in the cultural life of the city, and to be able to meet the changing needs of business, industry and the professions. To help address broad economic, cultural and political concerns in the city and beyond, the College draws together students from a wide range of ages and backgrounds, and seeks to provide the programs and support they need to achieve their goals.

Community College of Philadelphia seeks to create a caring environment that is intellectually and culturally dynamic and encourages all students to achieve:

- greater insight into their strengths, needs and aspirations, and greater appreciation of their own cultural background and experience;
- increased awareness and appreciation of a diverse world where all are interdependent;
- heightened curiosity and active interest in intellectual questions and social issues;
- improved ability to pursue paths of inquiry, to interpret and evaluate what is discovered, and to express reactions effectively;
- · self-fulfillment based on service to others, preparation for future work and study, and enjoyment of present challenges and accomplishments.

## Vision

To serve Philadelphia as a premier learning institution where student success exemplifies the strength of a diverse, urban community college.

#### Core Values

Integrity. The College places fairness and honesty at the center of all of its policies and operations. We uphold the highest ethical standards in striving for academic and professional integrity in all that we do. We strive to be both responsible and responsive in utilizing resources to meet student and community needs.

Academic Excellence. The College sets, expects and maintains high educational standards consistent with the needs of the students, region and changing workforce. Our faculty and staff are committed to providing high quality, innovative and flexible educational opportunities and services in an accessible student-centered environment.

*Diversity.* The College embraces and understands the importance of providing an education and environment that promote the uniqueness of students, faculty, staff and the communities that we serve. We affirm that diversity is crucial to a democratic society, as it enriches the educational experience and celebrates differences among individuals.

Commitment to Teaching and Learning. The College functions as a learning organization, continually adapting, improving and evaluating its services to promote lifelong intellectual and personal development. We believe that learning is rooted in both curiosity and inquiry, and is engendered by dedicated, creative and enthusiastic teaching, utilizing

appropriate and optimal modes of delivery. Technology supports and serves the learning process.

Communication. The College is committed to effective, open and proactive communication. We take responsibility to listen, speak and write clearly to inform others and foster collaboration by using and respecting a matrix of communication channels. Collaborative partnerships are strengthened when communication is ongoing and productive.

**Respect.** The College promotes respect, civility and courtesy in our day-to-day interactions with others. We seek to instill respect for and appreciation of members of the College community, our facilities, our environment, our community and the institution in which we work.

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## History of the College

The College was created on April 28, 1964, by legislation in Harrisburg and Philadelphia, following a decade of studies and surveys. More than 685,000 students have passed through the College's classrooms since the College opened its doors to its first class of 1,941 students in 1965. College surveys show that most of those men and women—in both academic transfer and vocationally-oriented programs—have remained in the greater Philadelphia area to earn their living.

The College moved to its newly constructed campus on Spring Garden Street between 16th and 18th streets in 1983. The more than \$70 million facility was developed around the former United States Mint Building, which was renovated for administrative offices, library and classrooms, and to which classrooms, laboratories and other facilities were added with the construction of two award-winning buildings.

In 1991, the College added two additional buildings—a state-of-the-art Athletics Center with basketball courts, Nautilus-type training machines, an aerobics room and classrooms, as well as a modern, three-story Student Life building with meeting facilities, an additional cafeteria and a Coffeehouse.

The Center for Business and Industry, located on the corner of 18th and Callowhill streets, opened in 2003. This high-tech facility offers wireless classrooms, a computer lab, smart podiums, videoconferencing capabilities, a career center and a testing center. Students can also enjoy lounge and study areas, as well as a cyber café. Many programs and courses at the Center focus on workforce development in order to enhance the region's workforce.

The College broke ground on another new building at the Main Campus, the Pavilion Building, in summer 2009. Opened in fall 2011, the ecofriendly building houses the Culinary Arts and Hospitality Management programs, complete with state-of-the-art cooking facilities. The College's new Welcome Center, bookstore and dining services are also located in the Pavilion Building.

Significant renovations to the Bonnell, West and Mint buildings were completed in spring 2014. Registration, financial aid and other student services have been relocated to Enrollment Central to better serve students. Renovations to science and technology labs and other updates have been made to improve student learning and provide access to the most up-to-date equipment found in several fields.

The College also has Regional Centers at 12901 Townsend Road in the Northeast, 4725 Chestnut Street in West Philadelphia and 1300 West Godfrey Avenue in Northwest Philadelphia. Each provides a service center with information, counseling, advising, testing and classroom space for Philadelphians for whom these locations are convenient.

A new building and renovations at the Northeast Regional Center, completed in 2009 and 2010, offers students lab space, a Learning Commons, a dedicated art room and music room, more student space and expanded parking. The ecofriendly new building and the modifications to the existing building will save energy costs while offering students more courses in more subjects. Renovations have also taken place at the Northwest and West Regional Centers in order to better serve student needs.

## Edward A. Anderson Welcome Center

The Welcome Center staff assist students in applying to the College and provide prospective students and their families with a wide range of information about the College. In addition, students can speak to staff about academic programs, attend an information session, tour the campus and learn about next steps in the enrollment process.

To find out more about opportunities to visit the College, and for Welcome Center hours, please click here.

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## Online Learning

Online Learning enables students to extend their educational opportunities in a flexible instructional setting. Online courses, which follow a regular schedule of academic activities and assignments, are delivered via the Internet. Many are completely online, but some require a few meetings on campus. For a complete list of online learning courses, degree programs, meeting schedules, instructors and more, please visit the Online Learning website.

## Noncredit Offerings

For students who seek educational experiences that do not carry college credits, the College offers a variety of special noncredit offerings through Corporate Solutions and the Division of Access and Community Engagement (DACE). They are offered at the Main Campus, the Regional Centers and many off-campus sites during each academic cycle, and

are reviewed and updated regularly in response to community needs and interests.

For more information on workforce and professional development, please visit Corporate Solutions online, call 215-496-6158, or e-mail csinquiry@ccp.edu.

For more information on courses for personal enrichment, please visit the Division of Access and Community Engagement online or call 215-751-8381.

#### Semesters

The College offers classes during fall and spring semesters and during the summer as well as in other formats, including shorter terms and accelerated programs. For more information about course offerings, please visit the College's Course Finder site.

#### Locations

## Main Campus

Community College of Philadelphia's Main Campus occupies 14 acres just north of center city Philadelphia. The most prominent building is the turn-of-the-century former U.S. Mint Building, which remains a historic building and landmark. Two large, modern buildings containing classrooms, laboratories, meeting facilities, a cafeteria, library, bookstore, and faculty and administrative offices were designed to complement and abut the Mint on the west and south sides. The Winnet Student Life Building houses a wide range of activity spaces for students, as well as classrooms and student support services. The 97,000-square-foot Center for Business and Industry contains conference rooms, student lounge areas, office space and classrooms in order to serve students in technology-related paths and offer programs and specialized training to area businesses. The College's Athletics Center attracts many fitness-conscious students, faculty and staff. A 635-car parking garage provides secure and sheltered parking for students, faculty, administrators and guests. The campus is well served by SEPTA city division lines.

#### Hours of Operation

While classes are in session during the spring and fall, the College is open from 7 a.m. to 10 p.m., Monday through Thursday, 7 a.m. to 6 p.m. on Friday and 7:00 a.m. to 5:00 p.m. on Saturday. During the summer (mid-May to mid-August), the College is open from 7 a.m. to 10 p.m., Monday through Thursday, and closed Friday through Sunday.

#### Regional Centers

To make its programs accessible to residents throughout the city, the College employs a network of three Regional Centers which provide classroom space for both credit and noncredit course offerings. A detailed overview of College locations can be found <a href="here">here</a>.

The Northeast Regional Center located at 12901 Townsend Road, the Northwest Regional Center at 1300 West Godfrey Avenue and the West Regional Center at 4725 Chestnut Street all offer on-site placement testing, registration, academic and personal counseling and tutorial services. All three Regional Centers feature a modern library and biology labs in addition to well-equipped classrooms and computer laboratories. The Northeast and Northwest Regional Centers also house a bookstore and cafeteria. Free parking is available. All the sites are accessible by public transportation.

For more information about any of the Regional Centers or their programs, please call the Northeast Regional Center at 215-972-NERC (6372), the Northwest Regional Center at 215-751-8773 or the West Regional Center at 267-299-5850.

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## Open Houses and Information Tours

Learn about the College's academic and student support programs, student life, and financial aid opportunities by visiting our Main Campus or Regional Centers. Open Houses are held throughout the year, and you can RSVP online. Information tours are offered weekly.

In addition, visitors to the College are welcome. Requests for information may be made at the security desk in the lobby of each building. Visitors wishing to meet specific members of the faculty or administration are advised to make appointments in advance by calling the departmental office. Group visits may be arranged through the Office of Admissions by calling 215-751-8010.

## Minors

The presence of minors on campus, other than Community College of Philadelphia students, is strongly discouraged because of important safety and liability issues. To ensure the safety of children, those under the age of 18 must not be left unattended on College property.

To prevent disruption of the learning process, children are not permitted in classrooms or laboratories when classes are in session. However, with regard to classrooms (but not laboratories), faculty members instructing a class may make exceptions in individual cases, provided that the learning process is not disrupted.

Under no circumstances are minors other than Community College of Philadelphia students allowed in the Athletics Center, instructional laboratories, laboratory prep areas, library and/or learning commons, student academic computer centers, learning laboratories, or administrative service areas, such as duplicating, mail room and craft shops. This policy does not preclude children's participation in events sanctioned by the College or the involvement of children in educational activities specific to a curriculum.

The College assumes no liability for any injury incurred by minors who are not registered Community College of Philadelphia students while they are on College property.

## Controlled Substances

College policy prohibits the illegal possession, use, or sale of drugs or other controlled substances on College property. Where appropriate or necessary, the College will fully cooperate with law enforcement agencies. In addition, alcoholic beverages are not to be sold, served, used or possessed in any of the facilities of the College.

## **Smoke-Free Buildings Policy**

Community College of Philadelphia is concerned about the health and comfort of its students, faculty members, administrators, staff and visitors. Smoking, including the use of nicotine-delivery systems, is, without exception, prohibited in every College building or facility. This includes all offices and any previously designated smoking areas inside any campus building.

Anyone who wishes to smoke must do so outside of College buildings and facilities. Smoking is prohibited within 25 feet of any entrance, exit or loading dock, or as posted otherwise. Smoking is also prohibited on adjacent stairways, ramps or landings leading to any entrance, exit or loading dock.

## Selling and Soliciting

The College is a publicly funded institution. However, College buildings and facilities are provided for use exclusively by students, faculty, staff and the administration, and only for the educational purposes of the College. No individual or company may solicit or sell on campus for personal gain.

Selling or soliciting for charitable, political, social, religious or other causes by nonstudents is prohibited on College property. Distribution of literature (handbills, tracts, leaflets, etc.) by outside agents for external agencies is also prohibited on College property. Selling, distributing leaflets or soliciting by College students is regulated by College policy administered through the Office of Student Life.

## Crime Act

Information regarding the Crime Act (commonly referred to as the Clery Act) is available through the Department of Safety and Security located in Room MG-12 or at the College's website under Consumer Information.

## Inclusive Language

Throughout this website, every effort has been made to use inclusive language which does not discriminate with regard to gender. Any remaining references to the male gender shall be intended to include, wherever applicable, the female gender as well.

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## College Policies and Procedures

## Student Responsibility

All students are expected to understand all regulations in the College Catalog that may affect their academic progress, financial obligations, relationships with College authorities, transferability of credits for courses completed, acceptance of credits for graduation and eligibility to graduate. To this end, it is their responsibility to become familiar with the information below as well as in their <a href="Student Handbook">Student Handbook</a>.

Students still in doubt about the meaning of any College regulation should seek advice from their academic advisor, a counselor or an appropriate officer of the College.

## Academic and Time Amnesty

• Policy on Academic and Time Amnesty

#### Graduation

- Graduation and Commencement
- Issuance of Diplomas
- Graduation Honors

## Policy on Academic Standards and Progress

• Policy on Academic Standards and Progress

## Registration and Enrollment

- Registration Procedures
- Course Scheduling Preference for Veteran Students
- Attendance
- Withdrawal
- Student Load
- Grading System
- Reporting Grades
- Semester Honors
- Class Status
- Auditing
- Change of Student Information
- Change of Residency
- Change of Curriculum
- Formation of Sections and Cancellation of Courses

## Student Rights and Responsibilities

- Student Appeals Procedures
- Student Code of Conduct
- Student Identification Card
- Academic Dishonesty
- Judicial Affairs
- Right to Know Law
- Privacy of Student Records Family Educational Rights and Privacy Act (FERPA)
- Photo/Video Release Agreement

## **Transfer of Credits**

- Transfer Credits
- Policy on Transfer Credit
- Foreign Educational Credentials

## Degree and Certificate Programs

Community College of Philadelphia offers academic programs that lead to the following associate's degree and certificate programs. These programs all develop the broad competencies associated with 21st century skills.

Each academic program in the Catalog is described briefly and includes a grid of the requirements for graduation. This information will help guide you in selecting the courses you need for graduation in a sequence that will help you move through consecutively more challenging information.

Programs are listed in the recommended sequence for full-time students typically taking at least 15 credits per semester. Many students at the College spread their academic work across several years, attending part time rather than full time.

Some College-wide general education requirements are automatically fulfilled when students complete a required course within a program; this is indicated in the far right column on the program page. Other general education requirements are not automatically fulfilled, and students must choose an elective that meets the specified requirement. These requirements are listed beneath the grid under the heading General Education Requirements.

Regular consultation with an academic advisor or counselor is important, whether a student is planning to enter the employment market directly or continue on in higher education.

## Degree Programs

#### Associate in Arts (A.A.)

A degree for those who plan to transfer to bachelor's degree-granting institutions.

The College offers the following A.A. degree programs:

- Architecture\*
- Art and Design\*
- Business General
- Communication Studies
- Education Early Childhood (Birth to 4th Grade)
- Education Middle Level (4th to 8th Grade)
- Education Secondary Humanities/Social Studies Option
- Education Secondary Math/Science Option
- English
- Health Care Studies
- Health Services Management \*
- Interior Design\*
- International Studies
- Liberal Arts
- Liberal Arts Honors Option\*
- Liberal Arts Social/Behavioral Science
- Mass Media
- Music Performance\*
- Psychology
- Religious Studies
- Theater

## Associate in Science (A.S.)

A degree for those who plan to transfer to bachelor's degree-granting institutions.

The College offers the following A.S. degree programs:

- Biology\*
- Chemistry\*
- Computer Science\*
- Engineering Science\*
- Mathematics\*

## Associate in Applied Science (A.A.S.)

A degree that provides students career-specific skills leading directly to employment. Students with this degree may also transfer to bachelor's degree-granting institutions.

The College offers the following A.A.S. degree programs:

- Accounting
- American Sign Language/English Interpreting (INT)\*
- Applied Science and Engineering Technology
- Automotive Technology
- Behavioral Health/Human Services
- Building Science
- Computer Information Systems Information Technology
- Construction Management
- Culinary Arts
- Cybersecurity
- Dental Hygiene\*
- Diagnostic Medical Imaging\*
- Digital Forensics
- Digital Video Production
- Facility Management Construction Option
- Facility Management Design Option
- Fire Science
- Hospitality Management
- Justice
- Medical Laboratory Technician\*
- Network Technology Management and Administration
- Nursing\*
- Paralegal Studies\*
- Photographic Imaging
- Respiratory Care Technology\*
- Sound Recording and Music Technology
- <u>Technical Studies</u>\*

## Certificate Programs

## **Academic Certificates**

Academic certificates prepare students for a variety of opportunities, including workplace preparation. They require two semesters of college-level English and one semester of College-level math. All coursework transfers seamlessly into the College's associate's degree programs.

The College offers the following academic certificates:

- Creative Writing Academic Certificate
- Energy Conservation Academic Certificate
- Human Services Academic Certificate
- Recovery and Transformation Academic Certificate

## **Proficiency Certificates**

Proficiency certificates are short-term, focused course offerings that are primarily developed to prepare students for employment. Students may also continue their education, since all credits received through the proficiency certificates transfer seamlessly into an academic certificate or associate's degree program in a related field. Students may be eligible for financial aid for proficiency certificates consisting of 16 or more credits.

The College offers the following proficiency certificates:

- Accounting Paraprofessional Proficiency Certificate
- Acting Proficiency Certificate
- Architectural Visualization Proficiency Certificate
- Automotive Service I Proficiency Certificate
- <u>Automotive Service II Proficiency Certificate</u>
- Biomedical Equipment Technology I Proficiency Certificate
- Biomedical Equipment Technology II Proficiency Certificate
- Clinical Assistant Proficiency Certificate
- Computer Programming and Software Development Proficiency Certificate

<sup>\*</sup>Select program: please refer to the curriculum description for program entrance requirements.

## Culinary Arts I Proficiency Certificate

- <u>Culinary Arts II Proficiency Certificate</u>
- Cybersecurity Proficiency Certificates I and II
- <u>Digital Imaging Proficiency Certificate</u>
- <u>Digital Video Production Proficiency Certificate</u>
- Early Childhood Education Proficiency Certificate
- Electronic Discovery Proficiency Certificate
- Entrepreneurship Proficiency Certificate
- Geographic Information Systems Proficiency Certificate
- Medical Insurance Billing Proficiency Certificate
- <u>Network and Systems Administration Proficiency Certificate</u>
- Ophthalmic Technician Proficiency Certificate
- Paralegal Studies Proficiency Certificate
- Patient Service Representative Proficiency Certificate
- Process Technology I Proficiency Certificate
- Recovery and Transformation Proficiency Certificate
- Social and Human Service Assistant Proficiency Certificate
- <u>Technical Theater Proficiency Certificate</u>

## Degree Requirements

The College is dedicated to providing all graduates of its associate's degree programs a quality educational experience. To ensure that students have educational experiences considered essential regardless of program, all degree students must complete the College's general education requirements.

The general education requirements are nested under seven core competencies that the institution considers essential to being an educated person in the 21st century: Critical Thinking; Effective Communication; Information Literacy; Quantitative Reasoning; Responsible Citizenship; Scientific Reasoning; and Technological Competence. Upon completing a cumulative learning experience at the College, each student is expected to demonstrate competence in all of the institutional core competencies.

## General Education Requirements

In order to provide students with a foundation for lifelong learning, the College requires students to complete courses in the following four general education areas:

- 1. Major Areas of Learning
  - ENGL101 and ENGL102 or ENGL112

Note: Engl 112 does not meet the Information Literacy requirement and students will still need to take Engl 102 to fulfill that general education requirement.

- 3 credit hours in Humanities (ENGL 101, 102, ENGL 108 and 112 may not be used to fulfill this requirement)
- 3 credit hours in Mathematics (at MATH 118 or above)
- 3 credit hours in Natural Sciences
- 3 credit hours in Social Sciences
- 2. Major Academic Approaches
  - 3 credit hours in an American Diversity/Global Diversity Studies course
  - 3 credit hours in an <u>Interpretive Studies</u> course
  - 3 credit hours in a Writing Intensive course
- 3. <u>Information Literacy</u>

The current requirement is met by ENGL 102.

4. Technological Competency

The current requirement is met by CIS 103 or other coursework as indicated on the program page.

The requirements listed above apply to all students who began their studies in the Fall 2009 semester or later. Students who began their studies prior to September 2009 should refer to a catalog for the year that they entered the College, or should consult an academic advisor or counselor. Students who changed their curriculum on or after September 2009 are required to follow the new general education requirements regardless of when they entered the College. For more information regarding general education requirements, please contact Academic Advising at 215-751-8777 or email Academic Advising.

### Completing Requirements

A single course may be used to fulfill multiple General Education Requirements. For example:

- Courses used to fulfill requirements in major areas of learning (English 101, 102 or 112, Humanities, Mathematics, Natural Science and Social Sciences) may be used to fulfill requirements in major academic approaches.
- A course may not be used to fulfill more than one requirement in major areas of learning.
- A course may fulfill more than one requirement in major academic approaches.

## Definitions for Major Areas of Learning

Humanities: A course that fulfills the Humanities requirement is a college-level course that emphasizes analysis and exchange of ideas related to human experience, using analytical, critical, or speculative methods. The methods in Humanities differ from the creative expression of the arts or the empirical approaches of the sciences. Click here for a list of courses that fulfill the Humanities requirement.

**Mathematics**: A course that fulfills the Mathematics requirement is designed to promote a solid foundation for the interpretation and understanding of the world through numbers or other measures, using deductive logic, with a synthetic or analytic approach. Courses that focus on the analysis of and drawing of inductive inferences from quantitative data can satisfy this requirement, provided they have a sufficiently prominent deductive component. Math courses at the level of 118 and above fulfill the Mathematics requirement.

Natural Science: A course that fulfills the Natural Science requirement is a college-level course, designed to use the scientific method to understand and describe the natural world.

Natural sciences include biology, chemistry, earth science, physics and multi-disciplinary courses such as Science, Technology and Society. Click here for a list of courses that fulfill the Natural Science requirement.

Social Sciences: A course that fulfills the Social Sciences requirement is a college-level course that focuses on the study of human behavior and/or the relationships of people within societies. Click here for a list of courses that fulfill the Social Sciences requirement.

## **Definitions for Major Academic Approaches**

American/Global Diversity: An American/Global Diversity Studies course is a college-level course designed to focus on either the comparative study of race/ethnicity, gender and gender relations, class, and/or religion in the United States (American Diversity), the study of a country, culture, civilization, or region outside the United States or a comparative analysis of countries, systems, or cultures outside the United States, or the study of a language other than English (Global Diversity). These courses prepare students to function effectively in a democratic society by helping them to understand the complexities and differences among the people of the United States or the complexities and differences between the cultures, languages and history of the United States and other regions of the world. Students in Liberal Arts - general and social/behavioral science options should select courses from the liberal arts course selection guide. Click here for a chart that shows courses that fulfill the American/Global Diversity requirement.

Interpretive Studies: An Interpretive Studies course is a college-level course designed to focus on the study, analysis, and interpretation of "primary sources," defined as those written documents, material artifacts, visual works, and musical works closest to the subject under investigation or created in the historical period or culture under study. In addition, relevant case studies and field research contained within a syllabus would be considered an interpretive endeavor. Click here for a chart that shows courses that fulfill the Interpretive Studies requirement.

Writing Intensive: A Writing Intensive course is a college-level course designed to integrate the teaching of writing with the teaching of specific subject matter. Writing Intensive courses are offered across the curriculum and may overlap with other degree requirements. A Writing Intensive course should include the practice of general forms of academic or creative writing or the introduction of specific forms of academic writing common to the discipline or set of disciplines pertaining to the course. The course should approach writing as a process of planning, drafting, revising and editing. Click here for a chart that shows courses that fulfill the Writing Intensive requirement.

## Definitions of Information Literacy and Technological Competency

**Information Literacy:** Information Literacy is defined as the ability to determine the extent of a need for information, access it effectively and efficiently, evaluate it critically, incorporate the information into a knowledge base, accomplish a specific purpose with it, and access and use this information ethically and legally. Information literacy includes proficiency in acquisition (finding, assessing, and utilizing repositories of information, both traditional and electronic) and integration (critically evaluating, digesting and synthesizing information from disparate sources).

## Technological Competency:

Technological Competency is defined by six goals approved through the College governance structure and effective Fall 2010:

- Goal 1 Graduates will be able to use word processing software to produce academic and professional documents, individually and working in collaboration with others.
- Goal 2 Graduates will be able to use electronic spreadsheets to organize, analyze and present data.
- Goal 3 Graduates will be able to use library information systems.
- Goal 4 Graduates will be able to use collaboration and social networking software for academic, professional, and personal use. They will be able to create Web pages from application software documents, and share those documents with others by posting them on the Web.
- Goal 5 Graduates will be able to connect personal computers to related equipment, such as printers, cell phones, PDAs (Personal Digital Assistants) and digital cameras, and to a wireless computer network in a secure manner.
- Goal 6 Graduates will demonstrate an understanding of common ethical issues related to the use of information technology systems and the handling of data, including privacy and security issues.

## Courses that Fulfill Specific Requirements for Major Areas of Learning

Below are lists of courses that fulfill specific requirements for Major Areas of Learning. In no case may a course with a number below 100 be used to fulfill a general education requirement.

- Architecture, Design & Construction 176
- Art 101, 103, 104, 120, 205
- English 100 and 200 levels, other than 101, 102, 108, 112, 122, 124
- · Foreign Languages
- History
- Humanities
- Interdisciplinary Studies
- Music 103, 105, 106, 120, 121
- Philosophy
- Photography <u>111</u>, <u>113</u>
- · Religious Studies

## Natural Science Requirement

- · Biology
- Chemistry
- · Earth Science
- Physics
- Applied Science and Engineering Technology
- · Science, Technology and Society

## Social Sciences Requirement

- Architecture, Design & Construction 176
- Anthropology
- · Earth Science
- Economics
- Education 214
- Geography
- History
- Interdisciplinary Studies
- Justice <u>171</u>
- Philosophy 151
- Political Science
- Psychology
- Religious Studies 101, 151, 170, 175
- Sociology
- · Women's Studies

## Courses that Fulfill Specific Requirements for Major Academic Approaches

These charts show courses which fulfill requirements for Major Academic Approaches: American/Global Diversity, Interpretive Studies and Writing Intensive.

## The Link between General Education and Core Competencies

The College's general education requirements are nested under core competencies identified to assist students in developing the attitudes, knowledge and behaviors expected through its general education requirements. Students who complete the general education requirements develop the following core competencies:

- Critical Thinking: Students will actively reflect on, reason about, and form independent judgments on a variety of ideas and information, and use these skills to guide their beliefs and actions.
- Effective Communication: Students will be able to make a written, oral or visual presentation that demonstrates comprehension of any source of information and that addresses the assigned topic, expresses a thesis, develops a sustained focus on the central idea, organizes supportive ideas around the thesis, and uses correct diction, syntax, usage, grammar and mechanics.
- Information Literacy: Students will be able to retrieve, organize, analyze and evaluate information using both technological and traditional means.
- Quantitative Reasoning: Students will demonstrate the ability to understand and communicate mathematical principles and to follow an extended line of formal reasoning.
- Responsible Citizenship: Students will demonstrate an awareness of the responsibilities of informed citizenship in a diverse and pluralistic society. Students will demonstrate self-management in the requirements that come with one's role as a student in the classroom and at the college; demonstrate integrity in one's role as a student relative to other students, faculty, staff and administrators; and demonstrate effort to understand the perspective of others and to respond to others with well-founded thoughts.
- Scientific Reasoning: Students will demonstrate an understanding of scientific principles and apply them to theoretical and practical issues, and interpret measurable and/or observable information through inference and analogy to develop hypotheses and draw conclusions.
- Technological Competency: Students will demonstrate the ability to use computers and related technology in school, at work, and at home.

## **Student Support Services**

You will find information about the following College centers, labs, resources and student services on this page:

- Academic Advising
- Assessment Center
- Career Services Center
- Center for Male Engagement
- Center on Disability
- Child Development Center
- Counseling Center
- Learning Labs
- Library
- Single Stop
- Student Academic Computer Centers
- Student Success Initiatives
- Veterans Resource Center
- Women s Outreach and Advocacy Center

### Academic Advising

Academic Advising is an integral part of the student experience at Community College of Philadelphia. Advisors work closely with students to develop educational plans, review program requirements, and select appropriate courses for the purpose of integrating program of study with personal, academic and career goals. Students are strongly encouraged to be an active part of the advising relationship by engaging with their Advisor throughout their time at the College.

In addition, students work with Advisors to plan for the transfer process by understanding of policies and procedures, and referrals to college resources. While the ultimate responsibility for making decisions about personal goals and educational plans rests with each student, Advisors support and assist by helping to identify and assess options.

For more information about Academic Advising, please visit us at any college location (Room BG-12 Main Campus or regional centers). For contact and location information, please visit the Office of Academic Advising website.

### Assessment Center

In the College Assessment Center, new students can complete placement tests prior to orientation and registration in order that they may demonstrate their skill level in the areas of reading, writing and math. Students returning to the College will be tested if they have not previously and successfully completed an English or mathematics course.

Testing may be waived for students with qualifying scores on the SAT of 560 in Evidence Based Reading/Writing and 510 Math and on the ACT of 21 English and 17 in Math. Once the student has taken the College placement test, test scores are valid for two years. Students must be retested after a two-year period unless they have successfully completed an English and/or a mathematics course during this time.

The Assessment Center administers admissions tests for select programs and placement for specific courses. For additional information, please email us at assessmentcenter@ccp.edu or visit us online.

### Career Services Center

Comprehensive career services are available to all Community College of Philadelphia students at the Career Services Center. The Center offers individual appointments and workshops on résumé and letter writing, interview preparation, job search strategies and career decision making and planning. The Center assists students and graduates in developing successful strategies to find Work-Study, part-time, full-time and summer employment.

The Center maintains an online résumé and job posting service at <a href="www.collegecentral.com/ccp">www.collegecentral.com/ccp</a>. The Center utilizes online resources to aid in career development: Resume Builder on College Central, interest and skills assessment on CHOICES, and The Virtual Career Library for educational requirements, job information and salaries to assist in career development and job search. Students can complete a mock interview online using Perfect Interview. Call the Center for details.

Recruiters from local businesses visit the College regularly to interview potential employees. The Center staff also coordinates an annual job fair. Contact the Center for workshops, recruiting, job fairs and special programming schedules or use the Announcements feature on College Central.

The Career Services Center is located in C1-34 of the Center for Business and Industry. For further information, please call 215-496-6176.

### Center for Male Engagement

The Center for Male Engagement (CME) is a program designed to increase the retention and graduation rates of male students of color on campus through academic support; career, leadership and personal development; civic engagement; and social and cultural enrichment.

College can be a challenging experience without proper support, particularly for incoming first-generation students. To that end, the CME provides its participants with one-on-one coaching, ongoing academic support, career and leadership development, life skills training, mentorship, and culturally relevant social enrichment activities.

Membership in the program is limited. To be eligible, male students must have either successfully completed the Summer Enrichment Program designed for first-time incoming students OR have 12 credits or less at the beginning of the fall or spring semester AND be interviewed to determine fit. All participants are required to sign an agreement of participation that outlines program expectations.

### Summer Enrichment Program

The Summer Enrichment Program is for first-time incoming male students of color designed to provide an enhanced orientation to the College and its resources, as well as promote academic, career, financial and personal preparedness, and success at the College.

Program features include:

- · Weekly SEPTA TransPass for transportation to and from the College
- · Breakfast and lunch daily
- Free, overnight, off-campus leadership development retreat
- A stipend upon successful program completion

The Center for Male Engagement is located in the Winnet Student Life Building in Room S1-05. For more information, call 215-751-8817 or email the Center for Male Engagement.

### Center on Disability

The Center on Disability reviews and approves student requests for academic accommodations related to disability. To request academic accommodations, students must submit informative and relevant documentation from a qualified professional stating the nature and impact of their disability. Additionally, students must attend a meeting at the Center on Disability located on Main Campus for an individualized review of accommodation requests. To ensure timely service provision, we urge students requiring accommodations to apply to the College and complete the Center on Disability registration process at least six (6) weeks before the start of the semester. We encourage students with disabilities to call the Center on Disability at 215-751-8050 or visit us online.

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### Child Development Center

Child care is available for students at the College's Child Development Center, which is located at 440 N. 16th Street, between Callowhill and Spring Garden streets. The Center is managed by Knowledge Learning Center, and serves children ages 6 weeks to 5 years. Hours of operation are 7 a.m. to 6 p.m. Children bring their lunches. Morning and afternoon snacks are provided. The Center is a "peanut free" environment. Foods containing nuts or nut byproducts are not permitted. The Child Development Center offers a program for infants age 6 weeks to 12 months, a toddler program from 13 months to age 2, pre-school for ages 3 to 4 and pre-K for ages 4 to 5. Recognizing that a child's first educational experiences are very important, all four programs are designed to meet the developmental needs of children as they grow. The Child Development Center also provides drop-in care on a space-available basis, requiring copies of a child's most recent physical.

The Center adheres to all state requirements and currently has National Association for the Education of Young Children (NAEYC) and Keystone Stars accreditations. For further information regarding registration procedures, fees, fee payment policies, summer programs, required physical and health policies, and visits/tours, call the Center director at 215-751-8764 or -8765.

### Counseling Center

The College offers free, comprehensive counseling to all its students. The Counseling Center is staffed by professional counselors. Educational, career and personal counseling are available to individuals and groups. Counselors also assist students and graduates who wish to continue their education at other institutions. Information discussed in counseling is kept strictly confidential.

The Counseling Center is located in BG-7 and can be reached by calling 215-751-8169. Counselors are also available at each of the Regional Centers. Please visit the <u>Counseling Center</u> online for more information on counseling services.

### Learning Labs

The Learning Labs provide supplementary instructional assistance by faculty and peer tutors to students registered in a variety of college courses. Peer tutors are accomplished students who have been trained to assist other students. The Lab's faculty members include specialists in reading, study skills, English as a Second Language, writing, mathematics, science and learning disabilities. Together, peer tutors and faculty reinforce and supplement material taught in class.

The Central Learning Lab (Room B1-28) specializes in Humanities, Social Science and English. The Math and BusinessLearning Lab (B2-36) handles Accounting, Finance, Economics and Mathematics. The Science, Technology, & Allied Health Learning Lab (Library, L1-LL) deals with Biology, Chemistry, Allied Health and Nursing. Services are also provided at the Northeast, Northwest and West Regional Centers. For more information and a complete list of day, evening and Saturday hours, call 215-751-8480 or visit us online.

### Library

The Main Campus Library is located just beyond the entrance to the Mint Building near 17th and Spring Garden streets. An online catalog and integrated network provide access to the College Library collection and numerous electronic databases. Classes taught by the Library faculty provide students with the knowledge and skills to locate, evaluate and use a wide range of resources to support their college coursework. The Main Campus Library is open Monday through Thursday, 7:30 a.m. to 9 p.m. and Friday, 7:30 a.m. to 5 p.m. and Saturday, 8 a.m. to 3 p.m. Hours are subject to change, particularly during the summer terms and intersession, but the current hours will be posted at the main entrance to the Library.

The Northeast Regional Center, located at 12901 Townsend Road, the Northwest Regional Center, located at 1300 W. Godfrey Avenue and the West Philadelphia Regional Center, located at 4725 Chestnut Street have library facilities. The hours for each Regional Center Library are available from the Library Web page and posted at each location. Your College ID card, with current validation, is required to enter the Library and to borrow materials.

For more information, visit the Library online.

### Single Stop

Community College of Philadelphia connects students with state and federal financial resources, as well as local community services. Its aim is to help students overcome economic barriers so that they can continue with their education and move towards economic mobility.

At <u>Single Stop</u>, staff will meet individually with students to help them determine and apply for those potential resources and benefits that ultimately enable them to achieve their educational goals.

Single Stop services include:

- Benefits screening determine eligibility, then apply for federal and state benefits
- Financial counseling financial services to help establish and achieve financial goals
- Healthcare enrollment assistance students receive guidance assessing different options to obtain health insurance coverage
- Immigration clinics students receive free legal consultations about status adjustment and naturalization process
- Legal assistance on-site attorneys to assist with and answer legal issues
- Referral services connections to other community resources
- Tax preparation and filing on-campus tax preparers assist students with filing tax returns and/or amendments

All Single Stop services are free to currently enrolled students. For additional information or to make an appointment, email <a href="mailto:singlestop@ccp.edu">singlestop@ccp.edu</a>, call 267-299-5910 or visit Room M1-21 in the Mint Building.

### Student Academic Computer Centers (SACC)

The Student Academic Computer Centers (SACC) offer students access to computer workstations with various software applications required in all disciplines at the College, including email, the Web and laser printing. Student computer access is available on the Main Campus in Rooms B2-33 and C3-17 and at the Regional Centers in Rooms NW-120 and NE-123. Informational brochures detailing services and hours are available at each site.

### Student Success Initiatives

Student Success Initiatives offers programs and services designed to support students with the goal of increasing rates of academic success at the College. Services include oversight of Starfish Connect, the College's Academic Early Alert system; Colonial Colleagues, a peer support program; and Complete with 15, a degree completion scholarship.

#### Starfish Connect

Starfish Connect, the College's new Academic Early Alert System, is a communication tool for students, faculty and staff at the College, designed to provide students with feedback about academic performance with the purpose of helping students successfully complete their courses and connecting them with important campus resources.

#### Goals:

- · Assist students in being academically successful
- · Help students achieve their educational goals
- · Provide individually tailored assistance to students
- · Engage students in their academic success

Using Starfish Connect, faculty members can raise academic alert flags (concerns), give kudos (acknowledge good performance) and refer students to campus resources for extra support. The Starfish Connect software allows faculty to easily communicate their concerns to students while at the same time communicating these concerns to student support staff on campus. The office of Student Success Initiatives monitors Starfish Connect and offers outreach and support to students receiving alerts to increase their likelihood of academic success.

### Colonial Colleagues Program

Colonial Colleagues is a peer support program which encourages students to proactively commit to completing a degree or credential and/or successfully transferring from the College. It provides a structure that connects students as colleagues in peer-to-peer relationships enabling them to both give and receive help – from the first semester in higher education through to achievement of a certificate or a degree. Colonial Colleagues are invited to attend several Colonial Connection events for sharing experiences, skill development, problem-solving and celebrating academic success.

### Complete with 15 Scholarship

The Complete with 15 Scholarship can offer students a faster path to completing a degree. This scholarship is appropriate for students who have earned at least 24 credits, have a 2.5 GPA and meet additional requirements. Complete with 15 provides eligible students, who enroll in four courses (minimum 12 credits) each semester, with a scholarship that will fund an additional 3-credit course. By enrolling in five courses per semester for a minimum of 15 credits, students can complete an associate's degree in less time while saving money. The office of Student Success Initiatives processes Complete with 15 applications. Once determined eligible, students work with an advisor to create an academic plan outlining all courses from the start of receiving the scholarship through to earning all credits needed for graduation. Depending on the number of earned credits at time of application, students may take advantage of the Complete with 15 Scholarship for up to three semesters.

For additional information, please call 215-751-8202, email studentsuccess@ccp.edu or visit our office in Room S3-09.

### Veterans Resource Center

Community College of Philadelphia is the largest public institution of higher education in Philadelphia and currently serves a number of students attending the College under the GI Bill. The Veterans Resource Center (VRC) offers specialized services for our veteran students and their families.

The VRC, located on the ground level of the Bonnell Building, Room BG-43, is dedicated to serving students who are veterans and dependents of veterans. A Veterans Resource coordinator is available to answer questions and provide resources and referrals to assist veterans and qualifying dependents in understanding and accessing all services and options available to them on the Main Campus and at the Regional Centers. Services include:

- Access to resources, periodicals, and other academic material for veterans
- Information regarding VA laws and regulations and College policy
- An online community for student veterans
- Peer group discussions
- Guest speakers on topics relevant to veterans
- · Transition workshops during the new student orientation program

For more information about the resources, visit the VRC, Room BG-43 or <u>e-mail Veterans Resource Center</u>. For more information about Veterans Education Benefits, visit the G.I. Bill® Website at <u>www.gibill.va.gov</u>.\*\*

Note: To receive assistance in completing the veteran's certification and veteran's scholarship forms, students may visit the Veterans Resource Center located on the ground level of the Bonnell Building, room BG-43, or send an inquiry via e-mail.

\*\*GI Bill®" is a registered trademark of the U.S. Department of Veterans Affairs (VA). More information about education benefits offered by VA is available at the official <u>U.S. government website</u>.

### Women's Outreach and Advocacy Center

The Women's Outreach and Advocacy Center is dedicated to issues of gender equity on campus. Its mission is to foster a community where women can exist, learn and work in an environment that promotes dignity, understanding, equality and mutual respect. Its vision is to serve the College Community as an advocate for gender equality and mutual respect among women and men.

The Center provides a focal point where women can convene as a community for advocacy, collaboration, research and education. Through various educational, professional, cultural, social and supportive services and programs, female students are empowered to take responsibility and control of their own life choices. The Center is located in Room S1-19 in the Winnet Student Life Building. The hours of operation during the academic year are Monday through Friday, 9 a.m. to 5 p.m. Please stop by, call 215-751-8808, or email Women's Outreach and Advocacy Center for additional information.

## **Specialized Programs**

You will find information about the following on this page:

- Programs for High School Students
- Transfer Opportunities and Services
- Study Abroad
- Degree Programs at Regional Centers
- Shared Programs

### Alliance for Minority Participation (AMP)

The Alliance for Minority Participation (AMP) is a consortium of institutions in the Greater Philadelphia area with the shared mission of increasing the number of under-represented minority students receiving degrees in Science, Engineering and Mathematics. The College's specific role is to advise and encourage you to transfer to other AMP institutions where you may ultimately earn baccalaureate degrees. Services and activities include specialized advising, book stipends and research. For more information about AMP, please contact Linda Powell.

### **Developmental Education Program**

The College is committed to assisting students in successfully attaining college-level skills in reading, writing and mathematics; therefore, the Developmental Education program collaborates with other College departments and programs to provide you with a variety of academic courses and support services. The College requires you to complete placement tests in these three areas so that if you need help in developing one or more basic skills, you can be placed into appropriate courses and provided with important academic support services. In addition, a few College courses are offered especially for Developmental Education students. Classroom instruction is supplemented by small group workshops, tutoring, academic advising, individual counseling and counseling workshops. The primary mission of the Developmental Education program is to prepare students to succeed at the College. For more information, please call 215-751-8867.

### English as a Second Language (ESL) Programs and Services: Academic Preparation

The ESL program and services provide students who speak English as a Second Language with the opportunity to improve their English language skills so that they are better prepared for the College's educational programs. In addition, a few College courses are offered specifically for ESL students. Classroom instruction is supplemented by small group workshops, tutoring, academic advising, individual counseling and counseling workshops.

The overall goal of the program and services is to assist you in improving your English language abilities to the degree that will lead not only to success in the College's academic and career programs, but also to effective participation in the community at large. For more information about ESL, please call 215-751-8867.

### English as a Second Language (ESL): Community Education

Classes are designed for non-native speakers of English who wish to improve their basic English language skills in order to more actively participate in the larger society or prepare for citizenship. The program provides three levels of ESL instruction. ESL classes are available to adults 18 years of age and older. For more information about the ESL program, please visit the ESL website or call 215-751-8531.

### High School Equivalency Program (HSE)

Classes are designed to help prepare students for the battery of High School Equivalency test. You must be at least 18 years of age and not enrolled in high school to enroll in the HSE program. Must make your own HSE test appointments. For more information, call the HSE hotline at 215-7512-8376.

### Honors Opportunities

Community College of Philadelphia is pleased to recognize academic excellence and provides a <u>number of opportunities to promote student success</u>. These opportunities vary from a specialized Liberal Arts curriculum to honors courses and the recognition of graduation with Departmental Distinction.

### The Liberal Arts Curriculum - Honors Option

This option provides rich academic experiences to qualified students. The curriculum encourages you to be self-reflective about your own intellectual processes and to become more aware of the requirements of academic discourse in the humanities and social sciences. For additional information, including program entry requirements, <u>please refer to the degree program information</u> or contact the Division of Liberal Studies at 215-751-8450, Room BR-21.

Specialized Honors courses in a variety of disciplines including English, Earth Science, History, Interdisciplinary Studies and Psychology offer students challenging activities and additional research opportunities. For additional information, contact the Division of Liberal Studies at 215-751-8450, Room BR-21.

Students with a strong background in science are invited to participate in special honors sections of general Chemistry coursework. Interested students may contact the chair of the

Chemistry Department at 215-751-8416 for additional information.

Departmental Distinction recognizes student achievement and is conferred on students at graduation from a wide range of programs. In order to qualify, you must achieve a minimum grade point average of 3.2 and complete a project (separate from required coursework) which has been approved by the department. For more detailed information on eligibility and requirements, please contact the department chair of the program in which you are enrolled.

### Keystone Education Yields Success (KEYS)

Keystone Education Yields Success (KEYS) is designed to assist students who receive support through Temporary Assistance for Needy Families (TANF) Program and Supplemental Nutritional Assistance Program (SNAP) support in their pursuit of postsecondary education. Students enrolled in the program have the opportunity to meet regularly with program staff who help them address barriers and promote achievement of their educational and employment goals. Students are connected with appropriate support services both in and outside the College. Academic performance is monitored and students are referred to needed services such as tutoring, advising, and career and personal counseling. In addition, KEYS can assist students in maintaining basic benefits and accessing additional allowances and services through the County Assistance Office and other community agencies essential in ensuring their ability to persist.

KEYS is funded by the Pennsylvania Department of Human Services. Eligible students who are interested in enrolling in KEYS should contact their caseworker at their assigned County Assistance Office (CAO) for referral or the KEYS Program office in M1-24 at 215-751-8025.

### Lifelong Learning Programs and Workshops

The College's lifelong learning programs include an array of workshops and classes designed to enhance an individual's experience and skills in various areas of interest. These classes and workshops focus on areas such as cooking, sewing, dancing, yoga, horticulture, and photography and are offered at the College's Main Campus and Regional Centers. The variety of classes offered gives community members options to enhance their social development and personal enrichment. For more information, please call 215-751-8374.

### TRiO Student Support Services

TRiO Student Support Services is a U.S. Department of Education grant-funded project for TRiO-eligible college students who are low-income, first-generation college students and/or have disabilities. Services and activities offered through TRiO Student Support Services include academic support, summer bridge program, intersession activities, orientations, career and skills workshops, college transfer visits, cultural activities, study abroad and grant aid. For information about TRiO Student Support Services and eligibility requirements, please visit us online or call 215-751-8532.

### Programs for High School Students

### Advance at College — Dual Enrollment

The Advance at College program offers motivated and academically-talented 11th and 12th grade Philadelphia students the opportunity to take developmental and/or college-level courses while still attending high school and seeks to facilitate a successful transition from high school to college. General College fees are waived for students in the program. Advance at College students are not eligible for financial aid. A special admissions application must be completed and signed by parent/guardian and school principal. Entrance into the program is determined by the College's placement test. Tuition is discounted for Advance at College students. For more information about Advance at College, please call 215-751-8585 or visit us online.

### Advanced College Experience (ACE)

The ACE program provides motivated Philadelphia students entering the 9th, 10th, 11th and 12th grades, and students pursing their GED, the opportunity to experience a college atmosphere and earn college credits. Courses are offered in a variety of subject areas and designed with additional hours of instruction to give participants the best possible chance for success.

Classes are offered during the summer at the College beginning in early July. Tuition for the program is offered at a rate that is less than regular College tuition and includes all fees and instructional materials. For additional information on the ACE program, please call 215-751-8585, visit us online or email us.

### Gateway to College

The Gateway to College program at Community College of Philadelphia serves at-risk youth, 16 to 21 years old, who have dropped out of school. The program gives students the opportunity to complete their high school diploma while simultaneously achieving college success. You accumulate high school and college credits, earning your high school diploma while progressing toward an associate's degree or certificate.

The Gateway to College Program is part of a National Network that works to build the capacity of colleges, school districts, and states to revolutionize education for high school dropouts and underprepared college students so that all young people can achieve college credentials.

The Philadelphia Gateway to College Program is funded through Community College of Philadelphia and our partner in student success, the School District of Philadelphia. For additional information about the program, please call 215-751-8425, email us or visit us online.

### TRIO Upward Bound

TRIO Upward Bound is a U.S. Department of Education grant-funded project for high school students who are either low-income or from families where neither parent holds a bachelor's degree. Students from Benjamin Franklin, Edison-Fareira, and South Philadelphia are eligible to participate. The program offers academic instruction, tutoring, mentoring, career exploration and cultural enrichment activities, college visits, college application assistance, financial aid instruction, and parent workshops. For information about

TRIO Upward Bound and eligibility requirements, please call 215-751-8780 or visit us online.

### Transfer Opportunities and Services

After successful completion of coursework at the College, many students continue their education at a four-year college or university. The success these students enjoy is a reflection of the transfer curricula and related support offered by the College.

### Transfer Services

A goal of many students is to earn a bachelor's degree. Counselors can assist students in the development of an educational plan and the exploration of academic programs and transfer institutions. Students may also develop a file of recommendations to be used for college applications. You are urged to visit the Counseling Center for transfer workshops or individual counseling. To schedule an appointment, call 215-751-8169, email <a href="mailto:counseling@ccp.edu">counseling@ccp.edu</a> or stop by Room BG-7 of the Bonnell Building on Main Campus.

Students who need assistance in choosing a major or career are encouraged to use Counseling Center resources, including computerized career guidance for self-assessment, occupational information, government publications and internet links to career information. Professional counselors are available to guide you through the career assessment process and the use of career resources.

The Main Campus Counseling Center is located in the Bonnell Building Room BG-7. Counselors are also available at the Regional Centers. For more information visit the Counseling Center information page.

### Transfer Agreements

There are three types of transfer agreements: dual admissions, core-to-core and program-to-program.

To participate as a transfer student in dual admissions, core-to-core and program-to-program agreements, you must earn an appropriate associate's degree before transfer. These agreements are not exclusive of one another. If you transfer to a school with more than one type of agreement, the agreements can complement one another. Information on transfer agreements and other information helpful to the transfer process is available on the <u>transfer website</u>.

### **Dual Admissions**

Community College of Philadelphia has developed dual admissions agreements with area colleges and universities. These agreements are designed to assist students who earn an appropriate associate's degree to transfer to one of these four-year institutions. Support and financial incentives, including scholarship awards, are built-in to offer you the best opportunity for success.

Students who are interested in dual admissions should complete an intent form early in their academic career. Many of the institutions listed below require that students signal their intent to participate before they have earned no more than 30 college-level credits.

For additional information and to submit a Dual Admissions intent form, log into MyCCP and go to the Transfer/Dual Admissions channel on the MyGPS tab. You should meet with a counselor for assistance in identifying the appropriate courses at the College in order to transfer into the program of your choice.

The College maintains <u>dual admissions</u> partnerships with the following institutions:

- Arcadia University
- Cabrini University
- Chestnut Hill College
- Cheyney University
- Eastern University
- Holy Family University
- Immaculata University
- La Salle University
- Peirce College
- Rosemont College
- Saint Joseph's University
- Temple University

### Core-to-Core

These agreements specify the acceptance of approved associate's degree programs in which the general education reflects the core requirements of the four-year institution's curriculum. If you earn an appropriate associate's degree (usually an A.A. or A.S.), the four-year institution's core requirements are satisfied except for core courses required by the intended major and possibly other requirements that reflect the specific values of the transfer institution (e.g., religion, foreign language). Below is a list of four-year institutions with which Community College of Philadelphia has core-to-core agreements:

- Arcadia University
- Cabrini University
- Chestnut Hill College
- Holy Family University (Community Bridge)

- La Salle University
- Temple University (Gen Ed-to-Gen Ed)

### Program-to-Program

These are agreements in which an entire curriculum or program of study is accepted to provide a graduate of a specific associate's degree advanced standing in a specific bachelor's degree program. The College maintains selected <u>program-to-program</u> agreements with the following colleges and universities:

- Alvernia University
- · Arcadia University
- Bloomsburg University
- Cabrini College
- Chestnut Hill College
- Cheyney University
- Drexel University Online
- East Stroudsburg University
- · Eastern University
- Excelsior College
- Goddard College
- Gwynedd Mercy University
- Holy Family University
- Immaculata University
- Indiana Institute of Technology
- Kaplan University
- La Salle University
- La Roche College
- · Lincoln University
- Moore College of Art and Design

- Neumann University
- Peirce College
- Pennsylvania Academy of the Fine Arts
- Pennsylvania College of Technology
- Philadelphia University
- Rosemont College
- Rowan University
- Saint Joseph's College of Maine
- Saint Joseph's University
- Springfield College School of Human Services
- Strayer University
- Temple University
- Thomas Jefferson University
- Universidad Del Sagrado Corazon
- University of the Arts
- University of Phoenix
- Villanova University
- West Chester University
- Western Governors University
- Widener University
- Wilmington University

The College continues to seek and implement new agreements. Students should confer with their academic advisor or the curriculum coordinator in their area of interest to find out about specific agreements. Transfer agreement guidelines are available in the Counseling Center and on the College's website.

### Pacollegetransfer.net

<u>Pacollegetransfer.net</u> facilitates exploration of colleges, universities and community colleges that belong to a Statewide Transfer System dedicated to the seamless transfer of courses within a 30-credit framework. In addition, the Statewide Transfer System has been expanded to require participating institutions to accept the transfer of Associate in Arts and Associate in Science degrees into parallel baccalaureate programs with full junior standing, recognizing all the competencies attained within the associate degree programs. College degree programs approved for the Statewide Transfer System are:

- Art and Design
- Biology
- Business Administration
- Chemistry
- · Communication Studies
- Computer Science
- Education (Birth to 4th Grade)
- English
- Mass Media
- Mathematics
- PsychologyTheater

Not all baccalaureate institutions offer parallel majors for each college program.

Students can explore information about the institutions and obtain information on course and program transfer at pacollegetransfer.net. Pennsylvania's 14 community colleges are Statewide Transfer System members, as are the Pennsylvania State System of Higher Education's (PASSHE) 14 universities. The following PASSHE, state-related institutions and private institutions have opted to participate as full Statewide Transfer System members:

- Bloomsburg University
- · California University of Pennsylvania
- Carlow University
- · Cheyney University
- Clarion University

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- East Stroudsburg University
- Edinboro University
- Geneva College
- · Indiana University of Pennsylvania
- Kutztown University
- · Lackawanna College (certificate and associate degree granting institution)
- · Lincoln University
- · Lock Haven University
- · Mansfield University
- Millersville University
- · Pennsylvania College of Technology
- Saint Francis University
- · Shippensburg University
- Slippery Rock University
- · West Chester University

State-related institutions including Pennsylvania State University, Temple University and the University of Pittsburgh have varying levels of participation in PA TRAC.

### Study Abroad

Studying in another country while earning credits toward graduation can be one of the most rewarding experiences of a student's undergraduate career. Study abroad can be a program or courses, through which you complete part of the formal college program while studying in another country.

Recognizing that time constraints and personal obligations may make a full semester study abroad experience impossible for many students, Community College of Philadelphia has developed several non-traditional short-term programs to help you experience different cultures. These programs range from one to four weeks in length and offer noncredit or credit experiences. For information on current study abroad programs, please visit the <a href="Study Abroad web page">Study Abroad web page</a>.

Students receiving financial aid can usually apply most sources of aid to study abroad fees. The Higher Education Act of 1965, amended in 1980, says that a student enrolled in a formal program of study abroad may be considered for federal financial aid for "reasonable costs" associated with such study. Contact the Office of Financial Aid and the study abroad coordinator for more information about financial aid and other options for financing study abroad.

Students desiring information about participating in non-Community College of Philadelphia study abroad programs must meet with the College's study abroad coordinator and complete the appropriate form. To learn more more about study abroad and international education, contact the coordinator and visit the <u>Study Abroad web page</u>.

### Degree & Certificate Programs at Regional Centers

The three Regional Centers provide a convenient entrée to all of the College's degree and certificate programs. In conjunction with online course offerings, the Regional Centers offer you the added advantage of taking all of the courses needed to satisfy the requirements for 15 degree and certificate programs.

Full degree/certificate options available at the Regional Centers include the following:

Northeast Regional Center (NERC)

The following degrees can be earned on-site at NERC:

- Health Care Studies
- Liberal Arts
- Liberal Arts Social/Behavioral Science

The following degrees can be earned on-site at NERC combined with online classes:

- Accounting
- Business
- English
- Justice
- Psychology
- Religious Studies

The following certificate can be earned on-site at NERC combined with online classes:

- Accounting Paraprofessional Proficiency Certificate
- Clinical Assistant Proficiency Certificate

### Northwest Regional Center (NWRC)

The following degrees can be earned on-site at NWRC:

- Behavioral Health and Human Services
- Liberal Arts

The following degrees can be earned on-site at NWRC combined with online classes:

- Liberal Arts Social/Behavioral Science
- Psychology
- Religious Studies

The following certificate can be earned on-site at NWRC in conjunction with Salus University:

• Ophthalmic Technician Proficiency Certificate

### West Regional Center (WERC)

The following degrees can be earned on-site at WERC:

- Automotive Technology
- Liberal Arts

The following degrees can be earned on-site at WERC combined with online classes:

- <u>Liberal Arts Social/Behavioral Science</u>
- Psychology
- Religious Studies

The following proficiency certificate can be earned on-site at WERC:

<u>Automotive Service Proficiency Certificate</u>

Even if a student is interested in a program that is not listed above as a full degree option, a Regional Center can still be the place to start. You may begin your college career at a Center in any one of the College's degree or certificate programs and take the remainder of the courses at the Main Campus. In these cases, you can complete 30 or more credits at a convenient Regional Center before moving on to the Main Campus. Learn more about the Northeast Regional Center, Northwest Regional Center and the West Regional Center.

### **Shared Programs**

Community College of Philadelphia, in cooperation with Bucks, Delaware and Montgomery County community colleges, offers approved shared programs. These are programs that are offered by one community college, but not another. Shared program students may complete some or all of their general education and elective courses at their home college while taking the program specialty courses at the host college. Students enrolled in shared programs pay the in-district tuition rate at the host college. Community College of Philadelphia is the home college for the following programs, and students who elect to enroll in these approved shared programs must be authorized by the Dean of Enrollment Management:

Shared Program	Host College
Fine Woodworking	Bucks County Community College
Furniture and Cabinetmaking	Bucks County Community College
Health and Fitness Professional A.A.S.	Montgomery County Community College
Historic Preservation	Bucks County Community College
Machine Tool Technology	Delaware County Community College

Community College of Philadelphia is the host college for the following programs, and students from Bucks, Delaware and Montgomery county community colleges must receive approval from their home college:

Community College of Philadelphia Program	Home College
American Sign Language/English Interpreting A.A.S.	Bucks County Community College, Delaware County Community College, Montgomery County Community College

Architecture A.A.	Bucks County Community College
Automotive Technology A.A.S.	Bucks County Community College, Montgomery County Community College
Dental Hygiene A.A.S.	Bucks County Community College, Delaware County Community College
Diagnostic Medical Imaging A.A.S.	Delaware Community College
Facility Management A.A.S.	Bucks County Community College
Photographic Imaging A.A.S.	Delaware County Community College
Respiratory Care Technology A.A.S.	Bucks County Community College

## Course Offerings

The three numbers at the far right of each course title indicate (left to right): class hours per week, laboratory or required student practice time (Music, Foreign Language, English) hours per week and credit hours per semester, respectively.\*

The four numbers at the far right of each course title in Allied Health curricula as well as Music courses indicate (left to right): class hours per week, laboratory hours per week, clinical hours per week or required student practice time, and credit hours per semester, respectively.

The one-hour lab indicated for all foreign language courses is a period in which students are required to complete listening and speaking exercises using various technologies as instructed by faculty.

A two-semester course is designated by a hyphenated number: for example, 101-102. The first half of such a course is prerequisite to the second half. Credit is usually given if only the first half of the course is completed unless otherwise stated in the course description.

All other courses are one semester in length.

Please check course listings, published each semester, to determine if and when a specific course may be offered.

\* In some courses that are followed by three numbers, the second number refers not to "laboratory hours per week" but to hours per week of an internship, partial employment, practicum or other off-campus, program-related activity. (The specific activity is usually referred to in the course description.)

Accounting

Allied Health

American Sign Language/English Interpreting

Anthropology

Applied Science and Engineering Technology

Architecture, Design and Construction

<u>Art</u>

Automotive Technology

Behavioral Health/Human Services

**Biology** 

Biomedical Equipment Technology

Biomedical Technician Training

**Business** 

Chemistry

Medical Laboratory Technician

College Success Seminar

Computer Information Systems

Computer Science

Counseling

Culinary Arts and Hospitality Management (formerly Hospitality Technologies)

Dental Hygiene

Diagnostic Medical Imaging

**Dietetics** 

**Digital Forensics** 

<u>Digital Video Production</u>

Earth Science

**Economics** 

Education

**Electronics** 

Engineering

English

Entrepreneurship

Finance

Fire Science

First Year Experience

Foreign Languages

Foundational Mathematics

Geographic Information Systems

Geography

<u>Health</u>

**History** 

**Hospitality Technologies** 

**Humanities** 

Interdisciplinary Studies

**Justice** 

**Leadership Studies** 

Management

Marketing

**Mathematics** 

Medical Laboratory Technician Courses

Music

Nursing

Office Administration

Ophthalmic Courses

Paralegal Studies

Philosophy

Photographic Imaging

**Physics** 

Political Science

Process Technology

**Psychology** 

Real Estate

Religious Studies

Respiratory Care Technology

Science, Technology and Society

Sociology

Women's Studies

Youth Work

# College Faculty & Staff



Faculty, Visiting Lecturers, Instructional Aides

Learn more



Adjunct Instructors

Learn more



College Administrators

Learn more

## Student Life - Beyond the Classroom

Community College of Philadelphia offers exciting and rewarding opportunities outside of the classroom that allow you to explore interests, expand your knowledge and become involved in the College community. This out-of-class involvement is meant to support your in-class performance.

### Student Life Center

The Student Life Center is responsible for programs such as New Student Orientation; Welcome Week; Student Leadership and Involvement; Clubs and Organizations; the Student Programming Board; Spring Fling; trips to Broadway shows; a biannual trip to Merida, Mexico; and many other ways to help you get involved.

Students who are involved are more connected to the campus and tend to have higher grades and graduate and transfer on time. Don't wait. There is more to college than going to class. Let us help you to succeed! Opportunities for involvement exist at each Regional Center in addition to the Main Campus.

For a list of current campus programs and events, you can view the student life center calendar.

Review a list of current student discounts.

### Athletics

The College offers a rich variety of competitive and fitness activities:

- · Athletics Center: This facility features a weight training room, cardio room, and exercise room for aerobics and yoga classes.
- Intercollegiate Athletics: Offering nine sports for men and women, the College is a member of the National Junior College Athletic Association (NJCAA) and competes in Region XIX as part of the Eastern Pennsylvania Athletic Conference (EPAC).
- Intramural Sports: Our programs include volleyball, basketball, kickball and Ultimate Frisbee.
- Health and Wellness: Events throughout the year serve students, faculty and staff at the College. Examples include health screenings, healthy cooking demonstrations and dietary information exchanges.

### Student Leadership and Involvement Center

There are several ways you can participate in campus life to enhance your leadership, teamwork and communication skills:

- You may choose to get involved in the <u>Student Government Association</u>.
- Become a member of a student club or organization.
- Help plan student activities as a member of the Student Programming Board.
- Contribute to the *Vanguard*, the student newspaper.
- The College's honor societies, including the Phi Theta Kappa International Honor Society and the Alpha Beta Gamma International Business Honor Society, offer you several leadership, networking and academic growth opportunities.
- The Student Leadership and Involvement Center houses Philadelphia LEADS our premier student leadership programs, including:
  - Emerging Leaders, specifically designed for incoming new students;
  - Gold Leaders, which certifies students through the Student Leadership Challenge; and
  - Colonial Leaders, which guides seasoned student leaders through the tenants of Servant Leadership.

### **New Student Orientation**

First-time students at the College receive important information about academic and student resources, student processes and initiatives that will help them navigate their new environment and achieve their goals. Orientation programs are offered at each Regional Center in addition to the Main Campus.

# Term Start and End Dates

# Spring 2017

Term Code	Description	Start Date	End Date
15A	15-week — Main Campus, Regional Centers and Online Learning	1/17/2017	5/4/2017
10A	10-week — Main Campus, Regional Centers and Online Learning	2/14/2017	5/4/2017
7A	7-week Accelerated Classes	1/17/2017	2/27/2017
7B	7-week Accelerated Classes	3/13/2017	4/22/2017

# Summer 2017

Term Code	Description	Start Date	End Date
14A	14-week – Main Campus and Online Learning	5/15/2017	8/24/2017
7A	7-week – Main Campus, Regional Centers and Online Learning	5/15/2017	6/29/2017
7B	7-week – Main Campus, Regional Centers and Online Learning	5/30/2017	7/20/2017
7N	7-week – Main Campus, Regional Centers and Online Learning	7/11/2017	8/24/2017

# Fall 2017

Term Code	Description	Start Date	End Date
15A	15-week — Main Campus, Regional Centers and Online Learning	9/5/2017	12/16/2017
10A	10-week — Main Campus, Regional Centers and Online Learning	10/3/2017	12/16/2017
7A	7-week Accelerated Classes	9/5/2017	10/17/2017
7B	7-week Accelerated Classes	10/24/2017	12/12/2017

# Spring 2018

Term Code	Description	Start Date	End Date
15A	15-week — Main Campus, Regional Centers and Online Learning	1/16/2018	5/3/2018
10A	10-week — Main Campus, Regional Centers and Online Learning	2/13/2018	5/3/2018
7A	7-week Accelerated Classes	1/16/2018	2/26/2018

7B 7-week Accelerated Classes 3/12/2018 4/21/2018

# Summer 2018

Term Code	Description	Start Date	End Date
14A	14-week — Main Campus and Online Learning	5/14/2018	8/25/2018
7A	7-week — Main Campus, Regional Centers and Online Learning	5/14/2018	6/30/2018
7N	7-week — Main Campus, Regional Centers and Online Learning	7/10/2018	8/25/2018

# Refund Dates

# Spring 2017 Refund Dates

Term Code	Description	100% Refund	50% Refund*	0% Refund**
15A	15-week — Main Campus, Regional Centers, and Online Learning	1/16/2017	1/17 – 2/6/2017	2/7/2017
10A	10-week — Main Campus, Regional Centers, and Online Learning	2/13/2017	2/14 – 3/1/2017	3/2/2017
7A	7-week — Accelerated Classes	1/16/2017	1/17 – 1/25/2017	1/26/2017
7B	7-week — Accelerated Classes	3/12/2017	3/13 – 3/20/2017	3/21/2017

# Summer 2017 Refund Dates

Description	100% Refund	50% Refund*	0% Refund**
14-week — Main Campus and Online Learning	5/14/2017	5/15 - 6/5/2017	6/6/2017
7-week — Main Campus, Regional Centers and Online Learning	5/14/2017	5/15 - 5/23/2017	5/24/2017
7-week — Main Campus, Regional Centers and Online Learning	5/29/2017	5/30 - 6/08/2017	6/09/2017
7-week — Main Campus, Regional Centers and Online Learning	7/10/2017	7/11 – 7/19/2017	7/20/2017
	14-week — Main Campus and Online Learning  7-week — Main Campus, Regional Centers and Online Learning  7-week — Main Campus, Regional Centers and Online Learning	14-week — Main Campus and Online Learning  5/14/2017  7-week — Main Campus, Regional Centers and Online Learning  5/14/2017  7-week — Main Campus, Regional Centers and Online Learning  5/29/2017	14-week — Main Campus and Online Learning  5/14/2017  5/15 – 6/5/2017  7-week — Main Campus, Regional Centers and Online Learning  5/14/2017  5/15 – 6/5/2017  5/15 – 6/5/2017  5/15 – 6/5/2017  5/15 – 6/5/2017

## Fall 2017 Refund Dates

Term Code	Description	100% Refund	50% Refund*	0% Refund**
15A	15-week — Main Campus, Regional Centers, and Online Learning	9/04/2017	9/05 — 9/25/2017	9/26/2017
10A	10-week — Main Campus, Regional Centers, and Online Learning	10/02/2017	10/03 — 10/17/2017	10/18/2017
7A	7-week — Accelerated Classes	9/04/2017	9/05 — 9/12/2017	9/13/2017
7B	7-week — Accelerated Classes	10/23/2017	10/24 — 11/02/2017	11/03/2017

# Spring 2018 Refund Dates

Term Code	Description	100% Refund	50% Refund*	0% Refund**
15A	15-week — Main Campus, Regional Centers, and Online Learning	1/15/2018	1/16 -2/05/2018	2/06/2018
10A	10-week — Main Campus, Regional Centers, and Online Learning	2/12/2018	2/13-2/28/2018	3/01/2018
7A	7-week — Accelerated Classes	1/15/2018	1/16-1/23/2018	1/24/2018

7B	7-week — Accelerated Classes	3/11/2018	3/12-3/19/2018	3/20/2018

# Summer 2018 Refund Dates

Term Code	Description	100% Refund	50% Refund*	0% Refund**
14A	14-week — Main Campus and Online Learning	5/13/2018	5/14-6/02/2018	6/03/2018
7A	7-week — Main Campus, Regional Centers and Online Learning	5/13/2018	5/14-5/22/2018	5/23/2018
7N	7-week — Main Campus, Regional Centers and Online Learning	7/09/2018	7/10-7/18/2018	7/19/2018

<sup>\*</sup> 50% refund only for tuition, course fees, online learning course fees, general college fees, technology fees, and nonresident capital fees.

 $<sup>**\,0\%</sup>$  (no) refund on or after date listed

# Withdraw & Incomplete Dates

### Spring 2017 Withdraw Dates

Dates listed are the last day to withdraw without penalty of failure

Term Code	Description	Withdraw Date
15A	15-week — Main Campus, Regional Centers, and Online Learning	4/10/2017
10A	10-week — Main Campus, Regional Centers, and Online Learning	4/17/2017
7A	7-week Accelerated Classes	2/15/2017
7B	7-week Accelerated Classes	4/13/2017

# Spring 2017 "I" to "F" Deadline Dates

Term Code	Description	Deadline Date
15A	15-week — Main Campus, Regional Centers, and Online Learning	6/15/2017
10A	10-week — Main Campus, Regional Centers, and Online Learning	6/15/2017
7A	7-week Accelerated Classes	4/10/2017
7B	7-week Accelerated Classes	6/05/2017

### Summer 2017 Withdraw Dates

Dates listed are the **last day** to withdraw without penalty of failure

Term Code	Description	Withdraw Date
14A	14-week — Main Campus and Online Learning	8/07/2017
7A	7-week — Main Campus, Regional Centers and Online Learning	6/19/2017
7B	7-week — Main Campus, Regional Centers and Online Learning	7/05/2017
7N	7-week — Main Campus, Regional Centers and Online Learning	8/12/2017

## Summer 2017 "I" to "F" Deadline Dates

Term Code	Description	Deadline Date
14A	14-week — Main Campus and Online Learning	10/05/2017
7A	7-week — Main Campus, Regional Centers and Online Learning	8/10/2017
7B	7-week — Main Campus, Regional Centers and Online Learning	8/31/2017
7N	7-week — Main Campus, Regional Centers and Online Learning	10/05/2017

## Fall 2017 Withdraw Dates

Dates listed are the last day to withdraw without penalty of failure

Term Code	Description	Withdraw Date
15A	15-week — Main Campus, Regional Centers, and Online Learning	11/27/2017
10A	10-week — Main Campus, Regional Centers, and Online Learning	11/27/2017
7A	7-week Accelerated Classes	10/04/2017
7B	7-week Accelerated Classes	11/29/2017

# Fall 2017 "I" to "F" Deadline Dates

Term Code	Description	Deadline Date
15A	15-week — Main Campus, Regional Centers, and Online Learning	1/29/2018
10A	10-week — Main Campus, Regional Centers, and Online Learning	1/29/2018
7A	7-week Accelerated Classes	11/29/2017
7B	7-week Accelerated Classes	1/23/2018

# Spring 2018 Withdraw Dates

Dates listed are the last day to withdraw without penalty of failure

Term Code	Description	Withdraw Date
15A	15-week — Main Campus, Regional Centers, and Online Learning	4/09/2018
10A	10-week — Main Campus, Regional Centers, and Online Learning	4/10/2018
7A	7-week Accelerated Classes	2/16/2018
7B	7-week Accelerated Classes	4/12/2018

# Spring 2018 "I" to "F" Deadline Dates

Term Code	Description	Deadline Date
15A	15-week — Main Campus, Regional Centers, and Online Learning	6/14/2018
10A	10-week — Main Campus, Regional Centers, and Online Learning	6/14/2018
7A	7-week Accelerated Classes	4/09/2018
7B	7-week Accelerated Classes	6/04/2018

## Summer 2018 Withdraw Dates

Dates listed are the **last day** to withdraw without penalty of failure

Term Code Description Withdraw Date

14A	14-week — Main Campus and Online Learning	7/30/2018
7A	7-week — Main Campus, Regional Centers and Online Learning	6/18/2018
7N	7-week — Main Campus, Regional Centers and Online Learning	8/13/2018

# Summer 2018 "I" to "F" Deadline Dates

Term Code	Description	Deadline Date
14A	14-week — Main Campus and Online Learning	10/04/2018
7A	7-week — Main Campus, Regional Centers and Online Learning	8/09/2018
7N	7-week — Main Campus, Regional Centers and Online Learning	10/04/2018

# College Catalog, April - August 2017

The academic year begins in September and ends in August of the following year. The major semesters, fall and spring, are 15 weeks in length. The fall semester begins in September, and the spring semester begins in January. Summer terms are held between May and August.

This calendar reflects major term dates and activities scheduled primarily at the Main Campus and the Regional Centers. Term start and end dates, refund periods, the final day to drop course(s) without penalty of "F" grade(s), and deadlines to change "I" grades vary for all terms. For complete information, click here. The College is closed on Sunday. In addition, the College is closed Friday and Saturday during the summer.

April 2017	Event
April 12, Wednesday	Deadline for full payment of tuition and fees for all students registered by this date for Early Summer 2017
April 18, Tuesday	Priority deadline for Fall 2017 for financial aid
April 24, Monday	Final day of classes for Spring 2017 semester
April 25-26, Tuesday-Wednesday	Professional Development Day (Potential Emergency Closing make-up day)
April 27, Thursday	Professional Development Day/Study Day (Potential Emergency Closing make-up day)
April 28-29, Friday-Saturday	Final examinations, Spring 2017 semester

May 2017	Event
May 1-4, Monday-Thursday	Final examinations, Spring 2017 semester
	2017-2018 PHEAA grant filing deadline for all renewal applicants
May 1, Monday	Final day to resolve all outstanding financial aid issues for the Spring 2017 semester
May 6, Saturday	Commencement
May 7, Sunday	Deadline for faculty submission of grades for Spring 2017 (15-week and 10-week) terms
May 8, Monday	Summer four-day work week begins — College closed on Fridays
May 15, Monday	Early Summer 2017 7-week (term code 7A) and 14-week (term code 14A) terms begin
May 29, Monday	Memorial Day Holiday — College Closed
May 30, Tuesday	Mid Summer 2017 7-week (term code 7B) term begins

June 2017	Event

June 13, Tuesday	Deadline for full payment of tuition and fees for all students registered by this date for Late Summer 2017
June 27, Tuesday	Final day of classes for Early Summer 2017 7-week (term code 7A) term
June 28-29 , Wednesday-Thursday	Final examination days for Early Summer 2017 7-week (term code 7A) term

July 2017	Event
July 1, Saturday	Deadline for faculty submission of grades for Early Summer 2017 7-week (term code 7A) term
July 3, Monday	No classes for 14-week and 7-week (term codes 14A and 7B) terms
July 4, Tuesday	Independence Day Holiday — College closed
July 5, Wednesday	Deadline to submit application for financial aid reinstatement for Fall 2017 semester  Deadline to submit all financial aid documents and resolve all financial issues to hold Fall 2017 classes  Priority deadline to submit application for academic reinstatement for Fall 2017 semester
July 5-6, Wednesday-Thursday	No classes for 14-week and 7-week (term codes 14A and 7B) terms
July 11, Tuesday	Late Summer 2017 7-week (term code 7N) term begins
July 18, Tuesday	Final day of classes for Mid Summer 2017 7-Week (term code 7B) term
July 19-20 Wednesday-Thursday	Final examination days for Mid Summer 2017 7-week (term code 7B) term

August 2017	Event
August 1, Tuesday	2017-2018 PHEAA grant filing deadline for all new applicants
August 3, Thursday	Final deadline to submit application for academic reinstatement for Fall 2017 semester
August 8, Tuesday	Deadline for full payment of tuition and fees for all students registered by this date for Fall 2017 semester
August 18, Friday	End of summer four-day work week — College closed
August 22, Tuesday	Final day of classes for Early Summer 2017 14-week (term code 14A) and Late Summer 2017 7-week (term code 7N) terms
August 23-24 , Wednesday-Thursday	Final examination days, Early Summer 2017 14-week (term code 14A) and Late Summer 2017 7-week (term code 7N) terms
August 25, Friday	Deadline to settle all outstanding financial aid matters for the current year (2016-2017); all aid will be canceled after this date
August 26, Saturday	Deadline for faculty submission of grades for Early Summer 2017 14-week (term code 14A) and Late Summer 2017 7-week (term code 7N) terms

### **Technical Studies**

### Description:

The Technical Studies program recognizes valuable training and/or work experience by giving students in technical fields the opportunity to receive college credits for their experiences and to apply that experience and knowledge to an associate's degree. It assists individuals in their preparation for career advancement or change. The student will develop an individualized program of study directly related to career or educational goals.

This select program has four components:

- 1. Prior learning assessment:12-30 credits in the Technical/Occupational core from industry certifications and other demonstrated competencies
- 2. 21 credits of General Education
- 3. 3 credits in communication
- 4. 6-24 credits taken as part of a Personal Education Plan that has either a technical or a business-related focus

### Student Learning Outcomes:

Upon completion of this program graduates will be able to:

- Demonstrate competence in oral and written communication.
- · Demonstrate an understanding of cultural diversity.
- Demonstrate the ability to think critically in many disciplines.

### Program Entry Requirements:

This is a select program. Prospective students must attend a program orientation prior to admission. All students need to take the College's placement tests at their time of entry into the College. Students who are identified as needing developmental coursework must satisfactorily complete the appropriate English and mathematics courses as part of the program. Students are accepted into the program upon assessment of their prior learning and the application of credits to the Technical Core.

### Program of Study and Graduation Requirements:

A minimum of 60 credits and a grade point average of 2.0 are required for graduation with an Associate in Applied Science (A.A.S.) degree in Technical Studies.

### Technical Studies Course Sequence

The sequence shown below is for illustration purposes. The length of time it takes for a student to complete the Program will vary depending on many factors including how many credits he or she transfers into the Program.

Course Number and Name	Prerequisites and Corequisites	Credits	Gen Ed Req.
Technical/Occupational Core Students submit industry certifications and/or other documentation for consideration for prior learning assessment.		12-30	
First Semester			
ENGL 101 - English Composition I		3	ENGL 101
FNMT 118 - Intermediate Algebra (or higher)		3	Mathematics
CIS 103 - Applied Computer Technology		3	Tech Comp
Science Elective		3/4	Natural Science
Second Semester			

ENGL 102 - The Research Paper	ENGL 101 with a grade of "C" or better	3	ENGL 102, Info Lit
Communications Elective (choose one) <u>ENGL 115</u> - Public Speaking or <u>ENGL 116</u> - Interpersonal Communication or	For ENGL 115 and 117: ENGL 101, which may be taken concurrently		
ENGL 117 - Group and Team Communication or	For ENGL 116: <u>ENGL 101</u> or <u>ENGL 114</u>	3	
ENGL 118 - Intercultural Communication	For ENGL 118: No prerequisite		
Humanities Elective		3	Humanities
Social Science Elective		3	Social Sciences
Third & Fourth Semester  Personal Education Plan (PEP)			
In order to ensure that the PEP has a unifying focus and relates to the Technical/Occupational Core, students should select individual courses within one of the two concentrations listed below.			
<b>Technology Concentration:</b> This concentration is appropriate for students who wish to enhance their technological skills in order to advance within their chosen profession.			
Applied Science and Engineering Technology (ASET) Architecture, Design and Construction (ADC) Automotive Technology (AT—excluding AT 289: Internship) Computer Information Systems (CIS) Computer Science (CSCI)			
Geographic Information Systems (GIS) Process Technology (PTEC)		6-24	
<b>Business Concentration:</b> This concentration is appropriate for students who have a solid foundation in business-related fields and are looking to increase their business knowledge and skills in order to advance in their chosen field or to open their own business.			
Accounting (ACCT) Computer Information Systems (CIS) Economics (ECON) Entrepreneurship (ENTR) Finance (FIN) Management (MNGT)			
Management (MNGT)			

### Minimum Credits Needed to Graduate: 60

## General Education Requirements:

Marketing (<u>MKTG</u>) Real Estate (<u>RE</u>)

All General Education requirements are met through required courses (as indicated above) except for the **Writing Intensive** requirement, the **Interpretive Studies** requirement and the **American/Global Diversity** requirement. Therefore, in order to graduate, students in this program must choose one course that is designated **Writing Intensive**, one course that is designated **Interpretive Studies** and one course that is designated **American Global Diversity**. The same course may be used to fulfill all three requirements. View the courses that fulfill all <u>degree requirements</u> and receive a more detailed explanation of the College's general education requirements to help in your selection.

### For More Information Contact:

The Division of Liberal Studies, Room BR-21, 1700 Spring Garden Street, Philadelphia, PA 19130, Telephone (215) 751-8450; or the College Information Center (215) 751-8010.

## Academic and Time Amnesty

### Academic and Time Amnesty

The College recognizes that sometimes students are unsuccessful academically for a variety of reasons. Later the students may discover that a low GPA is a barrier to entry into occupational fields or further academic progress. Therefore, the College has established Academic and Time Amnesty Policies to allow students a second chance.

Amnesty refers to "forgiveness" of a student's grade of "D", "F", and/or "W". Amnesty results in the recalculation of GPA and a reassessment of a student's academic progress. Students are eligible for one application of Academic Amnesty and one application of Time Amnesty. Requests for additional Amnesty approval of either type must stipulate the extenuating circumstances and will be considered, on an individual basis, by the Vice President for Academic Affairs.

Two types of Amnesty exist at Community College of Philadelphia: Academic Amnesty and Time Amnesty. Academic Amnesty is limited to grades of "D" and "F" received in courses which are peculiar to and required by the student's previous curriculum. Time Amnesty applies to students who have interrupted their attendance for three or more years and affects all courses in which a grade of "D", "F" or "W" was earned.

Federal Student Aid program regulations do not provide for Time Amnesty or for Academic Amnesty in evaluating a student's eligibility for financial aid.

### I. Academic Amnesty Requirements

- A. In order to qualify for Academic Amnesty:
  - 1. The student must be transferring from one Community College of Philadelphia curriculum to a different Community College of Philadelphia curriculum;
  - 2. The student must not have received Academic Amnesty for past performance.
  - 3. The cumulative earned GPA for the associate's degree or the academic certificate cannot be adjusted; therefore, a student who has already earned an associate's degree or an academic certificate is not eligible for academic amnesty.
- B. Once approval for Academic Amnesty has been granted, the recalculation of the student's academic record shall:
  - 1. Exclude previous "D" and "F" grades, for which Academic Amnesty has been granted, from the GPA calculation;
  - 2. Retain "D", "F" or "W" grades as part of the academic progress assessment;

### II. Time Amnesty Requirements

- A. In order for a student to qualify for Time Amnesty:
  - 1. The student must be currently enrolled and attending classes at the time of the amnesty request;
  - 2. Three or more years must have elapsed since the last grade was received;
  - 3. The student must have successfully completed six (6) credits, with at least a grade of "P" or "C" in each course;
  - $4.\ The\ student\ must\ not\ have\ received\ Time\ Amnesty\ prior\ to\ the\ amnesty\ request.$
  - 5. The cumulative earned GPA for the associate's degree or the academic certificate cannot be adjusted; therefore, a student who has already earned an associate's degree or an academic certificate is not eligible for time amnesty; and
  - 6. The student will not be granted Time Amnesty for courses taken as part of an earned proficiency certificate.
- B. Once approval for Time Amnesty has been granted, the recalculation of the student's academic record shall:
  - 1. Exclude from the GPA calculation previous "D" or "F" grades;
  - 2. Eliminate course credits for "D" grades from the student's academic record;
  - 3. Exclude previous "F" and "W" grades from calculation for academic progress.

### III. Procedure for Academic or Time Amnesty Approval

- A. The student will file a petition for Academic or Time Amnesty with the Counseling Department.
- B. The petition will be forwarded to the Vice President for Academic Affairs for approval.
- C. All approved petitions will be forwarded to the Office of Student Records and Registration for appropriate action.
- D. The Office of Records and Registration will notify the student of the outcome of the petition.
- E. The grades of "D", "F" and "W" that have been granted Amnesty will remain on the student's academic record followed by the appropriate code.

### Graduation

### Graduation and Commencement

Commencement and the official awarding of degrees take place only at the conclusion of the spring semester. However, a student may fulfill graduation requirements at the conclusion of any semester or summer.

Students who intend to meet the requirements for graduation at the end of any semester or summer session must apply to graduate via <u>MyCCP</u>. Students should complete this application immediately after finalizing enrollment for all courses required to complete that degree or certificate program.

Community College of Philadelphia will grant degrees and academic certificates only to students who have earned at least 30 credit hours in residence for a degree and 15 credit hours for an academic certificate. Prior learning assessment can be counted towards the residency requirement. Students on active duty with the Armed Forces need to earn only 15 credits in residence for a degree.

### Issuance of Diplomas

Diplomas will be issued as soon as possible after the completion of the student's final semester/term.

Students who, in the opinion of the Office of Student Records and Registration, are reasonably sure of completing their degree requirements at the end of early summer term, have the option of attending the commencement ceremonies prior to the beginning of early summer term or those of the following spring.

Students who have completed their degree requirements by the end of the spring semester (or by the preceding academic year's fall semester or late summer term) will be invited to commencement ceremonies after the end of that spring semester. Students enrolled in curricula normally mandating attendance during late summer term to complete requirements will be permitted to attend commencement ceremonies just prior to the beginning of early summer term of that year only if given permission by the dean of Enrollment Management.

### **Graduation Honors**

The Commencement program and the diploma will carry special designations for students who complete their work with outstanding academic records according to the following cumulative grade point averages:

- 3.2 With Honor
- 3.5 With High Honor
- 3.8 With Highest Honor

Note: Commencement honors for the May commencement are based on the cumulative GPA on record at the end of summer or fall semester.

## Policy on Academic Standards and Progress

### Policy on Academic Standards and Progress

### I. Academic Standards and Progress Policy

(Note: Students receiving financial aid are held to additional satisfactory academic progress regulations found in section VI.)

A. **GPA Policy:** Students must maintain a cumulative grade point average for all college-credited courses according to the following College schedule. GPA will be assessed after a student has attempted 12 college credited hours. (Note: Developmental courses will not count toward GPA calculation.)

Minimum Required	GPA Credit Hours
Cumulative GPA	Cumulative Attempted
1.40	12
1.50	18
1.60	25
1.75	37
1.85	49
2.00	Graduation

- B. **Progress Policy:** Students must maintain satisfactory progress for all courses. Satisfactory progress will be based on a cumulative successful completion of 67% of all credits attempted and will be assessed after a student has attempted 12 credit hours. For the purposes of calculating satisfactory progress, withdrawals made within the refund period will not count toward the calculation of progress. A grade of "A," "B," "C," "D," "P" or "MP" will be considered a successful completion. However, a grade of "MP" cannot be given in the same course more than two times. On the third attempt, a grade of "MP" will be converted to a grade "F".
- C. Students who do not maintain satisfactory course completion and/or GPA will:
  - 1. Be put on <u>full-time (13 credits maximum)</u> academic probation. Students on academic probation of any kind must meet with a counselor before registering for any term
  - 2. At the end of any full-time academic probation term, a student will be evaluated as follows:
    - a. If the student has met the cumulative 67% completion rate and the GPA requirements, he/she will be removed from academic probation.
    - b. If the student is either below the cumulative 67% completion rate or the GPA standard but has earned grades of "A," "B," "C," "P" or "MP" in 67% of the credits attempted for that term, he/she will continue on full-time academic probation. When the student achieves the cumulative 67% completion rate and GPA requirements, he/she will be removed from academic probation. Students may not register until they have met with a counselor.
    - c. If the student fails to earn a grade of "A," "B," "C," "P" or "MP" in 67% of the credits attempted for the term, he/she will be placed on part-time (7 credits maximum) academic probation. Students on part-time academic probation during any summer term will be limited to 3 credits or 6 credits for offerings spanning 14 weeks. Students may not register until they have met with a counselor. Students wishing to appeal their part-time academic probation status may do so through the Counseling Center.
  - 3. At the end of the first part-time academic probation term, a student will be evaluated as follows:
    - a. If the student has met the cumulative 67% completion rate and the GPA requirements, he/she will be removed from academic probation.
    - b. If the student is either below the cumulative 67% completion rate or the GPA standard but has earned grades of "A," "B," "C," "P" or "MP" in all credits attempted for that term, he/she will be permitted to continue on part-time (7 credits) academic probation until such time that the student achieves the cumulative 67% completion rate and GPA requirements, and is removed from academic probation. Students may not register until they have met with a counselor.
    - c. If the student fails to earn a grade of "A," "B," "C," "P" or "MP" in all credits attempted for the term, he/she will be dropped from the College for **poor** scholarship and/or insufficient progress.
  - 4. After a student is dropped for poor scholarship and/or insufficient progress for the first time, he/she will be required to sit out for one term, with summer counting as one term, before applying for reinstatement. Students wishing to appeal the requirement to sit out for one term may do so through the Counseling Center.

- 5. After a student has sat out the minimum of one term, he/she may return to the college on part-time (7 credits) academic probation but cannot be registered until he/she has met with a counselor. Students who return to the College after being dropped will be assessed at the end of each term in accordance with the part-time academic probation sequence described above.
- 6. Students who are dropped for either **insufficient progress** or **poor scholarship** two or more times must complete an Application for Reinstatement. Students are not officially reinstated until they are notified in writing of their status. All students who are reinstated based on appeals must see a counselor to register for courses and will be placed on part-time (7 credits) academic probation. Academic performance will be assessed at the end of each term in accordance with the part-time academic probation sequence described above.

The chart below shows sample calculations of necessary course completion rates based on the 67% completion rate and minimum GPA requirements.

Attempted Credits	Minimum GPA	Calculation Applied	Required Completion Rate
12	1.40	12 x 67% =	8 credits completed
18	1.50	18 x 67% =	12 credits completed
25	1.60	25 x 67% =	17 credits completed
37	1.75	37 x 67% =	25 credits completed
49	1.85	49 x 67% =	33 credits completed
60	2.00	60 x 67% =	40 credits completed
72	2.00	72 x 67% =	48 credits completed
84	2.00	84 x 67% =	56 credits completed
90	2.00	90 x 67% =	60 credits completed

### II. Policy on Repeated Courses

- A. Students may repeat courses to improve an initial grade of "B," "C," "D" or "F."
  - The following conditions apply:
    - 1. When a course is repeated, only the most recent grade will be included in the GPA calculations, although all prior grades will appear on the academic transcript.
- B. A grade of "MP" will not be given for a third time in the same course. The "MP" grade may be awarded no more than twice. Any "MP" for a third subsequent attempt will be converted to an "F."
- C. Credit for a course is given only once. Each attempted grade will appear on a transcript. Note: Some colleges to which students may wish to transfer do not accept this method of calculating grade point averages.

### III. Incomplete Work

- A. The letter "I" on a student's grade report or transcript indicates that a student has not completed all the requirements for a grade in a course.
- B. The instructor will inform the student of the work to be completed and the date that it is due. Notification of the incomplete grade will be forwarded to the department head through the use of the incomplete grade form.
- C. An incomplete grade becomes a failing grade ("F") if the work is not completed within six weeks from the end of the final exam period in which the "I" grade was assigned.
- D. An "I" will not be counted in the student's grade point average and academic progress in determining academic standing.
- E. Since only completed work can be counted as making progress toward the degree, students must be aware that an incomplete grade may have implications for qualifying for financial aid. In addition, incomplete grades will not satisfy requirements for prerequisites.

### IV. Withdrawals from Courses

- A. Students may withdraw from a course(s) but must do so by the published deadline for each term. After this date, students will be assigned the grades they have earned.

  Students who withdraw after the refund period and before the deadline date for any term will earn a grade of "W" on their transcript. Note that excessive withdrawals will affect academic progress.
- B. Students may drop a class via MyCCP or by completing the necessary form, available from the Office of Student Records and Registration, and submitting the form to this same office. Students are strongly encouraged to consult a counselor, if on academic probation, or an academic advisor prior to dropping courses.
- C. Students completely withdrawing from a term must complete the necessary form, available from the Office of Student Records and Registration, and submit the form to this same office. Students must consult a counselor prior to withdrawing from an entire roster of classes for any term.

- D. The date when the Office of Student Records and Registration is in receipt of the appropriate drop or withdrawal form is the official date of withdrawal. A student who cannot appear in person to fill out a withdrawal form must send a letter or e-mail stating the date and reason for the withdrawal. Absence from class or merely notifying the professor does not constitute withdrawal. An instructor may initiate a withdrawal (according to Policies and Procedures No. 5). (Note: Students should not assume that an instructor will initiate such withdrawals.)
- E. Students who are unable to complete a course(s) because of serious illness or other emergency may apply for an excused withdrawal within two years of the occurrence to the Office of Student Records and Registration. <a href="Excused withdrawals">Excused withdrawals</a> are not counted in determining academic progress; however, excused withdrawals are counted as an attempt when awarding financial aid. Satisfactory documentation of the illness or emergency will be required.
- F. Students who stop attending class or, in the case of online courses, stop participating (failure to submit or participate in coursework) will receive a grade of FS, failure stopped attending. Instructors who issue an FS grade must also report the student's last date of attendance or, in the case of an online course, last date of participation.

#### V. Reinstatement

Students applying for reinstatement to the College must submit an "Application for Reinstatement Form" which may be obtained in the Educational Support Services Office or at the Counseling Center. Once completed, forms can be dropped off at the Educational Support Services Office. Forms must be submitted no later than the deadline dates stated in the calendar in the College catalog. Applications received after the deadline dates will be rolled over and considered for the following academic term. Once a decision has been made about reinstatement, students will be notified in writing.

### VI. Satisfactory Academic Progress Requirements for Students Receiving Financial Aid

A student receiving financial aid is required to make progress towards his or her program of study each term. To maintain eligibility for financial aid, the course completion rate is two-thirds successful completion (67%) and maintaining minimum GPA requirements. However, academic progress standards set by Financial Aid Regulations are stricter than the College's Academic Standards and Progress Policy:

- A. Neither academic nor time amnesty, which the College approved, can be used when computing financial aid satisfactory academic progress (SAP).
- B. All excused withdrawals are counted as attempted credits.
- C. Financial aid eligibility is limited to 150% of the credits needed to graduate for each program of study. All attempted credits are counted toward this maximum, regardless of whether or not a student received aid during previous periods of enrollment. Credits transferred into the College are counted toward the 150% maximum limit.
- D. There is a maximum limit of 30 developmental course credits.
- E. Incomplete ("I") or unreported ("NR") grades are counted as attempted credits.
- F. All attempted credits are counted whether or not a student received financial aid.
- The following new provisions became effective July 1, 2011 and are applicable to all students receiving federal student aid:
- G. Financial aid can be applied only once to repeat any course where the student received a passing grade of "A," "B," "C," "MP," "P" and "D". Students who failed (grade of "F") or withdrew from a course ("W") in any previous attempts are not restricted by this one repeat limitation. However, once the student does earn a passing grade, then financial aid will only pay once to repeat that course.

The Office of Financial Aid will review academic progress after the Fall and Spring semesters, and Summer. Students deemed not to be making satisfactory academic progress will be placed on a financial aid warning status for the next term. Students may continue receiving financial aid while on financial aid warning status. No appeal is necessary. After the financial aid warning period, a student who fails to meet the Satisfactory Academic Progress Requirements for Students Receiving Financial Aid (as outlined above), will be ineligible for aid. Students may submit to the Financial Aid Academic Progress Appeals Committee a request to have his/her financial aid eligibility reinstated based on:

- 1. Death of a relative;
- 2. Injury or illness of the student; or
- 3. Other special circumstances.
  - a. The appeal must be submitted along with written explanation about why the student failed to make satisfactory academic progress and what has changed that will allow the student to be successful for the next term. Students must also provide appropriate supporting documentation, e.g., doctor's note, receipts or obituary with their appeals. Students who successfully appeal their aid ineligibility will be placed on financial aid probation. The decision of the Financial Aid Academic Appeals Committee is final.
  - b. A student on financial aid probation may receive financial aid for one semester or summer. At that point, the student must meet the College's Academic Standards and Progress policy or the requirements of an established individual probation conditions plan to maintain financial aid eligibility. The probation conditions plan is a set of academic performance expectations to ensure that the student is able to meet satisfactory academic progress (SAP) standards by a specified point in time. If a student begins and continues to follow the set plan, she/he may continue receiving financial aid.
- H. If appeals have been approved for students who are dropped for poor scholarship and/or insufficient progress after failing to meet the probation conditions plan that was established for them, the students will be ineligible for financial aid until they return to good academic standing.

## Registration and Enrollment

### **Registration Procedures**

Currently enrolled and previously enrolled students in good academic standing in any credit degree or certificate program may utilize online registration to enroll for courses. All other students, including those who are not permitted to drop/add classes via the Web, may visit Enrollment Central at the Main Campus or any of the Regional Centers.

Students will be permitted to attend only those sections of courses for which they have officially registered and paid. Students are not permitted to sit in on classes for which they have not registered.

Priority Web Registration is available to students based on the total number of credits transferred into and earned at the College. Eligible students are permitted to register via the Web before in-person registration begins. A Web Registration Guide is available to students on <u>MyCCP</u> regarding how to activate their portal account (if they have not done so) and register for classes via the Web. Online registration can be accessed through the Enrollment Services Channel on the Student Tab, and clicking on the "Register for Courses/Change Class Schedule" link on <u>MyCCP</u>.

It is the students' responsibility, in consultation with their advisors, to make certain that any registration changes will fulfill the degree requirements.

### Course Scheduling Preference for Veteran Students

Veteran students (as defined below) are granted course scheduling preference (in accordance with Pennsylvania legislation – Act 46 of 2014 - (Act of May 14, 2014, P.L. 667, No. 46) during the priority registration period. Active military members also receive course scheduling preference during the priority registration period.

Course scheduling preference means veteran students are able to start registering for courses sooner than students with the same class standing. Dates for priority registration and the procedure for veterans scheduling are published each semester on the College's website.

Eligible students must provide documentation confirming their status as an active military member or veteran as defined below. Supporting documentation such as the DD-214 must be received at least 5 business days before the priority registration period.

A Veteran – Per Act 46 of 2014 (Act of May 14, 2014, P.L. 667, No. 46):

- 1. Has served in the United States Armed Forces, including a reserve component and National Guard; and
- 2. Was discharged or released from such service under conditions other than dishonorable.
- 3. Veterans who completed their obligated service in the Reserves and National Guard but were not deployed to active duty are included in this definition.

A Veteran Student – Per Act 46 of 2014 (Act of May 14, 2014, P.L. 667, No. 46):

- 1. Is a veteran.
- 2. Has been admitted to a public institution of higher education; and
- 3. Resides in Pennsylvania while enrolled in the public institution of higher education.
- 4. Veteran students may or may not be using veteran's educational benefits at the institution.
- 5. Act 46 of 2014 applies to veteran students admitted to all for-credit courses and programs offered at the institution.

For additional information or questions regarding course scheduling preference for veteran students, contact the Veteran's Resource Center at vets@ccp.edu.

Act 46 of 2014 requires public institutions of higher education in Pennsylvania to provide veteran students, as defined in the Act, with preference in course scheduling. Non-compliance may be reported to the Pennsylvania Department of Education by submitting the Higher Education Student Complaint form found at <a href="https://www.education.state.pa.us">www.education.state.pa.us</a>.

### Attendance

Students' participation in regularly scheduled sessions or classes is an essential part of the instructional process. College students are expected to fulfill their academic responsibilities by attending all classes unless prevented from doing so by illness or emergency.

Faculty submit attendance reports after the 20 percent point for all terms and the 50 percent point for any term that meets 10 weeks or longer.

If a student has been absent from class for an amount of days equal to the equivalent of two weeks or more, the instructor may initiate a withdrawal (W) after the 20% attendance reporting period.

For Distance Education courses, the minimum standard for a faculty-initiated withdrawal (W) is measured by a student's failure, during the time referenced above, to engage in an academically related activity, such as contributing to an online discussion or initiating contact with a faculty member to ask a course-related question.

Individual faculty members have the right to establish regulations regarding attendance at class sessions and laboratories that they consider necessary for successful completion of the course materials. These regulations may include a reduced grade for students who miss classes.

#### Withdrawal

- A student may withdraw from a course or courses without academic penalty up to and including the eleventh (11th) week of a regular term, and up to and including the equivalent of the eleventh (11th) week in a nonstandard term.
- Students may process an official withdraw online using the student portal, or with an official withdrawal form provided by the Office of Student Records & Registration.
- If the official withdrawal is processed with the Office of Student Records & Registration within the established time limit, the student's grade report will show the grade W (withdrawal).
- If the official withdrawal is not processed within the established time limit, the student's grade report will show F (failure).
- Students who are members of the Pennsylvania National Guard or other reserve component of the armed forces who are called or ordered to active duty, and the student's
  affected spouse, can request an excused withdrawal, with proper documentation, and receive a leave of absence for military duty. The student and the affected spouse will
  receive an "M" grade on their transcript.

#### Student Load

A full-time student is one taking 12 or more credit hours. Students expecting to graduate within two years must successfully complete 15 to 17 credit hours each semester or complete summer courses. The required number of credit hours depends on the curriculum in which the student is enrolled.

Many full-time students take longer than four semesters to complete the requirements for graduation and to reach their personal goals. Some find it necessary to take developmental courses, for which they do not receive credit, to develop critical basic skills in their first semesters. Others elect to take only four courses a term to meet both the requirements of college-level academic work and their own personal needs.

A credit hour at the College is defined as an amount of work that reasonably approximates not less than one hour of classroom or direct faculty instruction and a minimum of two hours of out-of-class work each week for approximately 15 weeks or its equivalent over a different period of time.

Courses are designed such that students should expect to study a minimum of two hours outside of class for every hour of classroom or direct faculty instruction. Therefore, a full-time student registered for 12 hours per week should expect to spend at least 24 hours a week studying (12 x 2 = 24).

Careful planning and discussion with faculty and counselors can establish the best plan for the student, who should keep an open mind in developing plans for educational and career success.

#### **Grading System**

The grading system at Community College of Philadelphia is a letter system with associated quality points, which are used to compute cumulative grade point averages.

Grades	Q.P.*			
A	4	Outstanding		
В	3	Good		
С	2	Satisfactory		
D	1	Passing		
F	0	Failure		
FS	0	Failure - Stopped Attending		
*Numb	*Number of <b>quality points</b> earned			

#### **Other Grades**

As a result of testing and placement, students may be required to register for certain courses which do not carry credit towards graduation. These courses are numbered below 100. They are graded "Pass," "Making Progress" and "Fail."

P	Pass
MP	Making Progress

Г	ran			
(Not factored into gr	(Not factored into grade point average)			
Other Designations	Other Designations			
M	Military Absence Withdrawal			
W	Withdrawal			
AU	Audit			
NR	No report from instructor at the time grades were processed			
I	Incomplete			

The total number of quality points received for the semester may be computed as follows:

- For each course for which a grade was received, multiply the number of credit hours for that course by the number of quality points earned (determined by the grade received for that course, using the chart of equivalents above).
- · Total the results.

E

• The grade point average for the semester may then be computed by dividing the total number of quality points received by the total number of credit hours for all of the courses for which grades were received. (The cumulative grade point average is determined by doing the above figuring for the total number of semesters attended.) Courses from which a student has officially withdrawn are not included in the computation; however, they are counted in calculating academic progress.

#### Reporting Grades

Mid-term grades reflecting a student's level of academic performance as of the 50 percent point of the semester are assigned by faculty members. These grades are unofficial and do not appear on the student's transcript. The grades are designed to inform students of their mid-term standing and assist in making course selections for the next term.

Students may access mid-term and final grade information online using <u>MyCCP</u>. Paper grade mailers may be provided upon written request made to the Office of Student Records and Registration.

#### Semester Honors

Students must:

- 1. Achieve a semester grade point average of at least 3.2;
- 2. Complete at least 6 credit hours in courses carrying credit toward graduation;
- 3. Receive no grade of less than "C" during an academic honors list semester (i.e., fall or spring semester);
- 4. Receive no "Incomplete" grade during the academic honors semester.

## Class Status

Class status, either freshman or sophomore, is determined by the number of credit hours earned. Freshman status is maintained up to and including 29 credit hours. Sophomore status begins when 30 credits have been earned.

#### Auditing

With permission of the instructor teaching the course, a student may register in a course as an auditor. No credit will be given.

Permission to change from study-for-credit status to auditing (no credit) status must be obtained from the instructor by the end of the equivalent second week of each term. The instructor must submit an Audit Form to the Office of Student Records and Registration. The instructor may change the grade of an auditor either at mid-term or on the final grade report from "AU" to "W" in case of excessive absence or lack of participation in the course.

Audited courses do not count in determining student eligibility for financial aid. Students receiving financial aid should contact the Office of Financial Aid before changing a course from study-for-credit status to auditing status. Audit grades will not be used in determining academic load for veteran certification.

## Change of Student Information

The Office of Student Records and Registration must be notified in writing of all changes of name, address and Social Security Number. It is the student's responsibility to keep the College informed.

Official or legal documentation is required to change a name or Social Security Number. A valid Social Security card is required to change or correct a Social Security Number. To change or correct a name requires a state-issued photo ID or driver's license, court order, marriage license or birth certificate.

## Change of Residency

Students attending the College for the first time who wish to change their residency must visit Enrollment Central to submit the appropriate documents and complete the change of residency form. Returning students must visit the Office of Student Records and Registration to change their residency status. Change of residency for tuition and mailing purposes is the sole responsibility of the student. Please note that a student's residency classification for purposes of tuition calculation will not be adjusted after the third week of the semester. Any changes made to residency after the third week will be reflected in the following semester.

## Change of Curriculum

To change curriculum, a student may go to the Counseling Center and discuss the proposed change. With the counselor's advice and approval, the student must complete a change of curriculum form for processing. Any curriculum changes made after the third week of the fall or spring semester will be reflected in the following semester; this may impact the academic year of the new program. Students seeking entrance to an Allied Health program by way of the change of curriculum process must consult the specific counselors designated to advise these students and meet the required deadlines.

Students must follow the curriculum outlined in the Catalog in effect for the academic year they enter a program. If students change their curriculum, they must then follow the Catalog in effect for the academic year that they enter the new program.

If a curriculum is revised while students are enrolled in the program, students have the following options:

- 1. Continue to follow the requirements in the existing curriculum; OR
- 2. Change to the revised curriculum if the new requirements are better suited for transfer or employment. If students elect to follow the new curriculum, they may not return to the previous curriculum requirements.

#### Formation of Sections and Cancellation of Courses

Formation and continuation of class sections and courses of instruction are subject to adequate enrollment. The administration, acting on behalf of the Board of Trustees, reserves the right to cancel a course or section, to change the time of meeting, to subdivide a section, or to combine two or more sections as circumstances may require.

## Student Rights and Responsibilities

## Student Appeals Procedures

A student may lodge a complaint about any matter in which he or she feels unjustly treated by following the College's appeals procedures, details of which are available in the <u>Student Handbook</u> or in the Counseling Center located in Room BG-7.

#### Student Code of Conduct

Every student is expected to be fully acquainted with and comply with all policies, rules, and regulations outlined in the Student Code of Conduct. The Student Code of Conduct is contained in the Student Handbook, which is published and updated each year. Copies of the Student Handbook are available through the Student Life Center located in Room S1-19, the Regional Centers or online.

#### Student Identification Card

All credit students at the College are required to have a College photo identification card. It is the student's official College identification. Photo ID cards are used for admission to the campus and access to its facilities. A valid ID card is required for various student services on campus such as all in-person transactions, checking out materials in the library, access to computer labs and using the Athletics Center.

Students who for religious or other reasons require a student identification card without a photo may make arrangements through the Security office.

Your card must be shown upon request by any faculty member, security officer or any other official member of the College staff. You also may be asked for other identification to prove who you are. You must show it if requested.

Abuse of an ID card could result in disciplinary action by the College. If the card is lost or stolen, contact the Security Office, Room MG-12, for information on replacing it. Each additional replacement is \$10.

## Academic Dishonesty

All students are expected to understand what constitutes cheating and plagiarism. Conduct involving academic standards may be found in the <u>Student Handbook</u>, which is available through the Student Life Center located in Room S1-19, the Regional Centers or online.

#### Judicial Affairs

The Judicial Affairs officer, located in the Office of the Dean of Students, Room S1-10, is responsible for administering the College's Judicial Affairs program. The Student Code of Conduct provides the specific policies and procedures for governing student behavior. All students are expected to become familiar with their rights and responsibilities and the standards of student behavior as outlined in the <u>Student Handbook</u> under the Student Code of Conduct.

#### Right to Know Law

Pursuant to the Pennsylvania Right to Know Law, Community College of Philadelphia has established a Right to Know Office. The Vice President for Human Resources and General Counsel is the College's Right to Know Officer. Requests for information pursuant to the Pennsylvania Right to Know Law should be directed to <a href="https://example.com/RTK@ccp.edu">RTK@ccp.edu</a>. For additional information, click here.

#### Privacy of Student Records - Family Educational Rights and Privacy Act (FERPA)

Community College of Philadelphia accords all the rights under the Family Educational Rights and Privacy Act of 1974 to its students. The College collects, maintains, secures and destroys student records for the educational welfare and advancement of students. This act is intended to protect the privacy of educational records, to establish the right of students to inspect and review their educational records, and to provide guidelines for the correction of inaccurate or misleading data through informal or formal hearings.

The Family Educational Rights and Privacy Act (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 director of Student Records and Registration, dean, head of the academic department or other appropriate official, written requests that identify the record(s) 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 College official to whom the request was submitted, 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.

Students may ask the College to amend a record that they believe is inaccurate or misleading. They should write the College official responsible for the record, clearly identify the part of the record they want changed and specify why it is inaccurate or misleading.

3. The right to consent to disclosure 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, 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.

4. The right to file a complaint with the U.S. Department of Education concerning alleged failures by Community College of Philadelphia 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, SW Washington, DC 20202

The College, at its discretion, may disclose directory information upon request without consent. The College has identified the following as directory information: student's name; program of study; dates of attendance; and degrees, honors and awards received along with dates.

Currently enrolled students may, under the provisions of FERPA, withhold disclosure of such information. To prevent disclosure, written notification must be received by the Office of Student Records and Registration by October 1 of the fall semester and February 15 of the spring semester.

The College will honor each request to withhold the information listed above but cannot assume responsibility to contact a student for subsequent permission to release it. Decisions about withholding information should be made very carefully. Should a student decide to inform the College not to release information, any future requests for such information from non-institutional persons or organizations will be refused.

Community College of Philadelphia assumes that failure to request the withholding of directory information indicates approval for disclosure.

#### **Social Security Number**

In order to access the College's portal, <u>MyCCP</u>, or online services, a system-generated student identification number must be used with a personal identification number (PIN) provided by the College. In addition, the College requires the Social Security Number (SSN) as a condition of enrollment. Although it is not used as the primary student identification number, the SSN is required for tax reporting, financial aid processing and educational tracking purposes. Community College of Philadelphia will not disclose the SSN without student consent unless required to do so by federal, state or local law.

## Photo/Video Release Agreement

Community College of Philadelphia uses photographic, video and/or digital images taken of students on College property and at College events, as well as quotes provided by students, in publications, advertisements, promotional materials and audiovisual productions associated with marketing and/or student recruiting.

Currently enrolled students may request not to be photographed or videotaped by sending written notification to the Office of Student Records and Registration by October 1 of the fall semester and February 15 of the spring semester.

Community College of Philadelphia assumes that failure to request in writing not to be photographed or videotaped demonstrates approval for the College to use images in its marketing and/or student recruitment materials.

## Transfer of Credits

#### **Transfer Credits**

Transfer credit evaluation is the appraisal of a student's transcript from another institution to determine eligibility for credit to be granted. At Community College of Philadelphia, the Office of Student Records and Registration will evaluate all official transcripts received from the student's previous college or university for all students seeking a degree. Evaluation of transcripts is a two-step process: First, students must request that all postsecondary institutions previously attended send transcripts of their academic records to:

Community College of Philadelphia Transfer Credit and Placement Office Office, MG-17 1700 Spring Garden Street Philadelphia, PA 19130-3991

Second, students must complete an online Transcript Evaluation Request form. Log into MyCCP and access the Electronic Forms Channel. Complete and submit the Transcript Evaluation Request form for processing.

#### Policy on Transfer Credit

The consideration of transfer credit or recognition of degrees will not be determined exclusively on the basis of the accreditation of the sending institution or the mode of delivery but, rather, will consider course equivalencies, including expected learning outcomes, with those of the receiving institution's curricula and standards.

GENERAL STATEMENT: Community College of Philadelphia will accept courses in which the grade earned was a "C-" or better, unless otherwise specified by program requirements.

This statement is qualified as follows:

- A. The Vice President for Student Affairs, or the Vice President's designee, is responsible for the development and implementation of this policy, in collaboration with other affected offices. The final determination for the acceptance of courses will be made by the Vice President for Academic Affairs or the Vice President's designee in consultation with Academic Divisions as deemed appropriate.
- B. Transfer credit will not be granted if granting such credit is contrary to the requirements of any recognized local, state, or federal accrediting or certifying agencies.
- C. Transfer of course credit earned ten or more years prior will be accepted in the same manner as all other requests, except where the department requires more current studies for certain majors.
- D. Credit may be awarded for courses from an institution, whether or not similar courses are offered at Community College of Philadelphia. These courses must satisfy both general elective and graduation requirements. A student must still complete all academic content and the total quantitative requirements for graduation.
- E. Community College of Philadelphia will grant degrees and academic certificates only to students who have earned at least 30 credit hours in residence for a degree and 15 credit hours for an academic certificate. Credit by Examination or Credit for Life Experience can be counted towards the residency requirement. Students on active duty with the Armed Forces need to earn only 15 credits in residence for a degree.

There are institutions that offer some courses that are two credit hours, and these are often scheduled in a sequential manner. These two-credit courses will be transferred in as follows:

- 1. If one course of a two-course sequence is completed, the student will receive two (2) transfer credits which may, with the appropriate discipline approval, satisfy a course prerequisite. Students must complete the minimum number of credits to graduate from the College.
- F. The College operates under the semester system. If a student seeks transfer credit for work completed under the "quarter" system, credits will be transferred in as follows:
  - 1. A one-year course of nine credits taken over three quarters will transfer in as six semester hours.
  - 2. Two quarters of coursework totaling six credits will transfer in as a two-course sequence of two credits each, and will be treated as explained under section E above.
  - 3. One quarter of coursework totaling three credits equals two semester credits and will be transferred in as explained under section E above.

In general, where a student has completed only six hours of the nine quarter hour system, this is equal to four credit hours under the semester system. Where a student has completed only three hours of the nine quarter hours, this is equal to two semester credit hours.

#### I. APPEAL PROCEDURES:

Academic transcripts are evaluated based upon the procedures established in this policy and through the guidance provided by the Academic Affairs areas. When transcripts are received for which there appears to be no Community College of Philadelphia equivalent, or for which no equivalency can be established based upon the course name and/or course description, the Academic Affairs areas are contacted to make a determination.

It is possible that errors in the articulation of coursework, or omission of prior coursework can occur. In the event a student believes that this has happened, the appeal procedure is as follows:

- A. Students should first contact the Office of Student Records and Registration to discuss the evaluation results with a Placement/Transfer Credit Specialist, and provide any additional documentation needed to assist with the review (e.g., an updated transcript or college catalog, or other documentation from the sending institution).
- B. If the issue is not resolved in step A, the student may request a conference with the administrator responsible for Placement/Transfer Credit. After conferring with the

- student, the administrator will present the student's claim along with any additional documentation to the academic area department head for consideration, and send written communication to the student within ten (10) working days regarding the decision.
- C. If the issue is not resolved in step B, the student may then request a meeting and final review with the Director of Student Records and Registration. The Director will consult with the appropriate academic dean for further guidance, and will communicate the dean's decision to the student in writing, within ten (10) working days. The decision of the dean is final.
- D. Appeals must be submitted no later than four months after the completion of the initial evaluation.

## Foreign Educational Credentials

Foreign educational credentials must be evaluated initially by a recognized evaluation and/or translation service. Contact the Transfer Credit and Placement Office, Room MG-17, at 215-751-8916 for a list of service agencies.

## Architecture

## Description:

This program leads to the Associate of Arts degree in Architecture. It prepares students for transfer to professional schools of architecture. The primary goals of the program are to provide students with the fundamental professional knowledge and technical skills needed to compete in the challenging and rewarding career of architecture, and to foster the development of each student's creative capacities, reflecting an integrated understanding of the multi-faceted factors influencing design decisions.

The curriculum and faculty are dedicated to providing each student with strong design skills and technical experiences early in his or her education. In the Architecture program, the design studio is the focus. It is here that design fundamentals are acquired, and technical, historical and theoretical concepts are synthesized and applied. Students increase their spatial visualization capabilities and are guided in developing a design process and a personal creative vision. At the same time, they learn to work as part of a design team. The design projects are organized to build aesthetic understanding, technical abilities, sensitivity to human needs and awareness of the social consequences of design decisions.

At the College, the study of architecture reflects the diverse and evolving roles and responsibilities of the design professional. The program provides a broad liberal arts education, drawing upon art, science, humanities, social science, and the history of architecture and interior design. This is the vital foundation that leads to the ability to design buildings that are functional, lasting and beautiful.

#### Student Learning Outcomes:

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

- Creatively solve specific design problems related to the fundamentals of architectural design in the built environment with the use of critical thinking, analysis, research, 2-D and 3-D formal ordering systems, and visual perception throughout the design process.
- Communicate effectively individually or as a member of a team: Describe the fundamentals of common construction materials and methods, their use in building components
  and assemblies, and their environmental impact.
  - 1. Orally
  - 2. Written
  - 3. In design drawings utilizing freehand drawing, manual and computer drafting
  - 4. By producing three-dimensional analog models and computer modeling.
- Explain the complex interaction of people, place, historical / cultural / environmental / technological contexts in architecture.

#### **Program Entry Requirements:**

Architecture is a select program. To be accepted into the program, students must complete <u>ADC 109 - Design Studio I</u> with a minimum grade of "C." When ADC 109 has been completed with a "C" or better, students will be accepted into the Architecture program. Students with college-level design work can be evaluated on an individual basis by the department faculty for admission prior to completing <u>ADC 109</u>.

Interested high school students should complete a year of geometry, two years of algebra and two years in art-related areas (drawing, sculpture, photography or related areas). Mechanical drafting or Computer Assisted Design is also advantageous.

Students are required to take the College's placement tests at the time of admission. Students identified as needing developmental coursework must satisfactorily complete the appropriate English and mathematics courses prior to enrolling in courses required by the degree program.

#### Program of Study and Graduation Requirements:

To qualify for the A. A. degree in Architecture, a student must complete a minimum of 64 credits as prescribed, attain a minimum grade point average of 2.0 ("C" average) and earn a "C" or higher in all ADC and ART courses.

## Architecture Course Sequence

Course Number and Name	Prerequisites and Corequisites	Credits	Gen Ed Req.
First Semester			
ADC 101 - Introduction to Design and Construction		3	Tech Comp*

ADC 103 - CAD Basics		3	Tech Comp*			
ADC 109 - Design Studio I		4				
ART 105 - Drawing I		3				
ENGL 101 - English Composition I		3	ENGL 101			
Second Semester	Second Semester					
ADC 159 - Design Studio II	ADC 103, ADC 109	4				
ADC 112 - Construction Materials and Detailing: Properties	ADC 103, ADC 109	3				
ADC 160 - Presentation Techniques	ADC 103	3				
MATH 161 - Precalculus I (or above as per placement) **	FNMT 118 or MATH 118 with a grade of "C" or better	3	Mathematics			
ENGL 102 - The Research Paper	ENGL 101 with a grade of "C" or better	3	ENGL 102, Info Lit			
Third Semester						
ADC 209 - Design Studio III	ADC 159, ADC 160	4				
ADC 212 - Construction Materials and Detailing: Methods	ADC 103 or ADC 109	3				
ADC 221 - History of Architecture and Interiors I	ENGL 101	3				
ADC 260 - Advanced Presentation Techniques	ADC 160; and ADC 209 which may be taken be taken concurrently, or ADC 163 which may be taken concurrently	3				
Humanities Elective		3	Humanities			
Fourth Semester						
ADC 222 - History of Architecture and Interiors II	ADC 221 and ENGL 102 which may be taken concurrently	3				
ADC 253 - Environmental Systems I or ADC 254 - Environmental Systems II	ADC 101 and ADC 103 or ADC 109	3				
ADC 259 - Design Studio IV	ADC 209	4				
Science Elective		3/4	Nat Science			
Social Science Elective **		3	Soc Science			
Minimum Credits Needed to Graduate: 64						

All General Education requirements are met through required courses (as indicated above) except for the **Writing Intensive**, **Interpretive Studies** and **American/Global Diversity** requirements. Therefore, in order to graduate, students in this program must choose one course that is designated Writing Intensive, one course that is designated **Interpretive Studies** and one course that is designated **American/Global Diversity**. The same course may be used to fulfill all three requirements. View the courses that fulfill all degree requirements and receive a more detailed explanation of the College's general education requirements to help in your selection.

<sup>\*</sup> Students must complete ADC 101 and ADC 103 to meet the Technological Competency requirement.

** Students should select Mathematics and Science courses at CCP that correspond with the requirements of the institution to which they intend to transfer.
For More Information Contact:
The Division of Liberal Studies, Room BR-21, 1700 Spring Garden Street, Philadelphia, PA 19130, Telephone (215) 751-8450; or the College Information Center (215) 751-8010.

## Art and Design

#### Description:

The Art and Design curriculum leads to the Associate in Arts (A.A.) degree for students planning to transfer to baccalaureate programs or professional art schools after study at Community College of Philadelphia. This curriculum prepares students for either a B.F.A. (Bachelor of Fine Arts) or a B.A. (Bachelor of Arts) program.

The curriculum has been designed to be consistent with the foundation program of art schools and art programs at four-year colleges. Because transferability is most important, students will develop skills accordingly and also prepare a comprehensive transfer portfolio.

As a select program, students are required to submit a portfolio of work and schedule an interview prior to declaring their major. This portfolio may consist of materials from previous course work (at the college or high school level) or self-directed work. Portfolios should include 10-12 pieces for review, ideally from various art disciplines (2D, 3D, graphic design, etc.).

#### **Student Learning Outcomes:**

Upon completion of this program graduates will be able to:

- Demonstrate proficiency in basic foundation level 2D and 3D design concepts, including perceptual drawing.
- Utilize learned technical studio and/or computer-based skills to realize and test visual ideas and concepts.
- Use a wide range of materials and means of expression to communicate visual ideas.
- Critically interpret and analyze visual concepts.
- · Demonstrate knowledge of the arts through associated terminology, historical practices and contemporary developments.

#### Program Entry Requirements:

Applicants to the program must submit a portfolio with 8 to 10 pieces of original art work to demonstrate ability, talent and originality, though potential rather than competence is the primary measure for admission.

Students are required to take the College's placement tests at their time of entry. Students identified as needing developmental course work must satisfactorily complete the appropriate English and mathematics courses as a part of their degree program.

#### Program Of Study And Graduation Requirements:

Students in the Art and Design curriculum must complete a series of General Education requirements that include English 101 and 102, college-level math, CIS 103, a Social Science and a Natural Science elective in addition to the program specific courses. English 101 and CIS 103 are expected to be completed within the first 30 credits. To qualify for the Associate in Arts (A.A.) degree in Art and Design, a student must complete a minimum of 63 credit hours as prescribed and attain a grade point average of 2.0 or better and no grade below "C" in any program core and directed elective course.

## Art and Design Course Sequence

Course Number and Name	Prerequisites and Corequisites	Credits	Gen Ed Req.
First Semester			
ART 105 - Drawing I		3	
ART 125 - Design I (black and white)		3	
<u>ART 111</u> - 3-D Design I		3	
ART 150 - Intro to Computer Art/Graphics		3	
ENGL 101 - English Composition I		3	ENGL 101

Second Semester				
ART 106 - Drawing II	ART 105	3		
ART 126 - Design II	ART 125	3		
<u>ART 112</u> - 3-D Design II	ART 111	3		
ART 103 - History of Art: Ancient to Renaissance		3	Interpretive Studies AM/Global Diversity	
CIS 103 - Applied Computer Technology		3	Tech Comp	
Third Semester				
ENGL 102 - The Research Paper	ENGL 101 with a grade of "C" or better	3	ENGL 102 Info Lit	
FNMT 118 - Intermediate Algebra (or higher)		3	Mathematics	
ART 290 - Portfolio Prep	ART 106, ART 111, ART 125	3		
ART 207 - Drawing III	ART 106	3		
ART 104 - History of Art: Renaissance to Modern		3	Humanities	
Directed Elective - Choose ONE from list below		3		
Fourth Semester				
Social Science Elective		3	Social Sciences	
ART 208 - Drawing IV	ART 207	3		
Directed Elective - choose TWO from list below		6		
Natural Science Elective		3/4	Natural Science	
Directed Electives (3 ARE NEEDED)				
ART 109 - Ceramics I				
ART 115 - Painting I				
ART 151 - Graphic Design I	Art 150 prereq. for Art 151			
ART 205 - Modern American Art	Art 103 and Art 104 prereq. for Art 205			
ART 209 - Ceramics II	Art 109 prereq. for Art 209			
ART 215 - Painting II	Art 115 prereq. for Art 215			
ART 251 - Graphic Design II	Art 151 prereq. for Art 251			
PHOT 101 - Introduction to 35mm Film Camera and Darkroom Techniques				
PHOT 151 - Digital Imaging				
Minimum Credits Needed to Graduate: 63				

All General Education requirements are met through required courses (as indicated above) except for the **Writing Intensive** requirement. Therefore, in order to graduate, students in this program must choose one course that is designated Writing Intensive. The same course may be used to fulfill both requirements. View the courses that fulfill all degree requirements and receive a more detailed explanation of the College's general education requirements to help in your selection.

## For More Information Contact:

The Division of Liberal Studies, Room BR-21, 1700 Spring Garden Street, Philadelphia, PA 19130, Telephone (215) 751-8450; or the College Information Center (215) 751-8010.

## Business - General

## Description:

The Business - General program is specifically designed to prepare students to transfer to a four-year business school. The program allows students to transfer to a variety of business programs, including Accounting, Finance, Marketing, Management, or other business areas. It provides the fundamental knowledge necessary to be a successful business student with the ultimate goal of graduation from a business transfer institution and finding employment in the business field. Students are required to enroll in BUSL 101 within the first twelve credits.

The student's chosen transfer institution determines the mathematics courses to complete in order to be a successful transfer candidate. Students completing MATH 162 and MATH 171 will be best prepared to transfer to baccalaureate programs accredited by the Association to Advance Collegiate Schools of Business (AACSB). Students who graduate with FNMT 118 and MATH 161 can still transfer to AACSB-accredited program but will need to take higher level Math at their transfer institution in order to graduate, or they can transfer to a number of non-AACSB programs and continue in those programs without taking additional math courses. Students should consult with an advisor or their intended transfer institution for additional guidance.

#### **Student Learning Outcomes:**

Upon completion of this program, students will be able to:

- Prepare, analyze, interpret and discuss an entity's basic financial statements verbally and in writing.
- Analyze the legal, economic and social impact of business decisions.
- Quantitatively evaluate the impact of business decisions, activities and events.
- Explain the role business has historically taken in different societal and economic systems.

#### **Program Entry Requirements:**

Students are required to take the College's placement test at their time of admission. Students identified as needing developmental course work must satisfactorily complete the appropriate English and mathematics courses as part of their degree program.

#### Program Of Study And Graduation Requirements:

To qualify for the Associate in Arts (A.A.) degree in Business - General, a student must complete a minimum of 63 credit hours as prescribed, earning a "C" or better grade in all courses and earning at least a 2.0 GPA. Most receiving institutions require a higher grade point average. To learn more about requirements of specific four-year schools, students should contact an advisor within the Business - General program, the Career and Transfer Center here at Community College of Philadelphia or the four-year college to which they intend to transfer.

#### Business - General Course Sequence

Course Number and Name	Prerequisites and Corequisites	Credits	Gen Ed Req.
First Semester			
BUSL 101 - Navigating Leadership and Business Professions		3	
ENGL 101 - English Composition		3	ENGL 101
FMNT 118 - Intermediate Algebra or MATH 162 - Precalculus II	For MATH 162: MATH 161 with a grade of "C" or better	3	Mathematics
CIS 103 - Applied Computer Technology		3	Tech Comp
ACCT 101 - Financial Accounting		4	
Second Semester			

ECON 181 - Principles of Economics (Macroeconomics)		3	
MATH 161- Precalculus I or MATH 171 - Calculus I	For MATH 161: FNMT 118 with a grade of "C" or better. For MATH 171: MATH 162 with a grade of "C" or better.	3/4	
ACCT 102 - Managerial Accounting	ACCT 101 with a grade of "C" or better	3	
ENGL 102 - The Research Paper	ENGL 101 with a grade of "C" or better	3	ENGL 102, Info Lit
MNGT 121 - Introduction to Business		3	
Third Semester			
MNGT 141 - Principles of Management	Pre- or Corequisite: MNGT 121	3	
ECON 182 - Principles of Economics (Microeconomics)		3	
MKTG 131 - Principles of Marketing	Pre- or coreq: MNGT 121	3	
ECON 112 - Statistics I	FNMT 118 or MATH 118, or higher than FNMT 118 placement on placement test	4	
HIST 121 - Global History I or HIST 122 - Global History II		3	Social Science American/Global Diversity
Fourth Semester			
ECON 114 - Statistics II  FIN 151 - Risk Management and Insurance  MNGT 142 - Management Information Systems	For ECON 114: <u>ECON 112</u> For MNGT 142: <u>MNGT 121</u>	3	
CHEM 101 - General Chemistry I or			
BIOL 106 - General Biology I or PHYS 111 - General Physics I or higher or	For PHYS 111: MATH 162 or MATH 171 or placement	4	Natural Science
BIOL 106 - General Biology I or		3	Natural Science Humanities
BIOL 106 - General Biology I or PHYS 111 - General Physics I or higher or  ENGL 115 - Public Speaking or	placement		

Minimum Credits Needed to Graduate: 63

All general education requirements necessary for graduation are met through the courses in the program as indicated above. Students who wish to take courses that differ from the general education courses indicated above must consult with an advisor or counselor before registering. A more detailed explanation of the College's general education requirements appear at degree requirements.

## For More Information Contact:

The Division of Business and Technology, Room B2-22, 1700 Spring Garden Street, Philadelphia, PA 19130, Telephone (215) 751-8785; or the College Information Center (215)

## Communication Studies

## Description:

The Communication Studies program leads to the Associate in Arts (A.A.) degree. The program gives students a concentration in the field of communication studies with a liberal arts foundation. The program is primarily intended for students seeking transfer to a four-year institution, although some graduates may plan on immediately entering the work force as communications professionals.

Surveys of employers conducted by the National Association of Colleges and Employers (NACE) and the federal report, 21st Century Skills for 21st Century Jobs, both stress the importance of interpersonal and professional communication competence as critical to success in virtually all fields.

#### **Student Learning Outcomes:**

Upon completion of this program graduates will be able to:

- Demonstrate critical thinking and communication competence by recognizing multiple choices in a given communication situation and making choices that lead to achieving specific goals.
- Apply the basic theories and principles of communication to one's lived experience in various contexts.
- Demonstrate proficiency in interpersonal communication, small group communication, public speaking, and public communication.
- . Demonstrate an understanding of ethical communication, with an ability to communicate in ways that promote dialogue within a context of diversity.

#### Program Entry Requirements:

The program is open to interested students. New students are normally required to take the College's placement tests at their time of entry. Students who are identified as needing developmental course work must complete satisfactorily the appropriate English and mathematics courses as a part of their degree program.

## Program Of Study and Graduation Requirements:

A minimum of 61 credits and a grade point average of 2.0 ("C" average) are required for graduation.

## Communication Studies Course Sequence

Course Number and Name	Prerequisites and Corequisites	Credits	Gen Ed Req.	
First Semester				
ENGL 101 - English Composition I		3	ENGL 101	
ENGL 116 - Interpersonal Communication	ENGL 101 or ENGL 114	3		
<u>FNMT 118</u> - Intermediate Algebra <sup>1</sup>		3	Math	
CIS 103 - Applied Computer Technology		3	Tech Comp	
SOC 101 - Introduction to Sociology or PSYC 101 - Introduction to Psychology or ANTH 112 - Cultural Anthropology		3	Social Science	
Second Semester				
ENGL 102 - The Research Paper	ENGL 101 with a grade of "C" or better	3	ENGL 102 and Info Lit	
Science Elective-Lab		4	Natural Science	
ENGL 107 - Society and Mass Communications	ENGL 101 which may be taken concurrently	3		

ENGL 115 - Public Speaking	ENGL 101 which may be taken concurrently	3	
ENGL 117 - Group and Team Communication	ENGL 101 which may be taken concurrently	3	
Third Semester			
ENGL 118 - Intercultural Communication	ENGL 101 which may be taken concurrently	3	
General Elective <sup>2</sup>		3	
Directed Elective - Choose One <sup>2</sup>			
Social Science:			
ANTH 112 - Cultural Anthropology  ANTH 202 - Co. L. P. L. i. C. C. K. J. P. L. i. C. K. J. P. J.			
<ul> <li>ANTH 202 - Gender Roles in Cross Cultural Perspective</li> <li>PSYC 101 - Introduction to Psychology</li> </ul>			
PSYC 110 - Descriptive Research Methods in	For ANTH 202: ENGL 101 and ANTH 101 or		
Psychology	ANTH 112 or SOC 101		
<ul> <li><u>PSYC 221</u> - Social Psychology</li> <li><u>SOC 101</u> - Introduction to Sociology</li> </ul>	For PSYC 202: PSYC 101		
SOC 212 - Sociology of Marriage and Family	1011010 202.1010 101		
• SOC 231 - Social Problems	For PSYC 215: PSYC 101 or BIOL 109.		
SOC 233 - The Sociology of Ethnic and Minority Group Relations	For SOC 212, 231, and 233: SOC 101 or ANTH		
WS 101 - Introduction to Women's Studies	112		
Communication/Theater/Mass Media/English:	For ENGL 114: ENGL 101		
• ENGL 114 - Introduction to Speech Communication	For ENGL 124: ENGL: 107, must be taken prior,		
• ENGL 120 - Voice and Articulation	and PHOT 151, which may be taken concurrently		
<ul> <li>ENGL 122 - Writing for Mass Media</li> <li>ENGL 124 - Introduction to Mass Media Design</li> </ul>	For ENGL 132: ENGL 131 or permission of the		
• ENGL 131 - Acting I	department head		
• ENGL 132 - Acting II			
<ul> <li><u>ENGL 137</u> - Introduction to Theater</li> <li>Any 200 level ENGL course</li> </ul>	For MGNT 141: MNGT 121		
Management and Leadership:			
<ul> <li>MNGT 121 - Introduction to Business</li> <li>MNGT 141 - Principles of Management</li> </ul>			
<ul> <li>MNGT 141 - Principles of Management</li> <li>PHIL 111 - Critical Thinking</li> </ul>			
Humanities Elective <sup>2</sup>		3	Humanities
Literature Elective (choose one):			
ENGL 190 - Introduction to Literature			
ENGL 211 - Survey of British Literature: From Beginnings to 1750			
ENGL 212 - Survey of British Literature: From 1750 to the Modern Era			
ENGL 221- Survey of American Literature: From the Beginnings to the Civil War or			
ENGL 222- Survey of American Literature: From the Civil War to the Present or			
ENGL 232 - Introduction to Dram			
ENGL 241 - Introduction to Shakespeare		3	
ENGL 245- World Literature: From Antiquity to 1500 or ENGL 246- World Literature: From 1500 to the Present or			
ENGL 250- African-American Literature I or			
<del></del>			

ENGL 251- African-American Literature II or ENGL 260- Women in Literature ENGL 265 - Science Fiction ENGL 297H - Literature in the Context of Intellectual History: Ancient and Medieval (Honors) ENGL 298H - Literature in the Context of Intellectual History: Modern (Honors) ENGL 299 - Special Topics in Literature			
Fourth Semester			
ENGL 214 - Communication Theory	ENGL 115 with a "C" grade or higher and ENGL 107 or ENGL 116 with a "C" grade or higher	3	
General Elective <sup>2</sup>		3	
General Elective <sup>2</sup>		3	
Directed Elective - Choose one from list above <sup>2</sup>		3	
Directed Elective - Choose one from list above <sup>2</sup>		3	
Minimum Credits Needed to Graduate: 61			

All General Education requirements are met through required courses (as indicated above) except for the **Writing Intensive** requirement, the **Interpretive Studies** requirement and the **American/Global Diversity** requirement. Therefore, in order to graduate, students in this program must choose one course that is designated **Writing Intensive**, one course that is designated **Interpretive Studies**, and one course that is designated **American/Global Diversity**. The same course may be used to fulfill more than one requirement. View the courses that fulfill all <u>degree requirements</u> and receive a more detailed explanation of the College's general education requirements to help in your selection.

<sup>2</sup>General electives and directed electives should be chosen in consultation with an advisor based on student's academic and career goals, as well as specific requirements of transfer institutions. Students planning to transfer should strongly consider taking a Math class above FNMT 118 as a general elective.

#### For More Information Contact:

The Division of Liberal Studies, Room BR-21, 1700 Spring Garden Street, Philadelphia, PA 19130, Telephone (215) 751-8450; or the College Information Center (215) 751-8010.

<sup>&</sup>lt;sup>1</sup>For appropriate transfer credit, math courses should be chosen in consultation with an advisor.

## Education: Early Childhood (Birth to 4th Grade)

## Description:

The Education: Early Childhood (Birth to 4th Grade) Program develops the knowledge and competence of students interested in teaching or working in related careers with children birth through fourth grade. The Program provides a sound theoretical foundation in principles of child growth and development from the prenatal period through the primary years, as well as a functional understanding of programs and curricula appropriate for young children. Skills emphasized include child observation, curriculum planning for diverse learners, advocacy, and interpersonal and communication abilities.

Upon completion of the Program students receive an Associate in Arts degree and may either enter the workforce or transfer to a baccalaureate program in Education.

Because the curriculum supports the needs of those wishing to pursue a variety of options including transfer, it is highly recommended that students consult Program advisors, catalogs, and transfer worksheets available in the Career and Transfer Center in order to make appropriate course selections.

Graduates of the Program will be prepared to work as childcare practitioners and directors, parent educators, children's recreation staff, teacher assistants and instructional aides. Graduates who wish to become certified teachers will need to transfer to and complete a Pennsylvania Department of Education approved teacher certification program at a four year college or university.

#### **Student Learning Outcomes:**

Upon successful completion of the Education: Early Childhood degree program graduates will be able to:

- · Identify key theories of child development
- · Responsibly apply systemic observation, documentation, and other assessment techniques, in partnership with families and other professionals
- · Design, implement, and assess differentiated curricula and experiences to positively influence the development of every child
- Demonstrate ethical and professional standards and make decisions as part of continuous collaborative learning, informed reflective practice, and diverse field experiences
- Demonstrate effective oral and written communication skills in the discourse of the discipline.

#### **Program Entry Requirements:**

New students are normally required to complete the College's placement test prior to their enrollment. Students identified as needing developmental work must satisfactorily complete the appropriate developmental English and mathematics courses as part of the program.

Because students will be required to observe and work with young children the Program requires students to meet the requirements of the Child Protective Services Law, 23 Pa. C.S.A., section 6344 (relating to prospective child care personnel). Students must therefore present up-to-date Pennsylvania criminal history reports, Federal Bureau of Investigation criminal history reports, Department of Public Welfare (child abuse) reports, and health clearances, clearly stating that they are eligible to work with children. (Up-to-date clearance is defined as being no more than 12 months old on the first day of working with children.) Failure to produce up-to-date clearances or a change of clearance status may result in a student's removal from the program. A student who believes that an error of fact has been made in his/her removal may appeal that decision. Information regarding the appeal procedure will be provided with the letter of removal.

#### Program of Study and Graduation Requirements:

To qualify for the Associate in Arts (A.A.) Degree in Education: Early Childhood (Birth-4th grade) program, a student must complete a minimum of 62 credit hours as described in the course listing below. In addition, the student must have a cumulative grade point average of 2.0, and a minimum grade of "C" in all Education courses. During their matriculation in the Education: Early Childhood (Birth-4th grade), it is strongly recommended that students meet with a designated Education academic advisor to choose their courses. Students whose behavior is viewed as inconsistent with professional standards may be dropped from the curriculum pending a departmental hearing.

#### Prior Learning Assessment:

Students may be eligible to apply for credits for prior learning. Interested students should contact the program coordinator for further information regarding the criteria and an application.

#### Education: Early Childhood (Birth to 4th Grade) Course Sequence

Course Number and Name	<b>Prerequisites and Corequisites</b>	Credits	Gen Ed Req.
First Semester			

ENGL 101 - English Composition		3	ENGL 101
CIS 103 - Applied Computer Technology		3	Tech Comp
ED 105 - Foundations of Early Childhood Education		3	
PSYC 101 - Introduction to Psychology		3	Social Science
MATH 151 - Linear Mathematics OR MATH 152 - Probability OR MATH 123 - Mathematical Principles I	FNMT 118 with a C or better or MATH 161 (or higher) placement	3	Mathematics
Second Semester			
ENGL 102 - The Research Paper	ENGL 101 with a grade of "C" or better	3	ENGL102 & Info. Lit.
ED 135 - Family and Community Relationships		3	
MATH 161 - Precalculus I OR MATH 133 - Mathematical Principles II	FNMT 118 with a C or better or MATH 161 (or higher) placement For MATH 133: MATH 123	3	
PSYC 201 - Child Psychology	PSYC 101	3	
ED 204 - Curriculum & Instruction: Engaging Young Children in the Learning Process OR ED 214 - Cognition and Learning in the Classroom	ED 105 ENGL 101 and ED 105 or ED 201	3	
Third Semester  ED 222 - Language and Literacy Development in Early	PSYC 201 ED 204 or		
Childhood	ED 214	3	
ED 230 - Integrating the Arts into Early Childhood Education	ED 105	3	
ED 245 - Assessment of Young Children	ED 204 or ED 214	3	
BIOL 106 - General Biology I		4	Natural Science
ED 250 - Infant and Toddler Development and Curriculum	ED 204 or ED 214	3	
Fourth Semester			
ED 255 - Teaching English Language Learners	ED 105 or ED 201 and ED 204 or ED 214	3	
ED 265 - Introduction to Special Education and Inclusive Practices	ED 105 or ED 201 and PSYC 201 or PSYC 209 or PSYC 215	3	
HIST 101 - United States History: Colonial America through the Revolutionary Era OR HIST 102 - United States History: The 19th Century OR HIST 103 - United States History: The 20th Century		3	Humanities, Writing Intensive, Interpretive Studies, Am/Global Div.
ED 290 - Early Childhood Education Practicum	ED 222 and ED 245	4	

Directed Elective - choose one

ENGL 190 - Intro to Literature
GEOG 180 - Urban Geography
SNGL 115 - Public Speaking
ED 151 - Health, Safety and Nutrition for the Young Child

## Minimum Credits Needed to Graduate: 62

#### General Education Requirements

All General Education requirements are met through required courses as indicated above. View the courses that fulfill all <u>degree requirements</u> and receive a more detailed explanation of the College's general education requirements to help in your selection.

<sup>1</sup>Directed Electives should be selected in consultation with an advisor based on career goals and requirements of the institution to which the student plans to transfer. Note that many baccalaureate programs in education require two semesters of college level math and two semesters of lab science. <sup>2</sup>\*Students who enter the College at the Math 161 level or higher can complete this program in 62 credits. Students who enter the College at a lower level on the Math placement exam will need to take FNMT 118 - Intermediate Algebra and thus will need 65 credits to graduate.

#### For More Information Contact:

The Division of Liberal Studies, Room BR-21, 1700 Spring Garden Street, Philadelphia, Pa. 19130, Telephone (215) 751-8450; or call the College Information Center (215) 751-8010.

## Education: Middle Level (4th to 8th Grades)

## Description:

The Education: Middle Level (4th to 8th grades) Program prepares students for transfer to baccalaureate-degree granting institutions. After successful completion of the Program, students receive an Associate in Arts (A.A.) Degree. Most graduates then transfer to a four year institution where they earn a Bachelor of Science or Bachelor of Arts in Education and are eligible for Certification to teach Grades 4-8. The curriculum helps students to apply the knowledge, concepts, and skills essential for successful elementary/middle years instruction.

Because students have options with respect to specific content areas they would like to pursue, and because transfer institutions require specific courses, it is highly recommended that students consult catalogues of schools to which they might transfer and transfer worksheets available in the Career and Transfer Center, as well as their advisor to make appropriate course selections.

According to Pennsylvania mandates, under Chapter 354, students need a 3.0 G.P.A. for entry into upper level education courses and teacher certification programs at four year schools. In addition, they must pass the Pre-Professional Academic Performance Assessment (PAPA) before being admitted into these upper-level courses at four year schools.

#### **Student Learning Outcomes:**

Upon successful completion of the Education: Middle Level degree program graduates will be able to:

- Identify career options open to an individual with a background in education and describe the path required to Pennsylvania Teacher Certification
- · Explain key concepts in adolescent development
- · Conduct effective assessments and use information gathered for diagnostic and lesson planning purposes
- Demonstrate an understanding of classroom dynamics, including: motivation, teacher expectations, classroom management/behavior modification, special education and the inclusive classroom models, discourse of the discipline, teaching techniques, and curriculum planning and organization
- Demonstrate knowledge within four content areas: math, science, English/language arts/reading, and social studies
- Demonstrate knowledge of accommodations and adaptations for diverse learners.

#### **Program Entry Requirements:**

New students are normally required to complete the College's placement test prior to their enrollment. Students identified as needing developmental work must satisfactorily complete the appropriate developmental English and mathematics courses as part of the program.

Because students will be required to observe and work with children the Program requires students to meet the requirements of the Child Protective Services Law, 23 Pa. C.S.A., section 6344 (relating to prospective child care personnel). Students must therefore present up-to-date Pennsylvania criminal history reports, Federal Bureau of Investigation criminal history reports, Department of Public Welfare (child abuse) reports, and health clearances, clearly stating that they are eligible to work with children. (Up-to-date clearance is defined as being no more than 12 months old on the first day of working with children.) Failure to produce up-to-date clearances or a change of clearance status may result in a student's removal from the program. A student who believes that an error of fact has been made in his/her removal may appeal that decision. Information regarding the appeal procedure will be provided with the letter of removal.

#### Program of Study and Graduation Requirements:

To qualify for the Associate in Arts (A.A.) Degree in Education: Middle Level (4th to 8th grades), a student must complete a minimum of 61 credit hours as described in the course listing on the following page. In addition, the student must have a cumulative grade point average of 2.0, and a minimum grade of "C" in all Education courses. During their matriculation in the Education: Middle Level (4th to 8th grades) Program, it is strongly recommended that students meet with a designated Education academic advisor to choose their courses.

Students whose behavior is viewed as inconsistent with professional standards may be dropped from the curriculum pending a departmental hearing.

## Education: Middle Level (4th to 8th Grades) Course Sequence

Course Number and Name	Prerequisites and Corequisites	Credits	Gen Ed Req.
First Semester			
ENGL 101 - English Composition I		3	ENGL 101
CIS 103 - Applied Computer Technology		3	Tech Comp

PSYC 101 - Introduction to Psychology		3	Soc Science
MATH 151 - Linear Mathematics (or higher math) or MATH 161 - Precalculus I*	"C" or better in FNMT 118 or Math 161 placement level For MATH 161: FNMT 118 with a grade of "C" or better	3	Mathematics
HIST 101 - U.S. History: Colonial America through the Revolutionary Era or HIST 102 - U.S. History: The 19th Century* or HIST 103 - U.S. History: The 20th Century		3	Am/Global, Diversity Studie Interpretive Writing Intensiv Humanities
Second Semester			
ENGL 102 - The Research Paper	ENGL 101 with a grade of "C" or better	3	ENGL 102 & Info Lit
ED 201 - Foundations of Education for Middle and Secondary Years	ENGL 101	3	
Literature Elective: ENGL 211, 212, 221, 222, 230, 232, 241, 245, 246, 250, 251, 256, 260, 265, (choose one)	ENGL 101	3	
MATH 152 - Probability or MATH 162 - Precalculus II*	For MATH 152: FNMT 118 with a grade of "C" or better or MATH 161 (or higher) placement  For MATH 162: MATH 161 with a grade of "C" or better	3	
Laboratory Science		4	Natural Science
Third Semester	-		
ED 214 - Cognition and Learning in the Classroom	ENGL 101 and ED 105 or ED 201	3	
PSYC 209 - Adolescent Psychology	PSYC 101	3	
Science Elective		3/4	
Content Elective		3	
Content Elective		3	
Fourth Semester			
ED 265 - Introduction to Special Education and Inclusive Practices	ED 105 or ED 201 and PSYC 201 or PSYC 209 or PSYC 215	3	
ED 255 - Teaching English Language Learners	ED 105 or ED 201 and ED 204 or ED 214	3	
Art/Music course  ART 103 - History of Art: Ancient to Renaissance or  ART 104 - History of Art: Renaissance to Modern or  MUS 103 - Introduction to Music or  MUS 105 - Music of the Baroque and Classical Eras or  MUS 106 - Great Romantic Music or  MUS 120 - Music of African-Americans or  MUS 121 - Modern American Music		3	
Content Elective		3	
Content Elective		3	

- \* Students should choose math courses according to transfer institution.
- \*\*Students planning to transfer to Temple University should take Hist 101 or HIST 103, not HIST 102.

#### Content Electives

The following information regarding content electives is for informational purposes only. It is provided to guide students in choosing content elective courses. Students in this program do not need to declare a content area or an option while at the College although they should consider which subjects they wish to teach when choosing content electives. Students will not earn all of the necessary content electives in this program. They will need to take content electives both here and at the baccalaureate school to which they transfer.

Pennsylvania Department of Education (PDE) requires candidates for 4th-8th grade teacher certification to earn credits across four content areas — mathematics, science, English/language arts/reading and social studies. Students may earn these credits at the College and at their transfer institution. PDE provides two options for distribution of credits.

Option 1	Option 2
30 credits in one content area 12 in each of the other three Total = 66 credits	21 credits in one content area 21 credits in second content area 12 credits in the other two areas Total = 66 credits
Schools or districts could impose additional requirements, but by PDE regulations a teacher candidate who follows Option 1 would be eligible to teach all subjects at 4th-6th grade level, but only one subject at the 7th-8th grade level.	Schools or districts could impose additional requirements, but by PDE regulations a teacher candidate who follows Option 2 would be able to teach all subjects at the 4th-6th grade level and two subjects at the 7th and 8th grade levels.

Note: Under Option 2, a student must choose either Mathematics or Science as one of the two content areas. PDE does not allow teacher candidates to choose English and Social Studies as their two content areas. Therefore, there are five content combinations possible under Option 2:

- · Mathematics and Science
- Mathematics and English/Language Arts/Reading
- Mathematics and Social Studies
- · Science and English/Language Arts/Reading
- · Science and Social Studies

When choosing content electives, students should keep in mind that the Program requires

- 6 credits in mathematics (MATH 151 and MATH 152)
- 9 credits in English (ENGL 101, ENGL 102 and Literature elective)
- 7 credits in science
- 3 credits in social studies (<u>HIST 101</u>, <u>HIST 102</u> or <u>HIST 103</u>)

These required courses may count towards the totals listed on the table above depending on the transfer institution.

Students should choose content electives in consultation with an advisor based on the requirements of their intended transfer institution and the content area(s) in which they plan to teach. PDE only certifies baccalaureate programs in education; PDE does not certify Associate programs. Therefore, the College cannot guarantee that the content courses listed below will count towards the PDE requirement. Acceptance will be determined by the four-year college to which the student transfers and courses accepted vary by institution.

Content Area (as defined by PDE)	CCP courses recommended
English/Language Arts/Reading	ENGL 190, 211, 212, 221, 222, 230, 232, 241, 245, 246, 250, 251, 256, 260, 265, 299 (literature courses) ENGL 205, 280, 281, 282, 283 (creative writing courses)
Social Studies	ANTH 112 ECON 181, 182 GEOG 101, 103, 180, 222 HIST 101, 102, 103, 121, 122 220, 221 POLS 111, 112 RS 151 SOC 101, 233
Mathematics	MATH 161, 162, 171, 172, 251, 270, 271
	CHEM 105, 110, 121, 122 EASC 111

Science	BIOL 106-107 or BIOL 123-124 PHYS 111-112 or PHYS 141-240
Other Content Electives (Not required by PDE for 4th-8th grade teacher certification but may be required by some four year colleges. Students should consult an advisor or the transfer guides in the Career and Transfer Center.)	Foreign Language courses Religious Studies courses ENGL 115 - Public Speaking

All General Education requirements are met through required courses as indicated above. View the courses that fulfill all <u>degree requirements</u> and receive a more detailed explanation of the College's general education requirements to help in your selection.

## For More Information Contact:

The Division of Liberal Studies, Room BR-21, 1700 Spring Garden Street, Philadelphia, Pa. 19130, Telephone (215) 751-8450; or call the College Information Center (215) 751-8010.

## Education: Secondary Humanities/Social Studies Education Option

## Description:

The Education curriculum prepares students for transfer to baccalaureate degree-granting institutions by introducing them to the field of education while guiding them through a coherent sequence of liberal arts and sciences courses. By doing this, they prepare for careers in the field of education. After successful completion of this curriculum, students receive an Associate in Arts (A.A.) degree.

The Education: Secondary Humanities/Social Studies Education Option is appropriate for students who plan to pursue careers teaching humanities (such as English and foreign languages) or social studies education (including such subjects as history, government and political science) in secondary schools. This option emphasizes humanities and social science courses which students select according to their field of interest.

The Education curriculum has many transfer agreements with baccalaureate degree-granting institutions in the region. Because transfer institutions require specific courses to be taken prior to entry, it is highly recommended that students consult catalogues of schools to which they might transfer, as well as their advisors, in order to make appropriate selections for their elective courses. According to Pennsylvania mandates under Chapter 354, students will need a 3.0 G.P.A. for entry into teacher certification courses. In addition, they must pass the Pre-Professional Academic Performance Assessment (PAPA) before entry into upper level teacher certification courses at the transfer institution.

#### **Student Learning Outcomes:**

Upon completion of this program graduates will be able to:

- Identify career options open to an individual with a background in education and describe the path required to State Teacher Certification and tenure.
- Explain the history of the American education system, philosophical perspectives, and the social and cultural mores that shape contemporary practices in education.
- Demonstrate an understanding of school structure, governance and finance.
- Demonstrate an understanding of classroom dynamics including: motivation, teacher expectations, classroom management / behavior modification, special education and the
  inclusive classroom models, discourse of the discipline, teaching techniques and curriculum planning and organization.
- Demonstrate competence in the use of technology for teaching through teacher record keeping and differentiating instruction.
- Demonstrate effective oral and written communication skills.
- Demonstrate an understanding of how various theoretical frameworks apply to learning and development

#### **Program Entry Requirements:**

Students are typically required to take the College's placement tests at their time of entry. Students identified as needing developmental course work must satisfactorily complete the appropriate English and mathematics courses as a part of their degree program.

## Program Of Study And Graduation Requirements:

A minimum of 64 credits and a grade point average of 2.0 are required for graduation.

## Education: Secondary Humanities/Social Studies Education Option Course Sequence

Course Number and Name	Prerequisites and Corequisites	Credits	Gen Ed Req.
First Semester			
ENGL 101 - English Composition I		3	ENGL 101
MATH 150 - Introductory Data Analysis or Higher or MATH 161 - Precalculus I*	FNMT 118 or MATH 118 with a grade of "C" or better or MATH 161 placement For MATH 161: FNMT 118 with a grade of "C" or better	3	Mathematics
Lab Science ( <u>BIOL 106</u> - General Biology I or other BIOL, CHEM or PHYS)		4	Natural Science

PSYC 101 - Introduction to Psychology		3	Social Sciences
CIS 103 – Applied Computer Technology		3	Tech Comp
Second Semester			
ENGL 102 The Research Paper	ENGL 101 with a grade of "C" or better	3	ENGL 102, Info Lit
MATH 151 - Linear Mathematics or MATH 162 - Precalculus II*	For MATH 1512: FNMT 118 or MATH 118 with a grade of "C" or better or MATH 161 placement For MATH 162: MATH 161 with a grade of "C" or better	3	
Science (Lab or non-lab science)		3/4	
HIST 101 - U.S. History: The Colonial Period** or HIST 102 - U.S. History: The 19th Century or HIST 103 - U.S. History: The 20th Century**		3	Humanities, Am/Global Diversity Writing Intensive, Interpretive Studies
ED 201 - Foundations of Education for Middle and Secondary Years	ENGL 101 which may be taken concurrently	3	
Third Semester			
Literature Elective or <u>HUM 101</u> - Cultural Traditions or <u>HUM 102</u> - Cultural Traditions	ENGL 101 ENGL 101, which may be taken concurrently	3	
ED 214 - Cognition and Learning in the Classroom	ENGL 101 and and ED 105 or ED 201	3	
PSYC 209 - Adolescent Psychology	PSYC 101	3	
ENGL 115 - Public Speaking	ENGL 101 which may be taken concurrently	3	
Content Elective (see chart below for choice of content electives)		3	
Content Elective (see chart below for choice of content electives)		3	
Fourth Semester			
ED 265 - Introduction to Special Education and Inclusive Practices	ED 105 or ED 201 and PSYC 201 or PSYC 209 or PSYC 215	3	
Art/Music/Philosophy - select one			
<ul> <li>ART 103 - History of Art: Ancient to Renaissance or</li> <li>ART 104 - History of Art: Renaissance to Modern or</li> <li>MUS 103 - Introduction to Music or</li> <li>MUS 105 - Music of the Baroque and Classical Eras or</li> <li>MUS 106 - Great Romantic Music or</li> <li>MUS 120 - Music of Music of African-Americans or</li> <li>MUS 121 - Modern American Music or</li> <li>PHIL 101 - Introduction to Philosophy or</li> <li>PHIL 211 - Ethical Problems or</li> <li>PHIL 151 - World Religion or</li> <li>PHIL 152 - Philosophy of Religion</li> </ul>		3	

Content Elective (see chart below for choice of content electives)	3	
Content Elective (see chart below for choice of content electives)	3	
Content Elective (see chart below for choice of content electives)	3	
Minimum Credits Needed to Graduate: 64		

All General Education requirements are met through required courses as indicated above. A more detailed explanation of the College's general education requirements can be found on the following degree requirements. Web page.

Literature is strongly recommended; consult with advisor or transfer worksheets for best choice of course.

#### For More Information Contact:

The Division of Liberal Studies, Room BR-21, 1700 Spring Garden Street, Philadelphia, PA 19130, Telephone (215) 751-8450; or the College Information Center (215) 751-8010.

## **Content Electives**

Students should choose five content electives based on the subject they plan to teach as illustrated below

English	Foreign Languages	Social Studies	Art	Music
Five courses in literature, creative writing, or other humanities	Recommended minimum of two semesters in the language they plan to teach and three humanities electives. (Students who are already fluent in the language they intend to teach should take five humanities electives instead.)	Choose any five:     POLS 111     Econ 181 or 182     History 101, 102, 103 <sup>2</sup> , 121,     122, 220, 221     GEOG 101, 103, 180, 222     Sociology 101, 233     Anthropology 112	Art 103 Art 104 Art 105 Art 109 Art 115  Students who intend to teach art at the secondary level should also prepare a portfolio.	Five music courses are required. MUS 105 and 106 are particularly recommended. MUS 111, 113, 114, 120 and 121 are also recommended.  Most baccalaureate programs in music education require testing and/or auditions for incoming transfer students. CCP students who intend to teach music should contact their intended transfer institutions for details.

<sup>\*</sup> Students should choose math courses according to transfer institution.

<sup>\*\*</sup> Students planning to transfer to Temple University should take <u>Hist 101</u> or <u>HIST 103</u>, not HIST 102.

## Education: Secondary Math/Science Option

## Description:

The Education curriculum prepares students for transfer to baccalaureate degree-granting institutions by introducing them to the field of education while guiding them through a coherent sequence of liberal arts and sciences courses. By doing this, they prepare for careers in the field of education. After successful completion of this curriculum, students receive an Associate in Arts (A.A.) degree.

The Education: Secondary Math/Science Option is appropriate for students who plan to pursue careers in teaching mathematics, science or related fields in secondary schools.

The Education curriculum has many transfer agreements with baccalaureate degree-granting institutions in the region. Because transfer institutions require specific courses to be taken prior to entry, it is highly recommended that students consult catalogues of schools to which they might transfer, as well as their advisors, in order to make appropriate selections for their elective courses. According to Pennsylvania mandates under Chapter 354, students will need a 3.0 G.P.A. for entry into teacher certification courses. In addition, they must pass the Pre-Professional Academic Performance Assessment (PAPA) before entry into upper level teacher certification courses at the transfer institution.

#### **Student Learning Outcomes:**

Upon completion of this program graduates will be able to:

- Identify career options open to an individual with a background in education and describe the path required to State Teacher Certification and tenure.
- Explain the history of the American education system, philosophical perspectives, and the social and cultural mores that shape contemporary practices in education.
- Demonstrate an understanding of school structure, governance and finance.
- Demonstrate an understanding of classroom dynamics including: motivation, teacher expectations, classroom management / behavior modification, special education and the
  inclusive classroom models, discourse of the discipline, teaching techniques and curriculum planning and organization.
- Demonstrate competence in the use of technology for teaching through teacher record keeping and differentiating instruction.
- Demonstrate effective oral and written communication skills.
- Demonstrate an understanding of how various theoretical frameworks apply to learning and development.

#### **Program Entry Requirements:**

Students are typically required to take the College's placement tests at their time of entry. Students identified as needing developmental course work must satisfactorily complete the appropriate English and mathematics courses as a part of their degree program.

Since students in the Math/Science Option begin mathematics with Calculus I, it is necessary for those students who have not tested into this level of mathematics to take the prerequisite math courses (MATH 161 and MATH 162, or to have taken their equivalents at another college) either before enrolling or while enrolled in the program.

#### Program of Study and Graduation Requirements:

A minimum of 63 credits and a grade point average of 2.0 are required for graduation.

## Education: Secondary Math/Science Option Course Sequence

Course Number and Name	Prerequisites and Corequisites	Credits	Gen Ed Req.
First Semester			
ENGL 101 - English Composition I		3	ENGL 101
MATH 171 - Calculus I	MATH 162 or permission of dept. head	4	Mathematics
PSYC 101 - Introduction to Psychology		3	Social Sciences
HIST 101 - U.S. History: Colonial America through the Revolutionary Era or HIST 102 - U.S. History: The 19th Century or HIST 103 - U.S. History: The 20th Century <sup>1</sup>		3	Humanities Am/Global Diversity Interpretive Writing Intensive

CIS 103 - Applied Computer Technology*		3	Tech Comp
			Teen comp
Second Semester			
Content Elective (see chart below for choice of content electives)		4 or 5	Natural Science
ENGL 102 - The Research Paper	ENGL 101 with a grade of "C" or better	3	ENGL 102, Info Lit
MATH 172 - Calculus II	MATH 171	4	
ED 201 - Foundations of Education for Middle and Secondary Years	ENGL 101 which may be taken concurrently	3	
Third Semester			
Content Elective (see chart below for choice of content electives)		4 or 5	Natural Science
Content Elective (see chart below for choice of content electives)		4 or 5	Natural Science
ED 214 - Cognition and Learning in the Classroom	ENGL 101 and ED 105 or ED 201	3	
PSYC 209 - Adolescent Psychology	PSYC 101	3	
Literature Elective or <u>HUM 101</u> or <u>HUM 102 - Cultural Traditions</u> <sup>2</sup>	ENGL 101 ENGL 101, which may be taken concurrently.	3	
Fourth Semester			
ED 265 - Introduction to Special Education and Inclusive Practices	ED 105 or ED 201, & PSYC 201, or PSYC 209, or PSYC 215	3	
ANTH 112 - Cultural Anthropology or ECON 181 - Principles of Economics (Macroeconomics) or ECON 182 - Principles of Economics (Microeconomics) or SOC 101 - Introduction to Sociology or GEOG 101 - Introduction to Geography or GEOG 103 - Cultural Geography or GEOG 180 - Urban Geography or GEOG 222 - World Regional Geography <sup>1</sup>	GEOG 101 or GEOG 103	3	
Art/Music/Philosophy/Foreign Language course  • ART 103 - History of Art: Ancient to Renaissance or • ART 104 - History of Art: Renaissance to Modern or • MUS 103 - Introduction to Music or • MUS 105 - Music of the Baroque and Classical Era or • MUS 106 - Great Romantic Music or • MUS 120 - Music of African-Americans or • MUS 121 - Modern American Music or • PHIL 101 - Introduction to Philosophy or • PHIL 211 - Ethical Problems or • PHIL 151 - World Religions or • PHIL 152 - Philosophy of Religion or		3	Humanities

• Foreign language: any 100 or 200-level course <sup>1</sup>			
ENGL 115 - Public Speaking	ENGL 101 which may be taken concurrently	3	
Content Elective (see chart below for choice of content electives)		4 or 5	

Minimum Credits Needed to Graduate: 63

## General Education Requirements

All General Education requirements are met through required courses as indicated above. A more detailed explanation of the College's general education requirements can be found on the <u>degree requirements</u> Web page.

## For More Information Contact:

The Division of Liberal Studies, Room BR-21, 1700 Spring Garden Street, Philadelphia, PA 19130, Telephone (215) 751-8450; or the College Information Center (215) 751-8010.

## **Content Electives**

All students must take four content electives. Students may earn the Associate's degree with any combination of four of the courses listed on the chart below.

Students planning to teach secondary <b>mathematics</b> or <b>physics</b> should take the following content electives:	Students planning to teach secondary <b>chemistry</b> should take the following content electives:	Students planning to teach secondary <b>biology</b> or <b>general science</b> should take the following content electives:
Math 270 and Math 271 and PHYS 111 and PHYS 112 OR PHYS 140 and 241	<u>CHEM 121, 122, 221, and 222</u>	BIOL 123 and 124 CHEM 121 and 122

<sup>&</sup>lt;sup>1</sup> Consult with your advisor and use transfer worksheets to determine the best course choice.

<sup>&</sup>lt;sup>2</sup> Literature is strongly recommended; consult with advisor and transfer worksheets for best choice of courses.

## English

## Description:

The English degree program is for Community College of Philadelphia students planning to transfer to baccalaureate programs in English and for students interested in literature and writing. Because transfer institutions require students to take specific courses, it is highly recommended that students consult catalogs of schools to which they might transfer and transfer worksheets available in the Career and Transfer Center (or from the English Department), as well as their advisors and mentors, in order to make appropriate selections for their elective courses. The A.A. degree in English is appropriate for students who wish to focus on literature and writing, while improving their ability to read, analyze, interpret, research and persuade.

#### Student Learning Outcomes:

Upon completion of this program graduates will be able to:

- Demonstrate how elements typical of a literary genre help to create a work's theme or artistic impact.
- Demonstrate a basic understanding of critical approaches to literary study, including relevant terminology.
- Analyze a work of literature written in English in its cultural and historical context.
- Engage in effective academic writing within the discipline of literature.

#### **Program Entry Requirements:**

Students are typically required to take the College's placement tests at their time of entry. Students identified as needing developmental course work must satisfactorily complete the appropriate English and Mathematics courses as a part of their degree program.

#### Program Of Study And Graduation Requirements:

To qualify for the Associate in Arts (A.A.) degree in English, a student must complete a minimum of 61 credit hours as prescribed and attain a grade point average of 2.0 ("C" average)

## **English Course Sequence**

Course Number and Name	Prerequisites and Corequisites	Credits	Gen Ed Req.
First Semester			
ENGL 101 - English Composition I		3	ENGL 101
FNMT 118 - Intermediate Algebra (or higher)		3	Mathematics
CIS 103 - Applied Computer Technology		3	Tech Comp
Social Science Elective		3	Soc. Sci.
ENGL 190 - Introduction to Literature	ENGL 101 which may be taken concurrently	3	Writing Intensive, Interpretive Studies, Humanities
Second Semester			
ENGL 102 - The Research Paper	ENGL 101 with a grade of "C" or better	3	ENGL 102, Info Lit
Literature Survey Elective - Choose Two:  ENGL 211 - Survey of British Literature: From Beginnings to 1750  ENGL 212 - Survey of British Literature: From 1750 to the	ENGL 101		

Modern Era		6	Am/Global Diversity
ENGL 221 - Survey of American Literature: From the Beginnings to the Civil War			
ENGL 222 - Survey of American Literature: From the Civil War to the Present			
Laboratory Science		4	Natural Science
Humanities Elective**		3	
Third Semester			
ENGL 245 - World Literature: From Antiquity to 1500 or ENGL 246 - World Literature: From 1500 to the Present	ENGL 101	3	
Literature Survey Choose One:			
ENGL 211 - Survey of British Literature: From Beginnings to 1750			
ENGL 212 - Survey of British Literature: From 1750 to the Modern Era	ENGL 101	3	
ENGL 221 - Survey of American Literature: From the Beginnings to the Civil War			
ENGL 222 - Survey of American Literature: From the Civil War to the Present			
General Elective		3	
Humanities Elective		3	
ENGL 115 - Public Speaking	ENGL 101, which may be taken concurrently	3	
Fourth Semester			
English Elective - Choose Two:			
ENGL 106 - Grammar ENGL 137 - Introduction to Theater			
ENGL 205 - Creative Writing ENGL 208 - Introduction to Prose			
ENGL 209 - Introduction to Poetry ENGL 211 - Survey of British Literature: From Beginnings to			
1750 ENGL 212 - Survey of British Literature: From 1750 to the	For ENGL 106 & ENGL 137 - No prerequisite		
Modern Era  ENGL 221 - Survey of American Literature: From the	For ENGL 205 through ENGL 271, ENGL 101		
Beginnings to the Civil War	prerequisite For ENGL 272, ENGL 101		
ENGL 222 - Survey of American Literature: From the Civil War to the Present ENGL 230 - Asian Literature	prerequisite For ENGL 280, 281 & 282 ENGL 205		
ENGL 232 - Introduction to Drama	prerequisite	6	
ENGL 241 - Introduction to Shakespeare ENGL 245 - World Literature: From Antiquity to 1500			
ENGL 246 - World Literature: From 1500 to the Present ENGL 250 - African-American Literature I	For ENGL 283 prerequisite ENGL 102 or ENGL		
ENGL 251 - African-American Literature II ENGL 256 - African Literature	<u>205</u>		
ENGL 260 - Women in Literature ENGL 265 - Science Fiction	FOR <u>ENGL 285</u> - Enrollment in the certificate program in Creative Writing. Two of the		
ENGL 271 - The Language of Film ENGL 272 - Topics in Film Study	following: ENGL 280, 281, 282, 283 one of which may be taken concurrently		
ENGL 280 - Poetry Writing	·		

ENGL 281 - Fiction Writing ENGL 282 - Scriptwriting ENGL 283 - Nonfiction Writing: Memoir and Literary Journalism ENGL 285 - Portfolio Development		
Humanities Elective	3	
Social Science Elective	3	
General Elective	3	

## Minimum Credits Needed to Graduate: 61

## General Education Requirements

All General Education requirements are met through required courses.

- \*Students with computer skills may apply for credit by exam through the Computer Technologies Department.
- \*\* ENGL 205 is recommended for students also pursuing the Creative Writing Academic Certificate. Students who wish to study a foreign language or who plan to transfer to an institution that requires a foreign language are advised to take two semesters of a foreign language as their humanities electives.

#### For More Information Contact:

The Division of Liberal Studies, Room BR-21, 1700 Spring Garden Street, Philadelphia, PA 19130, Telephone (215) 751-8450; or the College Information Center (215) 751-8010.

## Health Care Studies

## Description:

The Health Care Studies program is designed for students interested in entering the health care profession. The program provides students with the foundational courses necessary to either enter one of the College's other health care programs, or, for interested students, transfer to bachelor's or master's degree programs in the health sciences fields such as nursing, health information management, occupational therapy and speech therapy. The program also enables students to graduate with an A.A. degree in Health Care Studies. While in the program, students may also opt to obtain a proficiency certificate to enhance their knowledge and skills of a particular area in health care and to increase their employment opportunities upon graduation from the College.

#### Student Learning Outcomes:

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

- Communicate effectively with others orally and in writing.
- Demonstrate quantitative reasoning skills, particularly as they apply to the health care setting.
- Explain the factors that influence health and disease.
- Explain social and psychological factors that influence human behavior.
- Define a career goal and outline the academic process required to reach that goal.

#### Program Entry Requirements:

Students are typically required to take the College's placement tests at their time of entry. Students identified as needing developmental course work must satisfactorily complete the appropriate English and mathematics courses as a part of the degree program.

## Program of Study and Graduation Requirements:

Allied Health 101, Introduction to the Health Care Professions, must be taken before 12 college credits have been earned. This course is a cornerstone of the Health Care Studies program, requiring students to define a career goal and outline the academic process required to reach that goal.

To qualify for the A.A. Degree in Health Care Studies, students must complete a minimum of 60 credit hours as prescribed and attain a 2.0 cumulative grade point average and complete all course and credit requirements with no grade below a "C" in any course. It is recommended that students who transfer into the program with earned credits take AH 101 during their first semester in the Health Care Studies Program.

## **Health Care Studies Course Sequence**

Course Number and Name	Prerequisites and Corequisites	Credits	Gen Ed Req.
First Semester			
AH 101 - Introduction to the Health Care Professions		3	
ENGL 101 – English Composition I		3	ENGL 101
CIS 103 – Applied Computer Technology		3	Tech Comp
FNMT 118 - Intermediate Algebra or higher		3	Mathematics
Choose one:  • <u>BIOL 106</u> - General Biology I or • <u>BIOL 109</u> – Anatomy and Physiology I1		4	Natural Science
Second Semester			

ENGL 102 – The Research Paper	ENGL 101 with a grade of "C" or better	3	
Choose one:  • MATH 150 - Introductory Data Analysis or • MATH 251 - Statistics for Science	FNMT 118 with a grade of "C" or better or MATH 161 (or higher) placement.	3/4	
Choose from:  • <u>BIOL 108</u> - Essentials of Human Anatomy and Physiology,  • <u>BIOL 109</u> - Anatomy and Physiology I, or  • <u>BIOL 110</u> - Anatomy and Physiology II1	For BIOL 110: <u>BIOL 109</u> with a grade of "C" or better	4	
SOC 101 - Introduction to Sociology		3	Social Science. Writing Intensive, Interpretive Studies, American/Global Diversity
Choose one:  • AH 116 - Interpersonal and Professional Skills in the Health Care Setting or • ENGL 115 - Public Speaking	For ENGL 115: ENGL 101, which may be taken concurrently	3	
Third Semester			
Choose one:  • DIET 106 - Nutrition for a Healthy Lifestyle or • DIET 111 - Introduction to Nutrition	For DIET 111: <u>ENGL 101</u> and <u>BIOL 109</u>	3	
Humanities Elective		3	Humanities
General Elective4		3/4	
Choose one:  • PSYC 101 - Introduction to Psychology or • PSYC 215 : Developmental Psychology or • Health Elective 2	For PSYC 215: PSYC 101 or BIOL 109	3	
Health2 or Science Elective 3		3/4	
Fourth Semester			
Choose one:  • PSYC 101 - Introduction to Psychology or • PSYC 215 : Developmental Psychology or • Health Elective 2	PSYCH 215 requires PSYCH 101 or BIOL 109 as a prerequisite	3	
Health2 or Science Elective3		3/4	
General Elective4		3/4	
General Elective4		3/4	
General Elective4		3/4	

1 Students should select Biology courses according to academic goal. Required science courses vary per program or certificate. 2 Health Elective – includes any Allied Health, Dental Hygiene, Diagnostic Medical Imaging, Medical Laboratory Technology, Nursing, Ophthalmic Technician or Respiratory Technology course. 3Science Elective – includes any Biology, Chemistry, Physics or STS course 4 All students must have a minimum of 60 credits in order to graduate. Depending on courses selected above, the number of general electives required will vary. Students must earn at least a 2.0 cumulative grade point average and complete all course and credit requirements with no grade below a "C" in any course.

#### General Education Requirements

All General Education requirements are met through required courses as indicated above. A more detailed explanation of the College's general education requirements can be found on the Web page at <a href="http://ccp.edu/college-catalog/degree-requirements">http://ccp.edu/college-catalog/degree-requirements</a>.

## For More Information:

Contact The Division of Math, Science and Health Careers, Room W2-7, 1700 Spring Garden Street, Philadelphia, PA 19130, Telephone (215) 751-8430; or the College Information Center (215) 751-8010

# Health Services Management

# Description:

The Health Services Management program teaches students the foundational knowledge and skills needed to become health care managers for advancement in health care disciplines. It prepares students to transfer to a baccalaureate degree program in Health Services Management/Administration, where upon graduation they can hold the position of medical office manager, health care administrator, practice administrator, regional operations director, manager of operations, associate administrator for strategic planning and director of patient access.

Understanding the social, political, economic and financial issues affecting health care will provide students with the knowledge to transfer to a baccalaureate program and become effective health care managers. The components of finance, technology, health care policy and economics that comprise the U.S. health care system and how each element interrelates with one another are emphasized in this curriculum.

Students interested working in health care but in nondirect patient care environments are encouraged to apply to this program.

#### **Student Learning Outcomes:**

Upon completion of this program graduates will be able to:

- Demonstrate effective communication, both orally and in writing.
- Demonstrate critical thinking and problem-solving skills in preparation for a career in health care.
- Identify current issues and trends affecting the U.S. health care delivery system and strategies to address them.
- Analyze health care policies and critique their effectiveness in serving the needs of the intended stakeholders.

#### **Program Entry Requirements:**

This is a select program. Students may apply for admission into the program after they have demonstrated readiness for ENGL 101 and FNMT 118 as determined by the College's placement tests or by successfully completing identified developmental course work. The program requires students to have completed the FNMT 118 course by the time they have earned 12 credits in order to remain in the program. They will also need to complete either MATH 150 or MATH 251; ENGL 102 and CIS 103 by the time they have earned 24 credits.

# Program of Study and Graduation Requirements:

To qualify for the Associate in Arts (A.A.) degree in Health Services Management, a student must complete 60 credit hours as prescribed, attain a grade point average of 2.0 in all program core courses and no grade below a "C" in any course.

#### **Health Services Management Course Sequence**

Course Number and Name	Prerequisites and Corequisites	Credits	Gen Ed Req.
First Semester			
FNMT 118 – Intermediate Algebra or higher			
		3	Mathematics
AH 103 – Medical Terminology		3	
ENGL 101 – English Composition I		3	ENGL 101
BIOL 109 – Anatomy and Physiology I		4	Natural Science
CIS 103 – Applied Computer Technology		3	Tech Comp
Second Semester			

AH 112 - Medical Administrative Procedures		3	
AH 120 - Reimbursement Methodologies in Health Care		3	
BIOL 110 - Anatomy and Physiology II		4	
ENGL 102 - The Research Paper	ENGL 101	3	
AH 116 - Interpersonal and Professional Skills in the Health Care Setting		3	Am/Global Diversity
Third Semester			
AH 204 - Medical Law and Ethics	ENGL 101	3	
ACCT 101 – Financial Accounting		4	
MATH 150 - Introductory Data Analysis or MATH 251 - Introductory Data Analysis	FNMT 118 with grade of "C" or better or MATH 161 placement	3/4	
PSYC 101 - Introduction to Psychology		3	Social Science
Humanities Elective		3	Humanities
Fourth Semester			
AH 260 - Supervisory Management in Health Care	AH 204	3	
AH 222 - Health Care Policy and Administration	AH 120, AH 204 with grade of "C" or better MATH 150 or MATH 251 with grade of "C" or better	3	
AH 224 - Current Issues and Trends in Health Care	AH 120, AH 204 with grade of "C" or better MATH 150 or MATH 251 with grade of "C" or better	3	
Social Science Elective		3	

Minimum Credits Needed to Graduate: 60

All General Education requirements are met through required courses (as indicated above) except for the **Writing Intensive** requirement and **Interpretive Studies** requirement. Therefore, in order to graduate, students in this program must choose one course that is designated **Writing Intensive** and one course that is designated **Interpretive Studies**. The same course may be used to fulfill both requirements. View the courses that fulfill all degree requirements and receive a more detailed explanation of the College's general education requirements to help in your selection.

#### For More Information Contact:

The Division of Math, Science and Health Careers, Room W2-7, 1700 Spring Garden Street, Philadelphia, PA 19130, Telephone (215) 751-8430; or the College Information Center (215) 751-8010.

# Interior Design

#### Description:

This program leads to the Associate in Arts degree in Interior Design, with graduates prepared to transfer to baccalaureate institutions. However, after graduation from the Community College of Philadelphia, students may choose to enter the work force as junior or assistant designers, or as materials librarians.

The primary goal of the program is to teach students to be imaginative, responsible and knowledgeable interior designers. Within the context of the multi-disciplinary learning environment of the Architecture, Design and Construction Department, students develop, explore and apply the broad intellectual, visual and graphic capacities required to compete successfully in the challenging and rewarding field of interior design.

The curriculum and faculty are dedicated to providing each student strong design and technical experiences early in his or her education. The Interior Design program is built upon a sequence of design studios. It is here that design fundamentals are acquired, and technical, historical and theoretical concepts are synthesized and applied. Students increase their spatial visualization capabilities and are guided in developing a design process and a personal creative vision. At the same time, they learn to work as part of a design team. The design projects are organized to build aesthetic understanding, technical abilities, sensitivity to human needs and awareness of the social consequences of design decisions.

At the College, the study of interior design reflects the diverse, evolving roles and responsibilities of the design professional. The program provides a broad liberal arts education, drawing upon art, science, humanities, social science and the history of architecture and interior design. This is the vital foundation that leads to the ability to produce lasting, beautiful and functional design work.

#### **Student Learning Outcomes:**

Upon completion of this program graduates will be able to:

- Use critical thinking and/or analytical skills to solve specific space planning and interior spaces design problems that synthesize human, ergonomic, technical, historical, cultural and theoretical concepts in two and three-dimensional form and space and that integrate lighting, color, textiles and furniture arrangements into interior design projects.
- · Communicate design intent effectively: Identify common finish materials, related interior products, and furniture employed in the interior environment.
  - 1. Orally.
  - 2. In writing,
  - 3. By producing design drawings utilizing freehand drawing, manual and computer drafting
  - 4. By producing three-dimensional analog and computer models that convey design intentions.
- Create and analyze design solutions that take people, built context, human culture, and history into consideration, addressing design as a complicated interaction of these conditions.

## Program Entry Requirements:

Interior Design is a select program. To be accepted into the program, students must complete <u>ADC 109 - Design Studio I</u> with a minimum grade of "C". When <u>ADC 109</u> has been completed with a "C" or better, students will be accepted into the Interior Design program. Students with college-level design work can be evaluated on an individual basis by the department faculty for admission prior to completing <u>ADC 109</u>.

Interested high school students should complete a year of geometry, two years of algebra and two years in art-related areas (drawing, sculpture, photography or related areas). Mechanical drafting or Computer Assisted Design is also advantageous.

Students are required to take the College's placement tests at the time of admission. Students identified as needing developmental coursework must satisfactorily complete the appropriate English and mathematics courses prior to enrolling in courses required by the degree program.

#### Program Of Study And Graduation Requirements:

To qualify for the A.A. degree in Interior Design, a student must complete a minimum of 64 credits as prescribed, and attain a minimum grade point average of 2.0 ("C" average).

## INTERIOR DESIGN COURSE SEQUENCE

Course Number and Name	Prerequisites and Corequisites	Credits	Gen Ed Req.
FIRST SEMESTER			
ADC 101 - Introduction to Design and Construction		3	Tech Comp*

ADC 103 - CAD Basics		3	Tech Comp*
ADC 109 - Design Studio I		4	
ENGL 101 - English Composition I		3	ENGL 101
ART 105 - Drawing I		3	
SECOND SEMESTER			
ADC 159 - Design Studio II	ADC 103, ADC 109	4	
ADC 160 - Presentation Techniques	ADC 103	3	
ADC 192 - Color and Lighting	ADC 101	3	
MATH 137 - Geometry for Design (or above as as per placement) **	FNMT 118 or MATH 118 placement	3	Mathematics
ENGL 102 - The Research Paper	ENGL 101 with a grade of "C" or better	3	ENGL 102, Info Lit
THIRD SEMESTER			
ADC 209 - Design Studio III	ADC 159, ADC 160	4	
ADC 221 - History of Architecture and Interiors I	ENGL 101	3	
ADC 260 - Advanced Presentation Techniques	Prereq: ADC 160 and ADC 209 which may be taken concurrently; or ADC 163 which may be taken concurrently	3	
Directed Elective - select one of the following		3	
ADC 112 - Construction Materials and Detailing: Properties	ADC 103 or ADC 109		
ADC 163 - Digital Documentation	ADC 103		
ADC 212 - Construction Materials and Detailing: Methods	ADC 103 or ADC 109		
ART 106 - Drawing II	ART 105		
ART 111 - Three - Dimensional Design I			
ART 125 - Design I			
ART 126 - Design II	ART 125		
Humanities Elective		3	Humanities
FOURTH SEMESTER			
Social Science Elective		3	Social Sciences
ADC 259 - Design Studio IV	ADC 209	4	
ADC 222 - History of Architecture and Interiors II	Prereq: ADC 221 and ENGL 102 which may be taken concurrently	3	
Directed Elective - select one from the list above		3	
Science Elective **		3/4	Natural Science

All General Education requirements are met through required courses (as indicated above) except for the **Writing Intensive**, **Interpretive Studies** and **American/Global Diversity** requirements. Therefore, in order to graduate, students in this program must choose one course that is designated **Writing Intensive**, one course that is designated **Interpretive Studies** and one course that is designated **American/Global Diversity**. The same course may be used to fulfill all three requirements. View the courses that fulfill all degree requirements and receive a more detailed explanation of the College's general education requirements to help in your selection.

- \* Students must complete ADC 101 and ADC 103 to meet the Technological Competency requirement.
- \*\* Students should select Mathematics and Science courses at CCP that correspond with the requirements of the institution to which they intend to transfer.

#### For More Information Contact:

The Division of Liberal Studies, Room BR-21, 1700 Spring Garden Street, Philadelphia, PA 19130, Telephone (215) 751-8450; or the College Information Center (215) 751-8010.

## **International Studies**

# Description:

The International Studies curriculum provides a strong foundation in global and international studies. The curriculum is designed for students planning to transfer to baccalaureate programs with an international or global focus in such subjects as foreign language or literature, area studies, international relations and international studies. The courses required in the International Studies curriculum are designed to be transferable to other colleges and universities.

Students are expected to consult with a counselor or an academic advisor upon entry into the program and in subsequent semesters. Transfer planning should begin early so that the student can gain the most benefit from the program. Students who follow the International Studies curriculum and plan to attend a specific four-year college after graduation should choose elective courses that duplicate as closely as possible those in the first two years of the program at that college.

Note: Some international programs at transfer institutions require foreign language proficiency at least through the intermediate level. It is recommended that students complete, if possible, a foreign language through the intermediate level. Students should consult with the Career and Transfer Center about foreign language requirements at transfer institutions.

#### **Student Learning Outcomes:**

Upon completion of this program graduates will be able to:

- · Analyze, explain, and evaluate a wide range of global and international topics and demonstrate cultural and global awareness.
- Communicate effectively in another language-at least at the elementary level in all four language skills (listening, speaking, reading and writing).
- Write effectively in English.
- Access, organize, document and present data in written form using technological means.
- · Examine and describe the natural world by using scientific/research methods and problem-solving strategies.

#### Program Entry Requirements:

The program is open to all interested students. New students are required to take the College's placement test at the time of entry. Students identified as needing developmental course work must satisfactorily complete the appropriate English and mathematics courses as a part of their degree program.

#### Program of Study and Graduation Requirements:

To qualify for the Associate in Arts (A.A.) degree in International Studies, a student must complete a minimum of 61 credit hours as prescribed and attain a grade point average of 2.0 ("C" average).

# **International Studies Course Sequence**

Course Number and Name	Prerequisites and Corequisites	Credits	Gen Ed Req.
First Semester			
ENGL 101 - English Composition I		3	ENGL 101
FNMT 118 - Intermediate Algebra (or higher)		3	Mathematics
Foreign Language <sup>1</sup>		3	Am/Global Diversity
CIS 103 - Applied Computer Technology		3	Tech Comp
Science Elective <sup>2</sup>		3/4	Natural Science
Second Semester			
ENGL 102 - The Research Paper	ENGL 101 with a grade of "C" or better	3	ENGL 102, Info Lit

Humanities Elective <sup>3</sup>	3	Humanities
The Arts	3	
Foreign Language <sup>1</sup>	3	
Social Science Elective	3	Social Sciences
Third Semester		
American Diversity <sup>3</sup>	3	
Science Elective <sup>2</sup>	3/4	
Foreign Language or Social Science (Global Diversity) or Humanities Elective (Global Diversity) <sup>1,3</sup>	3	
Social Science Elective (Global Diversity) <sup>3</sup>	3	
Humanities Elective (Global Diversity) <sup>3</sup>	3	
Fourth Semester		
Foreign Language or Social Science (Global Diversity) or Humanities Elective (Global Diversity) <sup>1,3</sup>	3	
Any 200-level Anthropology, Geography, Psychology or Sociology	3	
<u>Humanities Elective</u> (Global Diversity) <sup>3</sup>	3	
General Elective	3	
General Elective	3	
Minimum Credits Needed to Graduate: 61		

All General Education requirements are met through required courses (as indicated above) except for the **Writing Intensive** requirement and the **Interpretive Studies** requirement. Therefore, in order to graduate, students in this program must choose one course that is designated **Writing Intensive**, and one course that is designated **Interpretive Studies**. The same course may be used to fulfill both requirements. View the courses that fulfill all <u>degree requirements</u> and receive a more detailed explanation of the College's general education requirements to help in your selection.

#### For More Information Contact:

The Division of Liberal Studies, Room BR-21, 1700 Spring Garden Street, Philadelphia, PA 19130, Telephone (215) 751-8450; or the College Information Center (215) 751-8010.

<sup>&</sup>lt;sup>1</sup> One year of foreign language study is required. Students may do so at the elementary or intermediate level. It is recommended that students study a foreign language through the intermediate level.

<sup>&</sup>lt;sup>2</sup> One course must be a laboratory science.

<sup>&</sup>lt;sup>3</sup> See <u>Liberal Arts Course Selection Guide</u>

## Liberal Arts

#### Description:

The Liberal Arts degree program provides a structured and coherent path for many students at Community College of Philadelphia. It is designed for students planning to transfer to baccalaureate programs after study at the College.

Students in the Liberal Arts curriculum are required to enroll in FYE 101: First Year Experience within the first 12 credits and must complete required courses ENGL 101, ENGL 102, college-level math, CIS 103, the first in the Social Science pair, the first in the Humanities pair, and the Communication course within the first 24 credits so that they are free to choose the courses that best fit their long-term educational goals for the remainder of the program.

Students are expected to consult with an academic advisor or counselor upon entry to the program and in subsequent semesters. Transfer planning should begin early so that the student can make the most informed choices. The Liberal Arts curriculum contains a number of electives and allows students and advisors to shape the selection of courses to meet individual goals. Students who follow the Liberal Arts curriculum and plan to attend a specific four-year college after graduation should choose electives that duplicate as closely as possible those in the first two years of the program of that college.

**Note:** Many, but not all, transfer institutions require some knowledge of a foreign language (from one semester to two years of study at the college level or the equivalent). Students planning to transfer should be aware of foreign language requirements that may affect their acceptance into certain colleges and programs.

#### **Student Learning Outcomes:**

Upon completion of this program graduates will be able to:

- Demonstrate competence in both oral and written communication through a variety of means such as essays, research papers, presentations and class discussions.
- Demonstrate an informed understanding of cultural diversity, both in the United States and internationally.
- Demonstrate the ability to think critically about ideas and concepts in the arts, humanities, social and natural sciences, and mathematics.

#### Program Entry Requirements:

Students are typically required to take the College's placement tests at their time of entry. Students identified as needing developmental course work must satisfactorily complete the appropriate English and mathematics courses as a part of their degree program.

#### Program of Study and Graduation Requirements:

Students in the Liberal Arts curriculum are required to enroll in FYE 101: First Year Experience within the first 12 credits and must complete required courses ENGL 101, ENGL 102, college-level math, CIS 103, the first in the Social Science pair, the first in the Humanities pair, and the Communication course within the first 24 credits. To qualify for the Associate in Arts (A.A.) degree in Liberal Arts, a student must complete a minimum of 61 credit hours as prescribed and attain a grade point average of 2.0 ("C" average).

#### Liberal Arts Course Sequence

Course Number and Name	Prerequisites and Corequisites	Credits	Gen Ed Req.
First Semester			
FYE 101 - First Year Experience		3	
ENGL 101 - English Composition I		3	ENGL 101
FNMT 118 - Intermediate Algebra (or MATH 123 or MATH 137 or higher)*	FNMT 017 or FNMT 118 (or higher) placement	3	Mathematics
CIS 103 - Applied Computer Technology**		3	Tech Comp
Social Science or Humanities Elective		3	

econd Semester			
ENGL 102 - The Research Paper	ENGL 101 with a grade of "C" or better	3	ENGL 102, Info Lit
	For ENGL 115 and ENGL 117: ENGL 101, which may be taken concurrently		
Communication Course (ENGL 115, ENGL 116, ENGL 117, or ENGL 118)	For ENGL 116: <u>ENGL 101</u> or <u>ENGL 114</u>	3	
	For ENGL 118: No prerequisite		
1st in Social Science Pair		3	Social Sciences
1st in <u>Humanities Pair</u>		3	Humanities
1st Science (at least one science must include a lab)		3/4	Natural Science
2nd in Social Science Pair		3	
Third Semester			
2nd in <u>Humanities Pair</u>		3	
2nd Science course (at least one science must include a lab)		3/4	
Social Science or Humanities Elective		3	
General Elective		3	
Fourth Semester			
The Arts		3	
General Elective		3	
Minimum Credits Needed to Graduate: 61			·

All General Education requirements are met through required courses (as indicated above) except for the Interpretive Studies, Writing Intensive and Am/Global Diversity requirements. Therefore, in order to graduate, students in this program must choose one course that is designated Interpretive Studies, one course that is designated Writing Intensive, one course that is designated American Diversity and one course designated Global Diversity. With careful planning, the same course may be used to fulfill more than one of these requirements.

View the Liberal Arts Course Selection Guide to see which courses fulfill Liberal Arts requirements.

#### For More Information Contact:

 $The\ Division\ of\ Liberal\ Studies, Room\ BR-21, 1700\ Spring\ Garden\ Street, Philadelphia, PA\ 19130, Telephone\ (215)\ 751-8450; or\ the\ College\ Information\ Center\ (215)\ 751-8010.$ 

<sup>\*</sup>Students planning to attend baccalaureate programs should choose math courses that transfer.

<sup>\*\*</sup> Students with computer skills may apply for credit by exam through the Computer Technologies Department.

# Liberal Arts - Honors Option

#### Description:

The Honors curriculum is designed to serve students who plan to advance into professional life through demanding undergraduate and graduate programs in competitive colleges and universities. Honors prepares its graduates to be exemplary students at their transfer institutions by training them to excel in their mastery of the subtleties of intertextual interpretation, and to understand the role of theory in academics, including knowledge of a range of standard theoretical orientations in the Liberal Arts. Courses in the Honors curriculum stress practice in formal academic presentation in both speaking and writing, and practice in the conventions of academic discourse and behavior.

The Honors curriculum is designed to encourage students to be self-reflective about their own intellectual processes and to become more aware of the requirements of different academic discourses in the humanities and social sciences. The courses required in the Honors curriculum are designed to be transferable to other colleges and universities.

#### Student Learning Outcomes:

Upon completion of this program graduates will be able to:

- Articulate and demonstrate an understanding of the role of theory in academic discourse.
- Apply strategies for interpretation of texts within and across disciplines.
- Use academic modes of reading, writing and speaking to interpret texts and participate in academic discourse.

#### **Program Entry Requirements:**

This program is open to interested students who have demonstrated appropriate Honors program placement on the College's writing and reading comprehension examinations. Students who enter the Honors curriculum after completing some college work must have at least a 3.0 GPA in humanities and social science courses. Acceptance into the Honors curriculum requires an informational session with the Honors faculty.

#### Program of Study and Graduation Requirements:

To qualify for the Associate in Arts (A.A.) degree in Liberal Arts-Honors, a student must complete a minimum of 61 credit hours as prescribed (27 credits of which must be in Honors designated courses, including 2 Honors writing courses) and maintain a 3.0 GPA.

Typically students in this program complete two full time semesters (15 credits each) as indicated below. Alternatively, students may select one-15 credit block and 12 additional Honors designated credits to equal the required 27 credits in Honors designated courses. Students will work with Honors faculty advisors to select coursework.

#### Honors Designated Courses:

ENGL 101H, ENGL 102H, ENGL 195H, ENGL 196H

Courses generally offered in full time 15 credit schedule are blocked together and cannot be taken separately. These typically include: <u>ART 104H</u>, <u>ENGL 297H</u>, <u>ENGL 298H</u>, <u>HIST 298H</u>, HUM 101H, PHIL 297H, PHIL 298H

Courses generally offered in part time 6 credit schedule include: EASC 111H, HIST 103H, PSYC 101H, PSYC 215H, SOC 101H, Honors Writing

#### Sample Program Sequence:

The following grid represents a student taking general education courses in the first and fourth semesters and 15 Honors credits in each of their second and third semesters. However, students interested in a part time schedule can enroll in six credit blocks of Honors designated courses for 12 of their Honors credits, but must take one 15 credit block in order to graduate

## Liberal Arts - Honors Option Course Sequence

Course Number and Name	Prerequisites and Corequisites	Credits	Gen Ed Req.
First Courses			
First Semester			
ENGL 101 - English Composition I or (ENGL 101H)		3 credits	ENGL 101
Humanities Elective		3 credits	Humanities

FNMT 118 - Intermediate Algebra or higher		3 credits	Mathematics
CIS 103 - Applied Computer Technology		3 credits	Tech Comp
Lab Science Elective		4 credits	Natural Science
Second Semester			
ENGL 102 or ENGL 102H - The Research Paper	ENGL 101 with a grade of "C" or better	3 credits	ENGL 102, Info Lit
IDS 297H - Seminar in the Humanities and Social Sciences: Ancient and Medieval		3 credits	Interpretive Studies, Social Sciences
Honors Designated Course		3 credits	
Honors Designated Course		3 credits	
Honors Designated Course		3 credits	
Third Semester  IDS 298H - Seminar in the Humanities and Social Sciences:		3 credits	
Modern		3 credits	
Honors Designated Course		3 credits	
Honors Designated Course		3 credits	
Honors Designated Course		3 credits	
Honors Designated Course		3 credits	
Fourth Semester			
Science Elective (non-lab or lab)		3/4 credits	
Humanities Elective		3 credits	
General Elective*		3 credits	
General Elective*		3 credits	
General Elective*		3 credits	

Minimum Credits Needed to Graduate: 61

All General Education requirements are met through required coursesas indicated above except for the American/Global Diversity and Writing Intensive requirements. One course may fulfill both requirements. View the courses that fulfill all degree requirements and receive a more detailed explanation of the College's general education requirements to help in your selection.

\*Depending on the student's major, many, but not all, transfer institutions require some knowledge of a foreign language (from one semester to two years of study at the college level or equivalent). Students should consult with their advisors about appropriate courses to meet specific transfer needs. Depending on the combination of Honors courses they choose, students will take a minimum of three and a maximum of seven general electives.

#### For More Information Contact:

The Division of Liberal Studies, Room BR-21, 1700 Spring Garden Street, Philadelphia, PA 19130, Telephone (215) 751-8450; or the College Information Center (215) 751-8010.	

## Liberal Arts - Social/Behavioral Science

#### Description:

The Liberal Arts – Social/Behavioral Science degree program provides a structured and coherent path for students at Community College of Philadelphia who want broad exposure to social sciences in areas such as social work, sociology, urban studies, political science, geography, anthropology, economics, history, or related fields. This major is especially recommended for those who plan to transfer to baccalaureate programs in social work.

Liberal Arts—Social/Behavioral Science students are required to enroll in FYE 101: First Year Experience within the first twelve credits and must complete required courses ENGL 101, ENGL 102, college-level math, CIS 103, the first in the Social Science pair, the first in the Humanities pair, and the Communication course within the first 24 credits so that they are free to choose the courses that best fit their long-term educational goals for the remainder of the program.

Students are expected to consult with an academic advisor or counselor upon entry to the program and in subsequent semesters. Transfer planning should begin early so that the student can make the most informed choices. The Liberal Arts – Social/Behavioral Science curriculum contains a number of electives and allows students and advisors to shape the selection of courses to meet individual goals. Students who follow the Liberal Arts – Social/Behavioral Science curriculum and plan to attend a specific four-year college after graduation should choose electives that duplicate as closely as possible those in the first two years of the program of that college.

Note: Many, but not all, transfer institutions require some knowledge of a foreign language (from one semester to two years of study at the college level or the equivalent). Students planning to transfer should be aware of foreign language requirements that may affect their acceptance into certain colleges and programs.

#### **Student Learning Outcomes:**

Upon completion of this program graduates will be able to:

- Demonstrate critical analysis of arguments and evaluation of an argument's major assertions, its background assumptions and the evidence used to support its assertions.
- Communicate effectively through written and oral means including essays, research papers and classroom presentations.
- Identify principles of human behavior and social structures.
- Explain how the scientific method is used to study human behavior and social structures.

## **Program Entry Requirements:**

Students are typically required to take the College's placement tests at their time of entry. Students identified as needing developmental course work must satisfactorily complete the appropriate English and mathematics courses in the first 24 credits as a part of their degree program.

#### Program of Study and Graduation Requirements:

Liberal Arts—Social/Behavioral Science students are required to enroll in FYE 101: First Year Experience within the first twelve credits and must complete required courses ENGL 101, ENGL 102, college-level math, CIS 103, the first in the Social Science pair, the first in the Humanities pair, and the Communication course within the first 24 credits. To qualify for the Associate in Arts (A.A.) degree in Liberal Arts—Social/Behavioral Science, a student must complete a minimum of 61 credit hours as prescribed and attain a grade point average of 2.0 ("C" average).

# Liberal Arts - Social/Behavioral Science Course Sequence

Course Number and Name	Prerequisites and Corequisites	Credits	Gen Ed Req.
First Semester			
FYE 101 - First Year Experience		3	
ENGL 101 - English Composition I		3	ENGL 101
FNMT 118 - Intermediate Algebra (or MATH 123 or MATH 137 or Higher)	FNMT 017 or FNMT 118 (or higher) placement	3	Mathematics
CIS 103 - Applied Computer Technology**		3	Tech Comp
Social Science or Humanities Elective		3	

cond Semester			
ENGL 102 - The Research Paper	ENGL 101 with a grade of "C" or better	3	ENGL 102, Info Lit
	For ENGL 115 and ENGL 117: ENGL 101,		
Communication course (ENGL 115, ENGL 116, ENGL 117, or	which may be taken concurrently		
ENGL 118)	For ENGL 116: <u>ENGL 101</u> or <u>ENGL 114</u>		
	For ENGL 118: No prerequisite		
1st in <u>Social Science Pair</u>		3	Social Sciences
1st in <u>Humanities Pair</u>		3	Humanities
1st Science (at least one science must include a lab)		3/4	Natural Science
2nd in Humanities Pair  2nd Science (at least one science must include a lab)  Social Science Elective  Social Science Elective		3 3/4 3	
ourth Semester  The Arts		3	
Social Science Elective		3	
Social Science Elective		3	
		2	
General Elective		3	

All General Education requirements are met through required courses (as indicated above) except for the Interpretive Studies, Writing Intensive and Am/Global Diversity requirements. Therefore, in order to graduate, students in this program must choose one course that is designated Interpretive Studies, one course that is designated Writing Intensive, and one course that is designated American Diversity and one course designated Global Diversity. The same course may be used to fulfill more than one of these requirements.

View the <u>Liberal Arts Course Selection Guide</u> to see which courses fulfill Liberal Arts requirements.

## For More Information Contact:

<sup>\*</sup> Students planning to attend baccalaureate programs should choose math courses that transfer.

<sup>\*\*</sup> Students with computer skills may apply for credit by exam through the Computer Technologies Department.

The Division of Liberal Studies, Room BR-21, 1700 Spring Garden Street, Philadelphia, PA 19130, Telephone (215) 751-8450; or the College Information Center (215) 751-8010.	

## Mass Media

# Description:

Mass Media leads to the Associate in Arts (A.A.) degree. This program offers students the opportunity to study the form, content, history and issues related to mass media while learning the skills necessary to produce basic content for mass media outlets including, print, online, and broadcast. The study of mass media will also develop students' critical thinking skills as they learn how to effectively discuss and analyze how society interacts with mass media.

This program is primarily designed for students seeking transfer to four-year institutions to study Mass Media, Journalism, Advertising, Public Relations and Communication. Additionally, the skills learned here could be used to gain entry-level positions as creators and distributors of mass media content in smaller media organizations.

#### **Student Learning Outcomes:**

Upon completion of the program graduates will be able to:

- Demonstrate an understanding of the history, theories and practical applications of mass media.
- Demonstrate an understanding of the theories and principles of communication in various contexts.
- Display basic proficiency in writing for mass media.
- Display basic proficiency in the production of mass media.
- Adapt as professionals in the rapidly changing field of mass media.
- Explain the legal and ethical issues of communication and of creating and distributing information through mass media.

#### Program Entry Requirements:

The Program is open to interested students. New students are normally required to take the College's placement tests at their time of entry. Students who are identified as needing developmental course work must satisfactorily complete the appropriate English and mathematics courses as a part of their degree program.

# Program of Study and Graduation Requirements:

A minimum of 61 credits and a grade point average of 2.0 (C average) are required for graduation.

## Mass Media Course Sequence

Course Number and Name	Prerequisites and Corequisites	Credits	Gen Ed Req.
First Semester			
ENGL 101 - English Composition I		3	ENGL 101
<u>FNMT 118</u> - Intermediate Algebra or above <sup>1</sup>		3	Mathematics
CIS 103 - Applied Computer Technology		3	Tech Comp
ENGL 114 - Introduction to Speech Communication	ENGL 101 which may be taken concurrently	3	
Social Science Elective <sup>2</sup>		3	Social Sciences
Second Semester			
ENGL 102 - The Research Paper	ENGL 101 with a grade of "C" or better	3	ENGL 102 & Info Lit.
Lab Science		4	Natural Science
ENGL 107 - Society and Mass Communications	ENGL 101 which may be taken concurrently	3	

ENGL 115 - Public Speaking	ENGL 101 which may be taken concurrently	3		
General Elective <sup>2</sup>		3		
Third Semester				
ENGL 122 - Writing for Mass Media	ENGL 101	3		
Humanities Elective <sup>2</sup>		3	Humanities	
General Elective <sup>2</sup>		3		
PHOT 151 - Digital Imaging		3		
Directed Elective <sup>2</sup> (Choose one of the following) Engl 112, 117, 118, 120, 131, 132, 137 any 200 level Engl, or Phot 104, 217, or Art 101, 125, 150, 151, or CIS 130, 230	ENGL 101 for ENGL 205, 206, 211, 212, 221, 222, 230, 232, 241, 245, 246, 250, 251, 256, 260, 271 and 272 ENGL 131 for ENGL 132, ENGL 205 for ENGL 210, 280, 281 and 282, ENGL 102 or 205 for ENGL 283 PHOT 152 for 217, ART 125 and 150 for ART 151 CIS 130 for CIS 230	3		
Fourth Semester				
ENGL 124 - Introduction to Mass Media Design	Engl 107 Prerequisite, Phot 151 which may be taken concurrently	3		
General Elective <sup>2</sup>		3		
Directed Elective <sup>2</sup> (see above list		3		
Directed Elective <sup>2</sup> (see above list)		3		
General Elective <sup>2</sup>		3		
Minimum Credits Needed to Graduate: 61	·			

All General Education requirements are met through required courses (as indicated above) except for the **Interpretive Studies** requirement, **Writing Intensive** requirement and **American/Global Diversity** requirement. Therefore, in order to graduate, students in this program must choose one course that is designated **Interpretive Studies**, one course that is designated **Writing Intensive**, and one course that is **designated American/Global Diversity**. The same course may be used to fulfill more than one requirement. View the courses that fulfill all <u>degree requirements</u> and receive a more detailed explanation of the College's general education requirements to help in your selection.

## For More Information Contact:

The Division of Liberal Studies Room BR-21, 1700 Spring Garden Street, Philadelphia, PA 19130, Telephone (215) 751-8450; or the College Information Center (215) 751 8010.

<sup>&</sup>lt;sup>1</sup>To ensure appropriate transfer credit, math courses should be selected with an advisor.

<sup>&</sup>lt;sup>2</sup> General electives and directed electives should be chosen in consultation with an advisor based on student's academic and career goals, as well as specific requirements of transfer institutions.

## Music Performance

## Description:

The Music Performance curriculum gives students a thorough academic and applied preparation in music combined with a liberal arts background. The curriculum is a transfer program structured to be compatible with the first two years of music curricula leading to the Bachelor of Music Performance degree offered at most undergraduate colleges. Additionally, an A.A.S. degree in Sound Recording and Music Technology is offered.

#### Student Learning Outcomes:

Upon completion of this program graduates will be able to:

- Demonstrate sufficient command of their major performing medium and secondary areas (see below) to successfully pass an audition for a four-year music baccalaureate program.
- Demonstrate basic musicianship and knowledge of the theoretical, historical and technological backgrounds needed to understand how music is created, understood and performed.
- Apply background in the areas listed above so as to intelligently focus their musical work in additional areas beyond performance such as: historical research, composition/arranging, education and production.

#### Program Entry Requirements:

Students should meet with the department head to schedule an audition. The audition requires evidence of proficiency as a performer or composer: preparation, technical facility, expressiveness in performance or compositional arranging, musical sensitivity and familiarity with a variety of repertoire. A music theory placement exam is also available for students with an introductory music theory background, which allows students to complete a Credit by Examination for MUS 100 (Music Reading).

Note: Students studying piano as their primary instrument are not required to complete MUS 101, 102, 201 & 202.

#### Program of Study and Graduation Requirements:

To qualify for the A.A. degree, a student must complete 65-69 credits, depending upon their concentration, as prescribed and attain a minimum grade point average of 2.0 ("C" average).

## Music Performance Course Sequence

Course Number and Name	Prerequisites and Corequisites	Credits	Gen Ed Req.
Summer Session			
MUS 100 - Music Reading		3	
<u>MUS 101</u> - Piano I <sup>1</sup>		1	
First Semester			
MUS 102 - Piano II <sup>1</sup>	MUS 101	1	
MUS 196 - Ensemble I		1	
MUS 111 - Aural Theory I	MUS 100	3	
MUS 114 - Harmony I	MUS 100	3	
MUS 141 - Applied Music I		2	
MUS 142 - Applied Music II		2	

ENGL 101 – English Composition I		3	ENGL 101
CIS 103 – Applied Computer Technology <sup>2</sup>		3	Tech Comp
Second Semester			
MUS 201 - Piano III	MUS 102	1	
MUS 197 - Ensemble II		1	
MUS 113 - Aural Theory II	MUS 111	3	
MUS 214 - Harmony II	MUS 114	3	
MUS 143 - Applied Music III		2	
MUS 144 - Applied Music IV		2	
Music History Elective – choose one from the following:  • MUS 105 - Music of the Baroque and Classical Eras • MUS 106 - Great Romantic Music • MUS 120 - Music of African-Americans • MUS 121 - Modern American Music		3	Humanities
ENGL 102 – The Research Paper	ENGL 101 with a grade of "C" or better	3	ENGL 102, Info Lit
Third Semester  MUS 202 - Piano IV <sup>1</sup>	MUS 201	1	
MUS 296 - Ensemble III		1	
MUS 211 - Aural Theory III	MUS 113	3	
MUS 115 - Introduction to Music Technology		3	
MUS 241 - Applied Music V		2	
MUS 242 - Applied Music VI		2	
FNMT 118 - Intermediate Algebra or higher		3	Mathematics
Music History Elective – choose one from the following:  • MUS 105 - Music of the Baroque and Classical Eras • MUS 106 - Great Romantic Music • MUS 120 - Music of African-Americans • MUS 121 - Modern American Music		3	Humanities
Fourth Semester			
MUS 297 - Ensemble IV		1	
MUS 243 - Applied Music VII		2	
MUS 244 - Applied Music VIII		2	

MUS 215 - Advanced Music Technology and Multimedia	MUS 115	3	
Social Science Elective		3	Social Sciences
PHYS 125 – Musical Acoustics		3	Natural Science

Minimum Credits Needed to Graduate: 69

#### General Education Requirements

All General Education requirements are met through required courses (as indicated above) except for the **Writing Intensive** requirement, the **Interpretive Studies** requirement and the **American/Global Diversity** requirement. Therefore, in order to graduate, students in this program must choose one course that is designated **Writing Intensive**, one course that is designated **Interpretive Studies** and one course that is designated **American/Global Diversity**. The same course may be used to fulfill all three requirements. View the courses that fulfill all degree requirements and receive a more detailed explanation of the College's general education requirements to help in your selection.

#### **For More Information Contact:**

The Division of Liberal Studies, Room BR-21, 1700 Spring Garden Street, Philadelphia, PA 19130, Telephone (215) 751-8450; or the College Information Center (215) 751-8010.

<sup>&</sup>lt;sup>1</sup> Students studying piano as their primary instrument are not required to complete MUS <u>101</u>, <u>102</u>, <u>201</u>, & <u>202</u>.

<sup>&</sup>lt;sup>2</sup> Students with computer experience may apply for credit by exam through the Computer Technologies Department.

# Psychology

# Description:

Psychology is an excellent liberal arts major that allows you to explore and better understand the mind, how it functions and how it is influenced by biological, social, cultural and economic factors. Yet, there is also a practical advantage to studying psychology. Our students often report that they better understand themselves, and their relationships and other life experiences. Psychology is at play in practically every experience of our lives. It has been studied by individuals who have made their mark in a variety of fields within and beyond psychology including law, medicine and the arts.

For students who plan to pursue careers in psychology, earning an associates' degree in Psychology from Community College of Philadelphia will allow you to establish and continue your necessary academic preparation beyond the associate's degree. In order to practice psychology, you will need to have earned at least a Master's degree and, in many cases, a Ph.D. or Psy.D.

#### Student Learning Outcomes:

Upon successful completion of this program students will be able to:

- Demonstrate a basic understanding of psychology's major concepts, theoretical perspectives, empirical findings and historical trends.
- Demonstrate a basic knowledge of the principles of research design and an ability to apply them.
- Demonstrate the ability to think critically about statements concerning mental processes and behavior.
- Demonstrate an understanding of the ways psychology is applied in the realms of work, personal life, education and other real-world situations.
- Demonstrate understanding of the career choices open to psychology students.

#### Program Entry Requirements:

Students are typically required to take the College's placement tests at their time of entry. Students identified as needing developmental course work must satisfactorily complete the appropriate English and mathematics courses as a part of their degree program.

#### Program of Study and Graduation Requirements:

To qualify for the Associate in Arts (A.A.) degree in Psychology, a student must complete a minimum of 61 credit hours as prescribed and attain a grade point average of 2.0 ("C" average).

# Psychology Course Sequence

Course Number and Name	Prerequisites and Corequisites	Credits	Gen Ed Req.
First Semester			
ENGL 101 - English Composition I		3	ENGL 101
Math 151 - Linear Mathematics (or higher)	FNMT 118 or MATH 118 with a "C" or better or Math 161 placement	3	Mathematics
CIS 103 - Applied Computer Technology		3	Tech Comp
PSYC 101 - Introduction to Psychology		3	Social Sciences
SOC 101 - Introduction to Sociology or <u>ANTH 112</u> - Cultural Anthropology		3	Interpretive Studies
Second Semester			
ENGL 102 - The Research Paper	ENGL 101 with a grade of "C" or better	3	ENGL 102 & Info Lit

<u>PSYC 167</u> - Foundations of Statistical Methods for Social and Behavioral Sciences	FNMT 118 or MATH 118 or Math 161 placement	3	
Humanities Elective		3	Humanities
PSYC 110 - Descriptive Research Methods in Psychology		3	
Lab Science: Biology recommended		4	Natural/Lab Science
Third Semester			
Humanities Elective		3	
PSYC 205 - Psychopathology/Abnormal Psychology	PSYC 101	3	Writing Intensive
Science: Biology recommended		3/4	
PSYC 210 - Experimental Research Methods in Psychology	ENGL 101 PSYC 101, PSYC 110, PSYC 167	3	
PSYC 215 - Developmental Psychology	<u>PSYC 101</u> or BIOL 109	3	Amer/Global Diversity
Fourth Semester			
Psychology Elective	PSYC 101	3	
General Elective		3	
Minimum Credits Needed to Graduate: 61			

All General Education requirements are met through required courses as indicated above. View the courses that fulfill all <u>degree requirements</u> and receive a more detailed explanation of the College's general education requirements to help in your selection.

#### **For More Information Contact:**

The Division of Liberal Studies Room BR-21, 1700 Spring Garden Street, Philadelphia, PA 19130, Telephone (215) 751-8451; or the College Information Center (215) 751 8010.

# Religious Studies

# Description:

The Religious Studies program is designed for students preparing to transfer to a baccalaureate degree-granting institution with a major in religion or theology, students contemplating a career in religion either as a scholar or a cleric, students who want to explore their own religious beliefs in relation to the beliefs of others, and students interested in the role of religion in the contemporary world.

The Religious Studies curriculum is for students planning to transfer to baccalaureate programs or professional schools after study at the Community College of Philadelphia. Students are expected to consult with an academic advisor, counselor and or Department Chair upon entry to the program and in subsequent semesters.

Transfer planning should begin early so that the student can gain the most benefit from the curriculum. Students who follow the Religious Studies curriculum and plan to attend a specific four-year college after graduation should choose elective courses that duplicate as closely as possible those in the first two years of the program of that college.

#### Student Learning Outcomes:

Upon completion of this program graduates will be able to:

- Demonstrate critical analysis of arguments and evaluation of an argument's major assertions, its background assumptions and the evidence used to support its assertions.
- Communicate effectively through written and oral means including essays, research papers and classroom presentations.
- · Discuss and analyze the history and significance of major world religious traditions as cultural, social and intellectual phenomena.
- Identify and explain the use of history, philosophy, social science and theology in the study of religion.

#### Program Entry Requirements:

Students are typically required to take the College's placement tests at their time of entry. Students identified as needing developmental course work must satisfactorily complete the appropriate English and mathematics courses as a part of their degree program.

#### Program of Study and Graduation Requirements:

To qualify for the Associate in Arts (A.A.) degree in Religious Studies, a student must complete a minimum of 61 credit hours as prescribed and attain a grade point average of 2.0 ("C" average).

# Religious Studies Course Sequence

Course Number and Name	Prerequisites and Corequisites	Credits	Gen Ed Req.
First Semester			
ENGL 101 - English Composition I		3	ENGL 101
CIS 103 - Applied Computer Technology*		3	Tech Comp
FNMT 118 - Intermediate Algebra or higher		3	Mathematics
RS 101 - Introduction to Religion		3	Interpretive Studies
PHIL 101 - Introduction to Philosophy		3	
Second Semester			
ENGL 102 - The Research Paper	ENGL 101 with a grade of "C" or better	3	ENGL102, Info Lit
RS/PHIL 151 - World Religions		3	Am/Global Diversity
PSYC 101 - Introduction to Psychology or SOC 101 - Introduction to Sociology or ANTH 112 - Cultural Anthropology		3	Social Sciences

Religious Studies Electives—choose one from the list below RS/PHIL 152 - Philosophy of Religion RS/HIST 170 - Religion in American History RS 175 - Religions of the Middle East, or RS 180 - Asian Religions	3	
Laboratory Science	4	Natural Science
Third Semester		
Humanities Elective	3	Humanities
The Arts**	3	
Science Elective	3/4	
Religious Studies Electives—choose one from the list above	3	
Social Science Elective (Global Diversity)**	3	
Fourth Semester		
General Elective	3	
MINIMUM CREDITS NEEDED TO GRADUATE: 61		

All General Education requirements are met through required courses (as indicated above) except for the **Writing Intensive requirement**. Therefore, in order to graduate, students in this program must choose one course that is designated as **Writing Intensive**. View the courses that fulfill all degree requirements and receive a more detailed explanation of the College's general education requirements to help in your selection.

#### For More Information Contact:

The Division of Liberal Studies, Room BR-21, 1700 Spring Garden Street, Philadelphia, PA 19130, Telephone (215) 751-8450; or the College Information Center (215) 751-8010.

<sup>\*</sup> Qualified students are eligible to earn credit by examination for CIS 103.

<sup>\*\*</sup> View the <u>Liberal Arts Course Selection Guide</u> to see which courses fulfill Liberal Arts requirements.

# Theater

# Description:

The Theater curriculum leads to the Associate in Arts (A.A.) degree, giving students a concentration in Theater arts with a liberal arts foundation. The program is primarily suited for students seeking transfer to a four-year institution, although some graduates may plan on immediately entering the work force as communications professionals.

For students seeking transfer, the curriculum closely parallels the foundation program of virtually any four-year college, most specifically those institutions in the Philadelphia area.

The Theater Program offers two certificates in Acting (A-PC) and Technical Theater (TT-PC). Each requires the completion of four courses.

Studies within the Theater program will enhance a student's ability to work effectively in fields such as acting, directing, technical theater or any related career in the theater.

#### **Student Learning Outcomes:**

Upon completion of the Theater program the student will be able to:

- Understand and write about performance and theater with the vocabulary of the field.
- Create characters, perform scenes and monologues, and improvise in performance.
- Use the body as a performance instrument and understand and perform the basic principles, techniques and styles of body movement and dance.
- Build, design, paint and light stage scenery.
- Read and write about significant dramatic literature, with particular emphasis on an understanding and appreciation of both theatrical and literary techniques.
- Participate in every aspect of the rehearsal process and the presentation of a play.

# Program Entry Requirements:

The program is open to interested students. New students are normally required to take the College's placement tests at their time of entry. Students who are identified as needing developmental course work must complete satisfactorily the appropriate English and mathematics courses as a part of their degree program.

#### Program of Study and Graduation Requirements:

A minimum of 62 credits and a grade point average of 2.0 ("C" average) are required for graduation.

# Theater Course Sequence

Course Number and Name	Prerequisites and Corequisites	Credits	Gen Ed Req.
First Semester			
riist Semestei			
ENGL 137 - Introduction to Theater		3	Humanities, Interpretive Studies
ENGL 101 - English Composition I		3	ENGL 101
ENGL 115 - Public Speaking		3	
ENGL 131 - Acting I		3	
CIS 103 - Applied Computer Technology		3	Tech Comp
Second Semester			
ENGL 135 - Movement and Dance I		3	
ENGL 132 - Acting II	ENGL 131	3	

L			
ENGL 102 - The Research Paper	ENGL 101 with a grade of "C" or higher	3	ENGL 102, Info Lit
Social Science Elective		3	Social Sciences
FNMT 118 - Intermediate Algebra or higher		3	Mathematics
Third Semester			
ENGL 232 - Introduction to Drama	ENGL 101	3	
ENGL 141 - Introduction to Technical Theater		4	
Directed Elective (choose one from list below)		3	
Directed Elective (choose one from list below)		3	
Humanities Elective		3	
Fourth Semester			
Science Elective		3/4	Natural Science
ENGL 142 - Rehearsal and Performance	ENGL 132		
or <u>ENGL 146</u> - Technical Theater II		4	
<u></u>	ENGL 141		
Literature Elective (choose one of the following): <u>ENGL 211</u> , <u>ENGL 212</u> , <u>ENGL 221</u> , <u>ENGL 222</u> , <u>ENGL 230</u> , <u>ENGL 241</u> ,			
ENGL 245, ENGL 246, ENGL 250, ENGL 251, ENGL 256,	ENGL 101	3	
ENGL 260, ENGL 265			
Humanities Elective		3	
General Elective		3	

# Minimum Credits Needed to Graduate: 62

# Directed Electives

Course Number and Name	Prerequisites and Corequisites
ENGL 107 - Society and Mass Communications	ENGL 101 which may be taken concurrently
ENGL 120 - Voice and Articulation	
ENGL 136 - Movement and Dance II	ENGL 135
ENGL 142 - Rehearsal and Performance	ENGL 131, ENGL 132
ENGL 146 - Technical Theater II	ENGL 141
ENGL 205 - Creative Writing	ENGL 101
ENGL 271 - Language of Film	ENGL 101
ENGL 282 - Scriptwriting	ENGL 205

All General Education requirements are met through required courses (as indicated above) except for the **Writing Intensive** requirement and **American/Global Diversity** requirement. Therefore, in order to graduate, students in this program must choose one course that is designated **Writing Intensive** and one course that is designated **American/Global Diversity**. The same course may be used to fulfill both requirements. View the courses that fulfill all <u>degree requirements</u> and receive a more detailed explanation of the College's general education requirements to help in your selection.

## For More Information Contact:

The Division of Liberal Studies, Room BR-21, 1700 Spring Garden Street, Philadelphia, PA 19130, Telephone (215) 751-8450; or the College Information Center (215) 751-8010.

# **Biology**

#### Description:

The Associate of Science (A.S.) in Biology degree program is for students who wish to pursue baccalaureate studies in the biological sciences or plan to fulfill prerequisite courses for pre-pharmacy school or for programs such as pre-veterinary, pre-medical, and pre-dental. To enable seamless transfer, this curriculum is designed to parallel the first two years of study offered in biology programs at other colleges and universities.

#### Student Learning Outcomes:

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

- Summarize the major physical and chemical concepts and processes essential to living things including the maintenance of homeostasis, the energy transformations occurring within and between organisms, and the interactions among living organisms and their environment.
- Describe the mechanisms of reproduction and heredity, from both classical (Mendelian) and molecular perspectives, and link genetic influences to evolutionary processes and adaptation.
- · Appropriately use current scientific terminology and evaluate the merit of scientific data using critical thought.
- Explain the levels of organization in biology, including the chemical, cellular, histological, and organismal levels, and explain the dynamics of populations, ecosystems and the biosphere.
- Utilize the Scientific Method for the development of hypotheses, the proper design of experiments, the competent use of equipment, the collection and analysis of data, and
  the integration of scientific literature.
- Compare and contrast the major groups of microbes, protists, plants, and animals.

# Program Entry Requirements:

This is a select program. In order to enter the program, students must be at the ENGL 101 and MATH 162 placement levels. It is highly recommended that students who enter the program should have completed one year of high school biology and chemistry within the last ten years and received a grade of C or better. In the absence of these requirements, to better prepare themselves for the program, students can take BIOL 106 and/or CHEM 110. Additional science and mathematics courses are desirable.

# Program of Study and Graduation Requirements:

To qualify for the A.S. degree in Biology, students must successfully complete a minimum of 65 credit hours as prescribed and attain a grade point average of 2.0 ("C" average). Students must pass all biology courses with a grade of "C" or better.

To ensure appropriate course selections, students should consult an academic advisor. Students wishing to transfer this A.S. degree to a particular college or university should, with the help of an advisor, review that institution's requirements and/or existing articulation agreements with the College so that program courses may be chosen appropriately. The recommended course sequence follows.

# Associate of Biology Recommended Course Sequence

Course Number and Name	Prerequisites and Corequisites	Credits	Gen Ed Req.
First Semester			
CHEM 121 - College Chemistry I	CHEM 110 or Department Head approval and FNMT 118 or MATH 118	4	Mathematics
CIS 103 – Applied Computer Technology		3	Technical Competency
ENGL 101 - English Composition I		3	ENGL 101
MATH 162 - Precalculus II	MATH 161, MATH 162 placement	3	Mathematics
Social Science Elective		3	Social Science

CHEM 121 or CHEM 110	Δ	
	7	
CHEM 121 with a grade of C or better	4	
ENGL 101 with a grade of C or better	3	ENGL 102, Info Lit Humaniti
	3	
	3	
BIOL 123	4	
CHEM 122	5	
MATH 162	4	
	4	
CHEM 221	5	
ENGL 101	3	
	4	
	3	
	BIOL 123 CHEM 122 MATH 162 CHEM 221	CHEM 121 with a grade of C or better       4         ENGL 101 with a grade of C or better       3         3       3         BIOL 123       4         CHEM 122       5         MATH 162       4         CHEM 221       5         ENGL 101       3

Minimum Credits Needed to Graduate: 65

All General Education requirements are met through required courses (as indicated above) except for the Writing Intensive requirement, the Interpretive Studies requirement and the American/Global Diversity requirement. Therefore, in order to graduate, students in this program must choose one course that is designated Writing Intensive, one course that is designated Interpretive Studies and one course that is designated American/Global Diversity. The same course may be used to fulfill more than one of these requirements. View the courses that fulfill all degree requirements and receive a more detailed explanation of the College's general education requirements to help in your selection.

# For More Information Contact:

The Division of Math, Science and Health Careers, Room W2-7, 1700 Spring Garden Street, Philadelphia, PA 19130, Telephone (215) 751-8430 or the College Information Center (215) 751-8010.

# Chemistry

# Description:

The Associate of Science (A.S.) in Chemistry degree program is for students who wish to pursue baccalaureate studies in the chemical or physical sciences or who plan to continue with professional studies, such as pre-pharmacy, pre-medical or pre-dental programs. This curriculum parallels the first two years of study offered in the chemistry programs of other colleges and universities.

#### **Student Learning Outcomes:**

Upon completion of this program graduates will be able to:

- Demonstrate preparedness to successfully transfer into a chemistry program at a four-year institution.
- Demonstrate a foundational knowledge of general inorganic and organic chemistry principles and concepts by applying this knowledge to the solution of problems and performance of experiments.
- While adhering to all safety rules, competently perform routine laboratory tasks in the chemistry laboratory using the instrumentation for measurement and analysis that is
  commonly available.
- · Effectively collect, interpret, evaluate and communicate scientific data in multiple formats using computer technology as needed.

#### Program Entry Requirements:

This is a select program. In order to enter the program, students must have placement at ENGL 101 and MATH 162 (or MATH 161 completed with a "C" or better) levels.

## Program of Study and Graduation Requirements:

To qualify for the A.S. degree in Chemistry, students must successfully complete a minimum of 60 credit hours as prescribed and attain a grade point average of 2.0 ("C" average). Students must pass all Science and Mathematics courses with a grade of "C" or better.

# Chemistry Course Sequence

Course Number and Name	Prerequisites and Corequisites	Credits	Gen Ed Req.
First Semester			
ENGL 101 – English Composition I		3	ENGL 101
MATH 171 - Calculus I	MATH 162 with a grade of "C" or better or dept. head approval or placement	4	Mathematics
CHEM 121- College Chemistry I	CHEM 110 with a grade of "C" or better or dept. head approval	4	Natural Science
CIS 103 – Applied Computer Technology		3	Technological Competency
Second Semester			
Second Genesiei			
ENGL 102 – The Research Paper	ENGL 101 with a grade of "C" or better	3	ENGL 102, Info Lit
MATH 172 - Calculus II or Natural Science with Lab Elective <sup>1</sup>	MATH 166 with a grade of "C" or better or MATH 171 with a grade of "C" or better	4	Natural Science with Lab Elective
CHEM 122- College Chemistry II	CHEM 121 with a grade of "C" or better	4	
PHYS 140 - Mechanics, Heat and Sound	MATH 171	5	

Third Semester			
CHEM 221- Organic Chemistry I	CHEM 122 with a grade of "C" or better	5	
CHEM 214 - Chemical Analysis	CHEM 122 with a grade of "C" or better  MATH 162 with a grade of "C" or better	5	
PHYS 241 - Electricity, Magnetism and Light	PHYS 140 and MATH 172 or dept. head approval	5	
Fourth Semester			
CHEM 222 - Organic Chemistry II		5	
Directed Elective <sup>1</sup>		4	
Social Science Elective		3	Social Science
Humanities Elective		3	Humanities
Minimum Credits Needed to Graduate: 60			

All General Education requirements are met through required courses (as indicated above) except for the **Writing Intensive** requirement, the **Interpretive Studies** requirement and the **American/Global Diversity** requirement. Therefore, in order to graduate, students in this program must choose one course that is designated **Writing Intensive**, one course that is designated **Interpretive Studies** and one course that is designated **American/Global Diversity**. The same course may be used to fulfill more than one of these requirements. View the courses that fulfill all <u>degree requirements</u> and receive a more detailed explanation of the College's general education requirements to help in your selection.

# For More Information Contact:

The Division of Math, Science and Health Careers, Room W2-7, 1700 Spring Garden Street, Philadelphia, PA 19130, Telephone (215) 751-8430; or the College Information Center (215) 751-8010.

<sup>&</sup>lt;sup>1</sup> CIS 106: Introduction to Computer Programming (4) or BIOL 123: Principles of Biology I (4) or BIOL 281: Biochemistry I (4) or BTT 101: Biomedical Technician Training (3) [Students who choose this elective will need 1 additional credit to graduate]

<sup>&</sup>lt;sup>2</sup> Students who are required to take <u>CHEM 110</u> prior to <u>CHEM 121</u> will need 64 credits to graduate.

# Computer Science

# Description:

The Computer Science curriculum leads to an Associate in Science (A.S.) degree in Computer Science. The primary goal of the program is to prepare students for transfer to a baccalaureate program in Computer Science. The curricular focus is a set of courses concentrating on the skills necessary for the analysis of mathematically-oriented problems and the development of algorithms and data structures to solve those problems using computers.

#### **Student Learning Outcomes:**

Upon completion of this program graduates will be able to:

- Use technology effectively to communicate and analyze information related to computer programming, algorithm development and software engineering.
- Work as a part of a professional team to design, code, test and debug mathematically-based, object-oriented computer software.
- Demonstrate a fundamental knowledge of information transfer and control in modern computer systems, including knowledge of assembly languages, computer architecture
  and computer organization.
- Demonstrate a basic understanding of mathematical concepts important in computer science and software engineering, including differential and integral
  calculus, statistics and discrete mathematics.
- Develop object-oriented algorithms and data structures using the structured sequential logic of computer programming languages in an object-oriented environment and implement those solutions as Java applications and Java applets.
- · Analyze the temporal and spatial efficiency of algorithms and data structures and redesign them for increased efficiency where possible.

# Program Entry Requirements:

This program is open to interested students. However, new students are normally required to take the College's placement test at their time of entry. Students' test results must show readiness for English 101 and at least a grade of "C" in <u>FNMT 118</u> or MATH 118 or its equivalent for admission to the program. Those students whose test results identify them as needing developmental course work must complete satisfactorily the appropriate English and mathematics courses as a part of their degree program.

#### Program of Study and Graduation Requirements:

Two sets of physics courses are permitted within the program. This is because some transfer institutions require calculus-based physics, while others have a more lenient requirement. Students who do well in their first-year math courses should be able to handle the 10 credits of calculus-based physics, while those less mathematically inclined may opt for eight credits of algebra-based physics.

To qualify for the A.S. degree in Computer Science, students must complete a minimum of 61 credit hours as prescribed and attain a grade point average of 2.0 ("C" average).

# Computer Science Course Sequence

Course Number and Name	Prerequisites and Corequisites	Credits	Gen Ed Req.
First Semester			
CSCI 111 <sup>1</sup> - Computer Science I with Java and Python	FNMT 118 or MATH 118 placement or higher; or MATH 161 placement	4	Tech Comp
MATH 163 - Discrete Mathematics	MATH 161 ("C" or better) or MATH 162 or higher placement	4	Mathematics
MATH 171 - Calculus I	MATH 162 or dept. approval	4	
ENGL 101 - English Composition I		3	ENGL 101
Second Semester			

CSCI 112 <sup>1</sup> - Computer Science II with Java and C++	CSCI 111 with a "C" or better	4	Tech Comp
MATH 251 - Statistics for Science	FNMT 118 or MATH 118 placement or higher	4	
MATH 172 - Calculus II	MATH 171 or dept. approval	4	
ENGL 102 - The Research Paper	ENGL 101 with a grade of "C" or better	3	ENGL 102, Info Lit
Third Semester			
CSCI 211 - Data Structures and Algorithms	CSCI 112 with a "C" or better	4	
CIS 205 - Database Management Systems	<u>CIS 103</u> or ( <u>CSCI 111</u> and <u>CSCI</u> 112)	4	
PHYS 111 <sup>2</sup> - General Physics I or PHYS 140 - Mechanics, Heat and Sound	MATH 162 MATH 171	4/5	Natural Science
Humanities Elective		3	Humanities
Fourth Semester			
CSCI 213 - Introduction to Computer Organization	CSCI 111 or CIS 106 with a "C" or better	4	
PHYS 112 <sup>2</sup> - General Physics II or PHYS 241 - Electricity, Magnetism and Light	PHYS 111 or dept approval PHYS 140 and MATH 172 or dept. approval	4/5	
Social Science Elective		3	Social Sciences
Directed Elective <sup>3</sup>		3	
Minimum Credits Needed to Graduate: 61			

All General Education requirements are met through required courses (as indicated above) except for the **Writing Intensive** requirement, the **Interpretive Studies** requirement and the **American/Global Diversity** requirement. Therefore, in order to graduate, students in this program must choose one course that is designated **Writing Intensive**, one course that is designated **Interpretive Studies** and one course that is designated **American/Global Diversity**. The same course may be used to fulfill more than one of these requirements. View the courses that fulfill all <u>degree requirements</u> and receive a more detailed explanation of the College's general education requirements to help in your selection.

CSCI 125 - Introduction to Video Game and Simulation Development

CSCI 215 - Introduction to Android Development

CIS 103 - Applied Computer Technology

CIS 105 - Computer Systems Maintenance

CIS 106 - Introduction to Computer Programming

CIS 114 - JavaScript

CIS 130 - Web Page Design I

CIS 140 - Principles of Desktop and Electronic Publishing

CIS 150 - Network Technology

CIS 152 - Introduction to Cybersecurity

CIS 155 - Principles of Operating Systems

<sup>\*</sup>any language course in Arabic, Chinese, French, Italian, Hebrew, Japanese, or Spanish may be chosen.

<sup>&</sup>lt;sup>1</sup> Students must complete <u>CSCI 111</u> and <u>CSCI 112</u> to meet the Technological Competency requirement.

<sup>&</sup>lt;sup>2</sup> If students choose PHYS 111 and PHYS 112, they will need two additional credits from elective courses to complete the 61 credits required for the degree.

<sup>&</sup>lt;sup>3</sup> Any Computer Science, Computer Information Systems, or Mathematics course of at least three credits, above the 100-level, will satisfy the directed elective requirement. The following courses will fulfill this requirement provided the student has meet the course prerequisites:

- CIS 202 Advanced Word Processing
- CIS 203 Microsoft Excel with Macro Programming
- CIS 204 Fundamentals of Linux and Unix
- CIS 205 Database Management Systems
- CIS 230 Web Page Design II
- CIS 231 Adobe Flash
- CIS 252 Windows Server Configuration
- CIS 253 Windows Server Administration
- CIS 256 Cisco Routing Technology
- CIS 257 Advanced Cisco Routing and Switch Technology
- CIS 259 Computing and Network Security
- CIS 261 Cyber Investigation
- CIS 270 Systems Analysis and Design
- CIS 274 Ethical Hacking & Penetration Testing
- CIS 297 Network Technology and Management Capstone
- GIS 101 Introduction to Geographic Information Systems
- MATH 121 Computer Mathematics and Logic
- MATH 150 Introductory Data Analysis
- MATH 151 Linear Mathematics
- MATH 152 Probability
- MATH 161 Precalculus I
- MATH 162 Precalculus II
- MATH 263 Discrete Mathematics II
- MATH 270 Linear Algebra
- MATH 272 Differential Equations

#### For More Information Contact:

The Division of Business and Technology, Room B2-22, 1700 Spring Garden Street, Philadelphia, PA 19130, Telephone (215) 751-8785; or the College Information Center (215) 751-8010.

# **Engineering Science**

# Description:

The Engineering Science curriculum provides a foundation for further study toward the bachelor's degree in engineering. As such, it parallels the first two years of engineering programs offered by major universities and is applicable to any engineering discipline. Students planning to pursue baccalaureate degrees in aerospace, biomedical, chemical, civil, electrical, industrial, mechanical, nuclear or petroleum engineering select this program. Students with other technical interests may consider other technological curricula.

#### **Student Learning Outcomes:**

Upon completion of this program graduates will be able to:

- Solve problems in algebra, trigonometry and calculus.
- Solve basic problems in science and engineering.
- Work in teams to implement projects.
- Use computers for data acquisition and instrumentation control.
- Communicate technical information using written, verbal and graphical presentations.
- Transfer as engineering majors to bachelor's degree-granting institutions.

#### **Program Entry Requirements:**

Engineering Science is a demanding curriculum. Interested high school students are urged to complete a year of advanced high school mathematics that includes trigonometry and elementary functions. They should also complete a year each of high school chemistry and physics.

Students can be admitted to the program by successfully completing MATH 161 (Precalculus I) with a grade of at least a "C" Students can also be admitted if they have at least MATH 162 (Precalculus II) placement. Students who have not taken high school physics should take PHYS 105 (Survey of Physics) or PHYS 111 (General Physics I).

# Program of Study and Graduation Requirements:

To qualify for the Associate in Science (A.S.) degree in Engineering Science, a minimum of 71 credits and a grade point average of 2.0 are required.

### Preparation for Transfer:

The College has established articulation and dual admission agreements with area colleges and universities including Drexel and Temple universities. In the Career and Transfer Resource Center, room W2-3, and the Counseling Center, room W2-2, students may obtain information and guidance in selecting elective courses required by their transfer institutions.

# Engineering Science Course Sequence

Course Number and Name	Prerequisites and Corequisites	Credits	Gen Ed Req.
First Semester			
ENGR 102 - Engineering Design and Laboratory I	MATH 162	4	
MATH 171 - Calculus I	MATH 161 - MATH 162	4	Mathematics
CHEM 121 - College Chemistry I	CHEM 110 with a grade of C or better or Dept.  Head approval	4	
ENGL 101 - English Composition I		3	ENGL 101
CIS 103 - Applied Computer Technology		3	Tech Comp
Second Semester			

ENGR 202 - Engineering Design and Laboratory II	ENGR 102	4	Writing Intensive
PHYS 140 - Mechanics, Heat and Sound	MATH 171	5	Natural Science
MATH 172 - Calculus II	MATH 171	4	
MATH 270 - Linear Algebra	MATH 171, MATH 172	4	
Summer Session I			
ENGL 102 - The Research Paper	ENGL 101 with a grade of "C" or better	3	ENGL 102
Third Semester			
MATH 271 - Calculus III	MATH 172, MATH 270	4	
CHEM 122 - College Chemistry II	CHEM 121	4	
ENGR 221 - Statics <sup>1</sup>	PHYS 140, MATH 172	3	
PHYS 241 - Electricity, Magnetism and Light	PHYS 140, MATH 172	5	
Fourth Semester			
Humanities Elective		3	Humanities
Social Science Elective		3	Social Sciences
MATH 272 - Differential Equations	MATH 172, MATH 270	4	
ENGR 222 - Dynamics 1	ENGR 221, MATH 271	3	
CSCI 111 - Computer Science I with Java Python or ENGR 205 - Materials Engineering	FNMT 118 or MATH 118 placement or higher; or MATH 161 placement PHYS 241, MATH 172	4	
Minimum Credits Needed to Graduate: 71			

All General Education requirements are met through required courses (as indicated above) except for the **Interpretive Studies** requirement and the **American/Global Diversity** requirement. Therefore, in order to graduate, students in this program must choose one course that is designated **Interpretive Studies** and one course that is designated **American/Global Diversity**. The same course may be used to fulfill both of these requirements. View the courses that fulfill all <u>degree requirements</u> and receive a more detailed explanation of the College's general education requirements to help in your selection.

# For More Information Contact:

The Division of Math, Science and Health Careers, Room W2-7, 1700 Spring Garden Street, Philadelphia, PA 19130, Telephone (215) 751-8430; or the College Information Center (215) 751 8010.

<sup>&</sup>lt;sup>1</sup> A student planning to major in Chemical Engineering at a transfer institution may substitute <u>CHEM 221</u> - <u>CHEM 222</u> for <u>ENGR 221</u> and <u>ENGR 222</u>.

# **Mathematics**

# Description:

This program leads to an A.S. degree in Mathematics. The primary goal of the program is to prepare students for transfer to a baccalaureate program in mathematics. This curriculum provides freshman- and sophomore-level courses in both continuous and discrete mathematics.

#### **Student Learning Outcomes:**

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

- Prove mathematical statements.
- Solve mathematical problems.
- · Execute mathematical algorithms.

# Program Entry Requirements:

This program is open to interested students who have demonstrated readiness for English 101 and Math 171, either by passing the appropriate placement test or by meeting the prerequisites for the course. Selected math and English courses are available for those not meeting entrance requirements. An educational plan leading to acceptance into the program will be developed for each applicant who does not meet the entrance requirements.

## Program of Study and Graduation Requirements:

To qualify for the A.S. degree in Mathematics, students must complete a minimum of 60 credit hours as prescribed and attain a grade point average of 2.0 ("C" average).

Since science requirements vary at transfer institutions, students are advised to check requirements at transfer institutions before choosing science electives.

# Mathematics Course Sequence

Course Number and Name	Prerequisites and Corequisites	Credits	Gen Ed Req.
First Semester			
MATH 171 - Calculus I	MATH 162 with a grade of "C" or better	4	Mathematics
ENGL 101 – English Composition I		3	ENGL 101
MATH 163 - Discrete Math I	MATH 161 with a grade of "C" or better	4	
Lab Science Elective		4	Natural Science
Second Semester			7
MATH 172 - Calculus II	MATH 171 with a grade of "C" or better	4	
MATH 263 - Discrete Math II	MATH 163 with a grade of "C" or better	4	
ENGL 102 – The Research Paper	ENGL 101 with a grade of "C" or better	3	ENGL 102, Info Lit
Lab Science Elective	ENGL 101	4	Natural Science
Third Semester			
MATH 270 - Linear Algebra	MATH 171 with a grade of "C" or better and MATH 172 with a grade of "C" or better	4	

CSCI 111 – Computer Science I with Java Python	FNMT 118 or MATH 118 placement or higher (or MATH 161 placement)	4	
Humanities Elective		3	Humanities
Lab Science Elective		4	
Fourth Semester			
MATH 271 - Calculus III	MATH 172 with a grade of "C" or better and MATH 270 with a grade of "C" or better	4	
CSCI 112 – Computer Science II with Java and C++	CSCI 111 with a grade of "C" or better and MATH 161 or higher placement	4	Tech Comp
Social Science Elective		3	Social Science
MATH 272 - Differential Equations	MATH 172 with a grade of "C" or better and MATH 270 with a grade of "C" or better	4	
Minimum Credits Needed to Graduate: 60			

All General Education requirements are met through required courses (as indicated above) except for the **Writing Intensive** requirement, the **Interpretive Studies** requirement and the **American/Global Diversity** requirement. Therefore, in order to graduate, students in this program must choose one course that is designated **Writing Intensive**, one course that is designated Interpretive Studies and one course that is designated **American/Global Diversity**. The same course may be used to fulfill more than one of these requirements. View the courses that fulfill all <u>degree requirements</u> and receive a more detailed explanation of the College's general education requirements to help in your selection.

#### For More Information Contact:

The Division of Math, Science and Health Careers, Room W2-7, 1700 Spring Garden Street, Philadelphia, PA 19130, Telephone (215) 751-8430; or the College Information Center (215) 751-8010.

# Accounting

# Description:

The Accounting curriculum leads to an Associate in Applied Science (A.A.S.) degree. Students receive training in accounting theory and generally accepted accounting techniques, as well as in basic management and related fields. Students are prepared for a variety of careers in both industry and government, including positions such as junior accountant, accounting trainee, accounts receivable or accounts payable technician, or tax examiner.

#### Student Learning Outcomes:

Upon completion of the Accounting curriculum, the student will be able to:

- Demonstrate an understanding of financial statements prepared according to Generally Accepted Accounting Principles (GAAP), prepare journal entries and complete the accounting cycle using computerized general ledger software.
- Demonstrate an understanding of managerial and cost accounting concepts.
- Analyze and interpret financial statements for economic decision-making.
- · Effectively communicate with users of financial information orally and in writing.

#### Program Entry Requirements:

The program is open to interested students. However, all new students are normally required to take the College's placement tests at their time of entry. Students identified as needing developmental course work must satisfactorily complete the appropriate English and mathematics courses as a part of their degree program.

# Program Of Study And Graduation Requirements:

A minimum of 62 credits and a grade point average of 2.0 ("C" average) are required for graduation.

# Accounting Course Sequence

Course Number and Name	Prerequisites and Corequisites	Credits	Gen Ed Req.
First Semester			
BUSL 101 - Navigating Leadership and Business Professions		3	
ENGL 101 - English Composition I		3 credits	ENGL 101
MATH 151 - Linear Mathematics or MATH 161 - Precalculus I or MATH 162 - Precalculus II or MATH 171 - Calculus I *	FNMT 118 or MATH 118 with a "C" or better OR MATH 161 or higher placement  For MATH 162: MATH 161 with a "C" or better OR MATH 162 or higher placement  For MATH 171: MATH 162 with a "C" or better OR MATH 171 placement	3/4 credits	Mathematics
CIS 103 - Applied Computer Technology		3 credits	Tech Comp
ACCT 101 - Financial Accounting		4 credits	
Second Semester  ACCT 102 - Managerial Accounting	ACCT 101 with a grade of "C" or better	3 credits	

ACCT 101 with a grade of "C" or better	3 credits	
	3 credits	
ENGL 101 with a grade of "C" or better	3 credits	ENGL 102, Info Lit
	3 credits	
Pre- or Corequisite: MNGT 121	3 credits	
ACCT 101	3 credits	
	3 credits	
FNMT 118 or MATH 118 with a "C" or better OR MATH 161 or higher placement	4 credits	
	3 credits	Humanities
ACCT 201	3 credits	
	3 or 4 credits	Natural Science
For ACCT 215: ACCT 102 or ACCT 101 and department approval  For ACCT 203: ACCT 102  For ACCT 206: ACCT 201  For ACCT 250: ACCT 102	3 or 4 credits	
ECON 112	3 credits	
	3 credits	
	ENGL 101 with a grade of "C" or better  Pre- or Corequisite: MNGT 121  ACCT 101  FNMT 118 or MATH 118 with a "C" or better OR MATH 161 or higher placement  ACCT 201  For ACCT 215: ACCT 102 or ACCT 101 and department approval For ACCT 203: ACCT 102 For ACCT 206: ACCT 201 For ACCT 250: ACCT 102	Bre- or Corequisite: MNGT 121  ACCT 101  3 credits  ACCT 101  3 credits  FNMT 118 or MATH 118 with a "C" or better OR MATH 161 or higher placement  ACCT 201  3 credits  ACCT 201  3 credits  3 credits  3 credits  4 credits  3 credits  4 credits  3 credits

Minimum Credits Needed to Graduate: 62

All General Education requirements are met through required courses (as indicated above) except for the **Writing Intensive** requirement, the **Interpretive Studies** requirement, and the **American/Global Diversity** requirement. Therefore, in order to graduate, students in this program must choose one course that is designated **Writing Intensive**, one course that is designated **Interpretive Studies**, and one course that is designated **American/Global Diversity**. The same course may be used to fulfill several requirements. View the courses that fulfill all <u>degree requirements</u> and receive a more detailed explanation of the College's general education requirements to help in your selection.

#### For More Information Contact:

The Division of Business and Technology, Room B2-22, 1700 Spring Garden Street, Philadelphia, PA 19130, Telephone (215) 751-8785; or the College Information Center (215) 751-8010.

<sup>\*</sup> Students who enter the College at the MATH 161 level or higher can complete this program in 62 credits. Students who enter the College at a lower level on the Math placement exam will need to take FNMT 118 - Intermediate Algebra and thus will need 65 credits to graduate.

# American Sign Language/English Interpreting (INT)

# Description:

The ASL/English Interpreting (INT) curriculum prepares students to work as professional interpreters with Deaf and non-deaf (hearing) people. The goal of the ASL/English interpreter is to make communication as complete and equal as possible for both Deaf and non-deaf participants by accurately conveying the thoughts, feelings, words, attitudes and meanings of the message, whether it is expressed in spoken English, American Sign Language (ASL) or other forms of signed communication. Thus, interpreters must be bilingual, skilled in both English and ASL, and bicultural, knowledgeable about the cultures of both Deaf and non-deaf people.

A skilled interpreter must also be versatile, mature and flexible in order to successfully work with people from a variety of backgrounds with diverse communication needs. The field encompasses a multitude of situations and settings, including medical, legal and psychological, that frequently contain sensitive and personal issues. In responding to these situations it is the interpreter's professional responsibility to thoroughly understand, and adhere to, the Registry of Interpreters for the Deaf, Inc. Code of Professional Conduct. It is therefore imperative that interpreters also be of high moral character, nonjudgmental and well-informed in order to be able to meet the challenges which arise in these sensitive, diverse and ever-changing situations.

The INT curriculum covers a variety of subject areas, including Deaf culture, structure of ASL, comparative English and ASL, professional practices and ethics, interpreting processes in theory and application, and guided skill development in ASL and interpreting with diagnostic feedback. The INT lab offers practice opportunities in both video and digital formats in a small group, supportive environment.

In addition to traditional classroom lectures and laboratory activities, the curriculum utilizes hands-on experience through fieldwork, guest lectures, observations and internships. Cooperative relationships with professional and community agencies and organizations are maintained to provide opportunities for networking and interaction with the Deaf community, as well as the professional interpreting community.

The INT program prepares students for entry-level work as interpreters. It also prepares students for the national certification evaluation given by the Registry of Interpreters for the Deaf, Inc. (RID). For the majority of students, however, several years of professional work experience after graduation are needed before certification can be attained. Students completing the curriculum receive an Associate in Applied Science (A.A.S.) degree. Beginning July 1st, 2012 RID will require a Bachelor's degree in any major in order to take the national certification exam. In order to meet that requirement, CCP has developed collaborations with baccalaureate institutions to provide suitable options to students graduating with the A.A.S.

#### **Student Learning Outcomes:**

Upon completion of this curriculum, the student will be able to:

- Demonstrate advanced ASL proficiency and Deaf culture awareness as it applies to a wide variety of deaf-hearing interaction settings and participants
- Practice ethical standards of interpreting as they apply to the role and function of interpreters described within the RID Code of Professional Conduct.
- · Work effectively with other members of their profession in collegial ways to support their Deaf and non-deaf clients.
- . Demonstrate the ability to assess and analyze one's own competencies in order to identify areas of need for continuing education and professional development
- Demonstrate interpreting and transliterating competence necessary for effective facilitation of communication in a variety of settings.

#### Program Entry Requirements:

ASL/English Interpreting program students must be English 101 ready. Developmental coursework must be completed before admittance into the program. To be accepted into the ASL/English Interpreting program students must earn a minimum grade of "B" in both ASL 101 and ASL 102 (both program prerequisites). Applicants to the ASL/English Interpreting program who have not taken ASL 101 and/or ASL 102, and who have prior experience with the language of ASL, may request a proficiency screening for acceptance and placement in the program.

Applicants requesting transfer of ASL courses from another college must have earned a minimum grade of "B" in ASL 101, 102, 201 and 202 equivalents at their former college(s) for these courses to be transferable.

#### Program Retention Criteria:

A student who demonstrates attitudes and behavior viewed as inconsistent with professional ASL/English interpreting standards may be dropped from the curriculum pending a departmental hearing.

ASL skills can diminish over time if not used regularly. Therefore, it is recommended that students who leave the program for more than one year and wish to return be evaluated by a faculty member for the need to retake coursework previously taken.

# Program Of Study And Graduation Requirements:

To qualify for an Associate in Applied Science (A.A.S.) degree in ASL/English Interpreting, a student must complete 67 credits as prescribed, have an overall grade point average (GPA) of 2.0, and a "C" or better in all ASL, ENGL and INT courses.

# American Sign Language/English Interpreting Course Sequence

Course Number and Name	Prerequisites and Corequisites	Credits	Gen Ed Req.
Summer Session I			
ASL 201 - Intermediate American Sign Language I	ASL 102 (or Program placement)	3	Am/Global Diversity
ENGL 101 - English Composition		3	ENGL 101
Summer Session II			
ASL 202 - Intermediate American Sign Language II	ASL 201	3	
CIS 103 - Applied Computer Technology		3	Tech Comp
First Semester			
ASL 230 - Structure of American Sign Language	ASL 202 with a "B" grade or higher, ENGL 101 which may be taken concurrently	3	
ASL 231 - Advanced American Sign Language I	ASL 202 with a "B" grade or higher	3	Am/Global Diversity
INT 105 - Introduction to American Deaf Community		3	
ASL 215 - ASL Fingerspelling & Numbers	ASL 202 with a "B" grade or higher	3	
Second Semester			
ASL 232 - Advanced American Sign Language II	ASL 231 with a "C" grade or higher	3	
INT 106 - American Deaf Culture	INT 105 with a "C" grade or higher	3	
INT 240 - Introduction to the Field of ASL/English Interpreting	ASL 230, ASL 231, INT 105, ENGL 101 all with a "C" grade or higher, Pre- or coreq: INT 242	3	
INT 242 - Introduction to Interpreting Processes	ASL 215, ASL 230, ASL 231 all with a "C" grade or higher, Pre- or coreq: INT 240	3	
Summer Session I			
INT 251 - ASL/English Interpreting I	ASL 230, ASL 232, INT 240, INT 242 all with a "C" grade or higher	3	
Science Elective		3/4	Natural Science
Summer Session II			
Math Elective (FNMT 118 or MATH 118 or higher)		3	Mathematics

Humanities Elective (Choose one of the following) <u>ENGL</u> 115, <u>ENGL 116</u> , <u>ENGL 120</u> or <u>ENGL 131</u>		3	Humanities
Third Semester			
INT 252 - ASL/English Interpreting II	INT 251 with a "C" grade or higher	3	
INT 255 - Transliterating	INT 251 with a "C" grade or higher	3	
Social Science Elective		3	Social Sciences
ENGL 102 - The Research Paper	ENGL 101 with a "C" grade or higher	3	ENGL 102, Info Lit
Fourth Semester			
INT 260 - Interpreting in Specialized Settings	INT 240 with a "C" grade or higher	3	
INT 297 - Internship in Interpreting	INT 252, INT 255 both with a "C" grade or higher	4	

Minimum Credits Needed to Graduate: 67

# **General Education Requirements:**

All General Education requirements are met through required courses (as indicated above) except for the **Writing Intensive** requirement and the **Interpretive Studies** requirement. Therefore, in order to graduate, students in this program must choose one course that is designated **Writing Intensive** and one course that is designated **Interpretive Studies**. View the courses that fulfill all <u>degree requirements</u> and receive a more detailed explanation of the College's general education requirements to help in your selection.

# For More Information Contact:

The Division of Liberal Studies, Room BR-21, 1700 Spring Garden Street, Philadelphia, PA 19130, Telephone (215) 751-8450; or the College Information Center (215) 751-8010.

# Applied Science and Engineering Technology

# Description:

The Applied Science and Engineering Technology program curriculum leads to an Associate in Applied Science (A.A.S.) degree and prepares students for employment in a range of scientific technology occupations and also provides a foundation for transfer to four-year technology programs. The flexible design of the program allows students to choose from a range of scientific technology fields, including biomedical equipment technology, engineering technology and process technology, among others.

The program includes a set of courses required of all students and gives students the opportunity to select specialized courses in a particular field of interest, leading to a proficiency certificate in a specialized field. Some students may initially opt to finish a proficiency certificate without completing the degree in order to directly enter the workforce. Students who do so and who later decide to pursue the associate's degree will have a seamless transition to the degree program, since most credits earned through the proficiency certificate will also count toward the degree itself.

### **Student Learning Outcomes:**

Upon completion of the Applied Science and Engineering Technology curriculum, the student will be able to:

- Demonstrate foundational knowledge in at least one technology field.
- Demonstrate laboratory skills in basic science and technology areas.
- Demonstrate an understanding of the interplay between scientific information and public policy and standards.
- Present technical information in oral, written or graphic format.
- · Work effectively as part of a team.

In addition, students will be prepared to work in a range of industries at the technician level. Below is a list of some of the positions a graduate of the program could fill (depending on which certificate or certificates are completed).

- Process technician or operator in industries such as oil refining, food processing and water purification.
- · Biotechnology technician in the bio-pharmaceutical industry.
- Biomedical research technician.

### Program Entry Requirement:

This program is open to all interested students. All new students are normally required to take the College's placement test at their time of entry. Students who are identified as needing developmental course work must satisfactorily complete the appropriate English and mathematics courses as a part of their degree program.

# Program of Study and Graduation Requirements:

A minimum of 62 credits as prescribed must be completed with a minimum grade point average of 2.0. A minimum grade of "C" must be achieved in all certificate and required program courses. Specific certificates taken in conjunction with the degree will require more than 62 credits.

# Applied Science and Engineering Technology Course Sequence

Course Number and Name	Prerequisites and Corequisites	Credits	Gen Ed Req.
First Semester			
FNMT 118 - Intermediate Algebra or higher*		3	Mathematics
ASET 101 - Science, Technology and Public Policy or BMET 101 <sup>1</sup>	BMET: BIOL 108 or BIOL 110, which may be taken concurrently	3 or 4	Science
Directed Electives <sup>2</sup> [Prior Learning Assessment may be applied]**		15	
Second Semester			

ENGL 101 - English Composition I		3	Composition
CIS 103 - Applied Computer Technology		3	Tech Comp
ELEC 120 - DC and AC Circuits	FNMT 118 or MATH 118 pre or co-requisite	4	
$\begin{array}{c} \underline{PTEC~103} \text{ - Introduction to Process Technology and Plant} \\ Equipment \\ or \\ BMET~102^1 \text{ - Introduction to Biomedical Equipment Repair} \\ Technology~II \end{array}$	FNMT 118 or MATH 118 ready and CHEM 110 for PTEC 103 or BMET 101 for BMET 102	4	
Third Semester			
ENGL102 - The Research Paper	ENGL 101 with a grade of "C" or better	3	ENGL 102, Info Lit
ELEC 130 - Digital Electronics or ELEC 124 - Semiconductor Devices	For ELEC 130: FNMT 118 or MATH 118 For ELEC 124: ELEC 120 with a grade of "C" or better	4	
CHEM 110 - Introductory Chemistry or higher*	FNMT 118 or MATH 118 ready and ENGL 101 ready	4	Science
ASET 110 - Safety, Health and the Environment or BMET 201-Medical Devices <sup>1</sup>	BMET 103: BMET 201	3 or 4	
Humanities - Elective		3	Humanities
Fourth Semester			
PHYS 105 - Survey of Physics or higher*		4	
ASET 130 - Quality Control Quality Assurance or BMET 202 - Medical Devices in a Networked Environment <sup>1</sup>	ASET 130: FNMT 118 or MATH 118  BMET 201: BMET 202, ELEC 130 and CIS 150, all with a "C" or better	3 or 4	
Social Science - Elective		3	Social Sciences
Minimum Credits Needed to Graduate: 62 <sup>3</sup>			

<sup>1.</sup> Students interested in obtaining the BMET Proficiency Certificates should take BMET 101, BMET 102, BMET 201 and BMET 202 Students interested in obtaining the PTEC Proficiency Certificates should take ASET 101, ASET 110, ASET 130 and PTEC 103

- <sup>2.</sup> Directed Electives should be chosen in consultation with an Advisor, from the list below:
  - Any PTEC course above PTEC 103
    - (PTEC 111, 115, 125 and 135 needed for PTEC 2 Proficiency Certificate)
  - BMET 103 needed for BMET Proficiency Certificate I
  - BMET 203 needed for BMET Proficiency Certificate II
  - BIOL 108 needed for BMET Proficiency Certificate I
  - CIS 105, 106, 130, 150
    - CIS 105 needed for BMET Proficiency Certificate I
  - CIS 150 needed for BMET Proficiency Certificate II
  - Any ELEC course above ELEC 120
    - ELEC 124 and ELEC 130 needed for BMET Proficiency Certificate II
  - Management MNGT 121 or MNGT 141
  - Any Chemistry course above CHEM 110
  - Any Engineering course
  - Any Physics course above PHYS 105 except PHYS 108 Descriptive Astronomy

- Any Math course above FNMT 118 or MATH 118 except MATH 153 Mathematics of Personal Finance
- CSCI 111 or 112
- ADC 103
- EASC 111 or EASC 111H

Students in this program are required to complete at least one course that is designated Writing Intensive, at least one course that is designated Interpretive Studies and at least one course that is designated American/Global Diversity. Students must choose electives that fulfill these requirements. Students may use the same course to fulfill more than one of these requirements. View the courses that fulfill all <u>degree requirements</u> and receive a more detailed explanation of the College's general education requirements to help in your selection.

#### For More Information Contact:

The Division of Math, Science and Health Careers, Room W2-7, 1700 Spring Garden Street, Philadelphia, PA 19130, Telephone (215) 751-8430; or the College Information Center (215) 751-8010.

# Applied Science And Engineering Technology Proficiency Certificates

Students are strongly encouraged to meet with a program advisor to assure completion of the ASET degree in conjunction with a proficiency certificate.

Process Technology I Proficiency Certificate

Process Technology II Proficiency Certificate

Biomedical Equipment Technician Proficiency Certificate I

Biomedical Equipment Technician Proficiency Certificate II

PTEC 1 Proficiency Certificate I Courses	Pre-requisites	Credits
CHEM 110: Introductory Chemistry	FNMT 118 or MATH 118 ready	4
PTEC 103: Introduction to Process Technology and Plant Equipment	FNMT 118 or MATH 118 ready and CHEM 110	4
FNMT 118: Intermediate Algebra		3
ASET 110: Safety Health and the Environment		3
CIS 103: Applied Computer Technology		3
Total		17

PTEC 2 Proficiency Certificate II Courses	Pre-requisites	Credits
PHYS 105: Survey of Physics		4
PTEC 111: Process Control I	PTEC 103 and ASET 110	4
PTEC 115: Process Control II	PTEC 103, ASET 110, PHYS 105 and <u>FNMT 118</u> or MATH 118	4
PTEC 125: Fluid Power and Controls	PTEC 111 and ASET 130	4
PTEC 135: Unit Operations	PTEC 111 and ASET 130	4
ENGL 101		3
ASET 130: Quality Control Quality Assurance	<u>FNMT 118</u> or MATH 118	3

<sup>&</sup>lt;sup>3</sup> Students may have more than 62 credits to qualify for graduation depending upon courses chosen.

<sup>\*</sup>Qualified students, especially those interested in transfer to a 4-year Engineering Technology program, are encouraged to take higher level courses in Math, Physics and Chemistry.

<sup>\*\*</sup> Students may submit industry certifications and/or other proof of prior learning for credit consideration.

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BMET Proficiency Certificate I Courses	Pre-requisites Pre-requisites	Credits
BMET 101: Biomedical Equipment Technology I	BIOL 108 pre or co requisite	4
BMET 102: Biomedical Equipment Technology II	BMET 101 with a "C" or better and ELEC 120, which may be taken concurrently	4
ELEC 120: DC and AC Circuits	FNMT 118 or MATH 118 pre or co requisite	4
BIOL 108: Essentials of Human Anatomy and Physiology	FNMT 118 or MATH 118 ready	4
FNMT 118: Intermediate Algebra		3
CIS 105: Computer Systems Maintenance		4
BMET 103: Internship I	BMET 102 with a "C" or better	1
Total		24

BMET Proficiency Certificate II Courses	Pre-requisites	Credits
BMET 201: Medical Devices	BMET 103	4
ELEC 124: Semiconductor Devices	ELEC 120	4
CIS 150: Network Technology		4
BMET 202: Medical Devices in a Networked Environment	BMET 201, ELEC 130, CIS 150 CIS 150 with a "C" or better	4
ELEC 130: Digital Electronics	ELEC 120	4
BMET 203: Internship II	BMET 202 with a "C" or better	1
Total		21

# Automotive Technology

# Description:

The Automotive Technology program leads to an Associate in Applied Science (A.A.S.) degree. As the automotive industry has undergone a parts and service revolution, the increased complexity of the modern automobile has created a demand for highly skilled, technologically advanced automotive professionals.

The Automotive Technology program prepares students to work as mechanics, safety inspectors and shop supervisors. The skills courses provide experience with the most modern diagnostic and repair equipment. The general education courses are transferable to some baccalaureate degree programs in engineering and vocational education. Graduates are also prepared to take the National Institute of Automotive Service Excellence Certification examinations. This program is certified by the National Automotive Technicians Education Foundation (NATEF).

### Student Learning Outcomes:

Upon completion of this program graduates will be able to:

- Apply a basic foundation in theory, maintenance, diagnosis and repair of automotive systems.
- Integrate and analyze online service data, written repair material and technical service bulletins to repair and service a vehicle.
- Demonstrate proficiency in the use of specialized automotive service tools, electronic diagnostic equipment and basic hand tools.
- Demonstrate ethical behavior, professionalism and the ability to work as a team.

### **Entry Requirements:**

Students interested in automotive fields may enroll in this curriculum. New students are normally required to take the College's placement test at their time of entry. Students who are identified as needing developmental course work must satisfactorily complete the appropriate English and mathematics courses as part of the certificate.

### Program of Study and Graduation Requirements:

To qualify for the A.A.S. degree in Automotive Technology, a student must complete a minimum of 62 credits as prescribed and attain a grade point average of 2.0 ("C" average).

#### Automotive Technology Course Sequence

Course Number and Name	Prerequisites and Corequisites	Credits	Gen Ed Req.
First Semester			
AT 100 - Introduction to Automotive Technology		3	
ENGL 101 - English Composition I		3	ENGL 101
CIS 103 - Applied Computer Technology		3	Tech Comp
AT 121 - Automotive Electricity and Electronics	AT 100, which may be taken concurrently	3	
SOC 101 - Introduction to Sociology		3	Social Science Interpretive Studies American/Global Diversity Writing Intensive
Second Semester			

AT 181 - Automotive Engine Mechanical Repair	AT 100, which may be taken concurrently	4	
AT 131 - Automotive Manual Transmissions	AT 100, which may be taken concurrently	4	
FNMT 118 - Intermediate Algebra		3	Mathematics
AT 150 - Automotive Braking Systems	AT 100, which may be taken concurrently	2	
ENGL 102 - The Research Paper	ENGL 101 with a grade of "C" or better	3	ENGL 102, Info Lit
Summer Session			
AT 221 - Advanced Automotive Electrical Systems	AT 121, FNMT 118 or higher MATH, which may be taken concurrently	4	
Third Semester			
AT 261 - Engine Performance and Diagnosis	AT 221	4	
AT 271 - Air Conditioning and Heating Systems	AT 121	3	
Science Elective (choose one):  • CHEM 101 - General Chemistry • PHYS 105 - Survey of Physics • STS 101 - Intro to Science Technology and Society • EASC - Environmental Conservation • ASET 110 - Safety, Health and the Environment	For PHYS 105 and STS 101: FNMT 118 (or higher placement) or a passing grade in FNMT 017 (or higher) are required.	3/4	Natural Science
AT 250 - Advance Braking Systems and Controls	AT 121, AT 150	2	
Fourth Semester			
AT 241 - Automatic Transmissions and Transaxles	AT 221, AT 131	4	
ENGL 102 - The Research Paper	ENGL 101 with a grade of "C" or better	3	ENGL 102, Info Lit
<ul> <li>Humanities course (choose one):</li> <li>HIST 101 - United States History: Colonial America through the Revolutionary Era</li> <li>HIST 102 - United States History: The 19th Century</li> <li>HIST 103 - United States History: The 20th Century</li> <li>ADC 176 - Philadelphia History: Architecture and Planning</li> </ul>		3	Humanities
AT 111 - Automotive Steering and Suspension	AT 100, which may be taken concurrently	4	
Summer Session			
AT 281 - Advanced Engine Performance and Diagnosis	AT 221, AT 261	4	
Minimum Credits Needed to Graduate: 62			

All general education requirements necessary for graduation are met through the courses in the program as indicated above. Students who wish to take courses that differ from the general education courses indicated above must consult with an advisor or counselor before registering. View the courses that fulfill all degree requirements and receive a more detailed explanation of the College's general education requirements to help in your selection.

\* AT 210 and AT 289 are highly recommended but not required for graduation.

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# Behavioral Health/Human Services

# Description:

This curriculum is designed for students interested in working with people in need. Students will have the opportunity to study human behavior and human development within the context of the psychological, social and biophysical environments in which people live. They will develop skills needed to work with others both one-on-one and in groups. They will develop the value base from which they will practice and learn the ethical standards of the helping professions. They will learn to appreciate and work in a multicultural environment. As a major part of their study, they will also have the opportunity to work directly with people in need by being assigned two field placements with agencies and institutions in the community.

## Student Learning Outcomes:

Upon completion of this program graduates will be able to:

- Discover a stronger professional identity through personal growth experience
- Develop self within the ethical and culturally sensitive standards of helping
- Distinguish the major theories that inform multidimensional practice
- Demonstrate the ability to use common helping skills, critical thinking and communications

#### **Program Entry Requirements:**

Students are typically required to take the College's placement tests at their time of entry. Students identified as needing developmental course work must satisfactorily complete the appropriate English and mathematics courses as a part of their degree program.

### Program Of Study And Graduation Requirements:

It is recommended that students in the Behavioral Health Human Services curriculum must complete required courses ENGL 101, ENGL 102, CIS 103, BHHS 101, 103, 105, 111 and at least one of two required social sciences (PSYCH 101 or SOC 101) within the first 30 credits. To qualify for the Associate in Applied Science (A.A.S.) degree in Behavioral Health/Human Services, students must complete the appropriate 63 credit hours with a minimum cumulative grade point average of 2.0 ("C" average). All BHHS students must earn a "C" or better in all required BHHS courses. While enrolled in the curriculum, students are to be guided by the values and ethical standards of the helping professions. They are also challenged to participate in a process of self-discovery and growth. Students whose behavior is viewed as inconsistent with professional standards may be dropped from the curriculum pending the results of a departmental hearing.

# Behavioral Health/Human Services Course Sequence

Course Number and Name	Prerequisites and Corequisites	Credits	Gen Ed Req.
First Semester			
ENGL 101 - English Composition I		3	ENGL 101
BHHS 101 - Introduction to Behavioral Health and Human Services		3	
CIS 103 - Applied Computer Technology*		3	Tech Comp
BHHS 105 - Introduction to Group Dynamics		3	
BHHS 111 - Introduction to Helping Skills	BHHS 101 which may be taken concurrently	3	
Second Semester			
ENGL 102 - The Research Paper	ENGL 101 with a grade of "C" or better	3	ENGL 102, Info Lit
BHHS 103 - Human Development and Behavior in the Social	ENGL 101 with a grade of "C" or better		Am/Global Diversity, Writing

Environment		3	Intensive
BHHS 194 - Case Management Practice	BHHS 111 with a "C" grade or better	3	
BHHS 195 - Practicum in Behavioral Health and Human Services I	BHHS 111 with a "C" grade or better	3	
Social Science Elective		3	Social Sciences
Humanities Elective		3	Humanities
Third Semester			
<u>BHHS 212</u> - Resolution-Focused Helping Skills	BHHS 111 with a "C" grade or better Coreq: BHHS 213	3	
Social Science Elective		3	
General Elective**		3	
BHHS 213 - Practicum in Behavioral Health and Human Services II	BHHS 195 with a "C" grade or better; BHHS 212 must be taken concurrently	3	
BHHS 106 - Analysis of Group Participation	BHHS 105	3	
Fourth Semester			
BHHS 293 - Family and Relationship Counseling	BHHS 111 with a "C" grade or better	3	
Mathematics Elective ( <u>FMNT 118</u> Intermediate Algebra or higher)		3	Mathematics
Science Elective		3/4	
General Elective**		3	
General Elective**		3	

Minimum Credits Needed to Graduate: 63

# **General Education Requirements:**

All General Education requirements are met through required courses (as indicated above) except for the **Interpretive Studies** requirement. Therefore, in order to graduate, students in this program must choose one course that is designated **Interpretive Studies**. View the courses that fulfill all <u>degree requirements</u> and receive a more detailed explanation of the College's general education requirements to help in your selection.

Recovery and Transformation Academic and Proficiency Certificates Social and Human Service Assistant Proficiency Certificate

### For More Information Contact:

 $The\ Division\ of\ Liberal\ Studies, Room\ BR-21, 1700\ Spring\ Garden\ Street, Philadelphia, PA\ 19130, Telephone\ (215)\ 751-8450; or\ the\ College\ Information\ Center\ (215)\ 751-8010.$ 

<sup>\*</sup>Students with computer skills may apply for credit by exam through the Computer Technologies Dept.

<sup>\*\*</sup>Students should choose General Electives in consultation with an advisor. Students who wish to earn one of the Certificates listed below are advised to use their General Electives to take courses required for that Certificate.

# **Building Science**

# Description:

This program prepares students for a variety of careers in the energy conservation industry and related fields, such as energy auditors, renewable energy installers and designers, energy conservation installers and computer energy modelers. Individuals interested in developing small independent energy conservation contracting businesses will also find this program useful toward achieving that goal. Although designed for career preparation, it also can serve students interested in continuing their studies leading to a bachelor's degree. Courses within this program utilize the latest industry-standard scientific methods, instruments and software for determining the energy consumption profile for buildings.

#### **Student Learning Outcomes:**

Upon completion of this program graduates will be able to:

- Conduct performance audits of energy consumption in existing buildings.
- Interpret and produce mechanical, electrical and plumbing drawings and details.
- Plan energy renovation projects.
- Plan and detail alternative energy installations including photovoltaic, solar thermal, and wind turbine systems.
- Organize and run an independent energy conservation contracting business.
- Interpret architectural and construction drawings and documents, demonstrating knowledge of various building materials and methods and related building technologies.
- · Utilize computer systems for project planning and management and to produce estimates of probable construction cost, including analysis of costs and benefits
- Investigate and resolve problems in construction planning, scheduling and management.
- Provide leadership in creating and maintaining a safe working environment.

### Program Entry Requirements:

Students are normally required to take the College's placement tests at the time of entry. Students identified as needing developmental course work must satisfactorily complete the appropriate English and mathematics courses in addition to the requirements of their program.

#### Program of Study and Graduation Requirements:

To qualify for the A.A.S. degree in Building Science, a student must complete a minimum of 63 credits as prescribed and attain a minimum grade point average of 2.0 ("C" average).

# **Building Science Course Sequence**

Prerequisites and Corequisites	Credits	Gen Ed Req.
	3	Tech Comp
	3	Tech Comp
	3	
	3	ENGL 101
	3	Math
ADC 103 OR 109	3	
ADC 101	3	
	ADC 103 OR 109	3 3 3 3 3 3 3 3 3 3

ADC 161 - Introduction to Building Science	ADC 101	3	
ADC 286 - Building Rehabilitation and Energy Retrofit	ADC 101	3	
ENGL 102 - The Research Paper	ENGL 101 with a grade of "C" or better	3	ENGL 102 & Info Lit
Third Semester			
ADC 163 - CAD Building Documentation	ADC 103	3	
ADC 236 - Construction Cost Estimating I	ADC 101	3	
ADC 246 - Contracts and Specifications	ADC 101	3	
ADC 253 - Environmental Systems I	ADC 101; ADC 103 or ADC 109	3	
EASC 111 - Environmental Conservation		3	Social Sciences
Humanities Elective		3	Humanities
Fourth Semester  ADC 156 - Alternative and Renewable Energy Systems		3	
ADC 237 - Construction Cost Estimating II — Computer Methods & Cost/Benefit Analysis	ADC 236	3	
ADC 254 - Environmental Systems II	ADC 253	3	
ADC 261 - Construction Management and Scheduling	ADC 246	3	
Science Elective		3/4	Natural Science
Minimum Credits Needed to Graduate: 63			

All General Education requirements are met through required courses (as indicated above) except for the **Writing Intensive** requirement, the **Interpretive Studies** requirement and the **American/Global Diversity** requirement. Therefore, in order to graduate, students in this program must choose one course that is designated **Writing Intensive**, one course that is designated **Interpretive Studies** and one course that is designated **American/Global Diversity**. The same course may be used to fulfill more than one of these requirements. View the courses that fulfill all <u>degree requirements</u> and receive a more detailed explanation of the College's general education requirements to help in your selection.

# For More Information Contact:

The Division of Liberal Studies, Room BR-21, 1700 Spring Garden Street, Philadelphia, PA 19130, Telephone (215) 751-8450; or the College Information Center (215) 751-8010.

# Computer Information Systems - Information Technology

# Description:

The Computer Information Systems-Information Technology degree program provides a solid foundation in computing areas most important in today's workplace—including PC operating systems, common applications software, data communications and networking, database management systems, computer programming, and systems analysis and design. In addition to required courses all students take in the program, elective courses may be chosen to develop specialization in a selected area of computing or to obtain a broader understanding of computer technologies and how they fit together. (Many of our students use their elective courses to earn a related Proficiency Certificates in addition to their degree, such as the Computer Programming and Software Development Proficiency Certificate or Network and Systems Administration Proficiency Certificate or Cybersecurity I Proficiency Certificate.)

#### **Student Learning Outcomes:**

Upon completion of this program graduates will be able to:

- Use technology effectively to communicate and analyze information related to computer information systems.
- Work as a part of a professional team to analyze, design and implement computer information systems.
- Install, configure and maintain computer information systems, including the system's operating system and common computer hardware and software.
- Demonstrate a broad knowledge of computer information systems terminology and practices, including those related to networking and data communications technology.
- · Effectively use word processing, spreadsheet, presentation graphics and database management software in a professional office environment.
- · Design and implement a relational database.
- Develop solutions to common programming problems using the structured sequential logic of computer programming languages.

#### Program Entry Requirements:

This program is open to interested students. However, new students are normally required to take the College's placement test at their time of entry.

Students who have had prior computer-related experience may be placed in more advanced courses after consultation with and approval of the department chairperson.

Students identified as needing developmental work must satisfactorily complete the appropriate English and mathematics courses as part of their degree program.

## Program of Study and Graduation Requirements:

A total of 60 credit hours as prescribed must be satisfactorily completed with a grade point average of 2.0 ("C" average).

# Computer Information Systems - Information Technology Course Sequence

Course Number and Name	Prerequisites and Corequisites	Credits	Gen Ed Req.
First Semester			
ENGL 101 - English Composition I		3	ENGL 101
CIS 103 - Applied Computer Technology		3	Tech Comp
CIS 106 - Introduction to Computer Programming		4	
CIS 105 - Computer Systems Maintenance		4	
Second Semester			
FNMT 118 - Intermediate Algebra or above		3	Mathematics
ENGL 102 - The Research Paper	ENGL 101 with a grade of "C" or better	3	ENGL 102, Info Lit
CIS 150 - Network Technology		4	

<u> </u>			
MATH 121- Computer and Logic or MATH 163 - Discrete Math	For MATH 163 a Prerequisite of MATH 161 with a grade of "C" or better or MATH 162 or higher	3/4	
CIS 205 - Database Management Systems	<u>CIS 103</u> or ( <u>CSCI 111</u> and <u>CSCI 112</u> )	4	
Third Semester			
CIS or CSCI Concentration Course*		3/4	
Natural Science Elective		3/4	Natural Science
CIS or CSCI Concentration Course*		3/4	
CIS 270 - Systems Analysis and Design	CIS 205	4	
CIS or CSCI Concentration Course*		3/4	
Fourth Semester			
Social Science Elective		3	Social Sciences
Humanities Elective		3	Humanities
CIS or CSCI Concentration Course*		3/4	
CIS or CSCI Elective (if necessary to reach the minimum of 15 credits of CIS or CSCI electives)*		3/4	
MINIMUM CREDITS NEEDED TO GRADUATE: 60			

#### \*Concentration Courses:

#### Cybersecurity Concentration Courses

- <u>CIS 152</u> Introduction to Cybersecurity
- CIS 155 Principles of Operating Systems
- CIS 114 Java Script
- CIS 204 Fundamentals of Linux and Unix
- <u>CIS 252</u> Windows Server Configuration
- CIS 259 Computing & Network Security
- CIS 261 Cyber Investigation
- CIS 274 Ethical Hacking & Penetration Testing

# Web Design Concentration Courses

- CIS 114 Java Script
- CIS 130 Web Page Design I
- CIS 140 Principles of Desktop and Electronic Publishing
- CIS 230 Web Page Design II
- CIS 231 Adobe Flash

# Programming Concentration Courses

- CSCI 111 Computer Science I with Java and Python
- CSCI 112 Computer Science II with Java and C++
- CSCI 125 Introduction to Video Game and Simulation Development
- CSCI 211 Data Structures and Algorithms
- CSCI 213 Computer Organization
- CSCI 215 Introduction to Android Development
- CIS 204 Fundamentals of Linus and Unix

# Networking Concentration Courses

- CIS 252 Windows Server Configuration
- CIS 253 Windows Server Administration
- CIS 256 Cisco Routing Technology
- CIS 257 Advanced Cisco Routing and Switch Technology
- CIS 259 Computing and Network Security
- CIS 297 Network Technology Capstone

All General Education requirements are met through required courses (as indicated above) except for the **Writing Intensive** requirement, the **Interpretive Studies** requirement and the **American/Global Diversity** requirement. Therefore, in order to graduate, students in this program must choose one course that is designated **Writing Intensive**, one course that is designated **Interpretive Studies** and one course that is designated **American/Global Diversity**. The same course may be used to fulfill more than one of these requirements. View the courses that fulfill all <u>degree requirements</u> and receive a more detailed explanation of the College's general education requirements to help in your selection.

#### For More Information Contact:

The Division of Business and Technology, Room B2-22, 1700 Spring Garden Street, Philadelphia, PA 19130, Telephone (215) 751-8785; or the College Information Center (215) 751-8010.

<sup>\*</sup> CIS 100 and CIS 104 are for non-majors and do not count toward degree.

# Construction Management

# Description:

This program prepares students for a variety of careers in the construction industry and related fields, such as estimators, project managers and schedulers, surveyors, specifiers, quality control supervisors, materials testers, construction materials and equipment salespersons, owners' representatives and site inspectors. Individuals interested in developing small independent construction contracting businesses will also find this program useful toward achieving that goal. Although designed for career preparation, it also can serve students interested in continuing their studies leading to a bachelor's degree. Courses within this program utilize the latest industry-standard computer software for project scheduling, construction cost estimating, and contract and specification writing.

# Student Learning Outcomes:

Upon completion of this program graduates will be able to:

- Interpret and produce property surveys.
- Interpret and produce structural drawings and details.
- Plan building renovation projects.
- Organize and run an independent construction business.
- Interpret architectural and construction drawings and documents, demonstrating knowledge of various building materials and methods and related building technologies.
- · Utilize computer systems for project planning and management and to produce estimates of probable construction cost, including analysis of costs and benefits.
- Investigate and resolve problems in construction planning, scheduling and management.
- Provide leadership in creating and maintaining a safe working environment.

#### Program Entry Requirements:

Students are normally required to take the College's placement tests at the time of entry. Students identified as needing developmental course work must satisfactorily complete the appropriate English and mathematics courses in addition to the requirements of their program.

#### Program of Study and Graduation Requirements:

To qualify for the A.A.S. degree in Construction Management, a student must complete a minimum of 63 credits as prescribed and attain a minimum grade point average of 2.0 ("C" average).

# Construction Management Course Sequence

Course Number and Name	Prerequisites and Corequisites	Credits	Gen Ed Req.
First Semester			
ADC 101 - Introduction to Design & Construction		3	Tech Comp
ADC 103 - CAD Basics		3	Tech Comp
ADC 136 - Construction Safety and Building Codes		3	
ENGL 101 - English Composition I		3	ENGL 101
MATH 137 Geometry for Design (or higher MATH <sup>1</sup> )		3	Math
Second Semester			
ADC 112 - Construction Materials & Detailing: Principles	ADC 103 or ADC 109	3	
ADC 146 - Construction Supervision & Business Practices	ADC 101	3	

ADC 186 - Surveying	ADC 101	3	
ADC 286 - Building Rehabilitation and Energy Retrofit	ADC 101	3	
ENG 102 - The Research Paper	ENGL 101 with a grade of "C" or better	3	ENGL 102 & Info Lit
Third Semester			
ADC 163 - Digital Documentation in Architecture & Construction	ADC 103	3	
ADC 226 - Structures I	ADC 101 & MATH 118 or higher	3	
ADC 236 - Construction Cost Estimating I	ADC 101	3	
ADC 246 - Contracts and Specifications	ADC 101	3	
Social Science Elective <sup>1</sup>		3	Social Sciences
Humanities Elective <sup>1</sup>		3	Humanities
Fourth Semester			
ADC 212 - Construction Materials & Detailing: Methods	ADC 103 or ADC 109	3	
ADC 227 - Structures II	ADC 226	3	
ADC 237 - Construction Cost Estimating II - Computer Methods & Cost/Benefit Analysis	ADC 236	3	
ADC 261 - Construction Management and Scheduling	ADC 246	3	
Science Elective		3 or 4	Natural Science
Minimum Credits Needed to Graduate: 63			

<sup>&</sup>lt;sup>1</sup> Students intending to transfer to baccalaureate programs in Construction Management are advised to consult that institution's requirements in Mathematics, Social Sciences and Humanities.

All General Education requirements are met through required courses (as indicated above) except for the **Writing Intensive**, **Interpretive Studies** and **American/Global Diversity** requirements. Therefore, in order to graduate, students in this program must choose one course that is designated **Writing Intensive**, one course that is designated **Interpretive Studies** and one course that is designated **American/Global Diversity**. The same course may be used to fulfill all three requirements. View the courses that fulfill all degree requirements and receive a more detailed explanation of the College's general education requirements to help in your selection.

#### For More Information Contact:

The Division of Liberal Studies, Room BR-21, 1700 Spring Garden Street, Philadelphia, PA 19130, Telephone (215) 751-8450; or the College Information Center (215) 751-8010.

# Culinary Arts

# Description:

The Culinary Arts program leads to an Associate in Applied Science (A.A.S.) degree and provides students with a culinary education that has depth and breadth as well as crucial work experience. The Culinary Arts program is designed to expose students to a broad range of career options to which they can add depth and specificity through their work experience during and after completing the curriculum.

Graduates of the program are prepared for positions as chefs, cooks and kitchen workers in restaurants, schools, health care and university food operations, and other institutions. If Culinary Arts students are interested in pursuing Apprenticeship status, an American Culinary Federation (ACF) qualified Culinary Arts faculty chef will assist students with securing and supervising the required employment.

### Student Learning Outcomes:

Upon completion of this program graduates will be able to:

- Demonstrate skills and knowledge required of culinarians in basic and quantity food preparation.
- Demonstrate industry-standard knowledge and skills regarding sanitation and food safety.
- Demonstrate industry-standard knowledge and skills regarding nutrition.
- Demonstrate the ability to make educated, lawful, ethical and productive decisions in food-service related supervisory positions.

### Program Entry Requirements:

New students are required to take College placement tests at the time of entry. Students identified as needing developmental work must satisfactorily complete the appropriate English and mathematics courses as part of their degree program.

### Program Of Study Requirements:

Culinary Arts students are responsible for purchasing uniforms, knife sets, and other related materials required for the program.

#### **Graduation Requirements:**

To qualify for the Associate in Applied Science (A.A.S.) degree in Culinary Arts, students must complete a minimum of 65 credit hours as described and attain a grade point average of 2.0 or better. Some students may wish to take additional courses beyond program requirements.

# For More Information Contact:

The Division of Business and Technology, Room C1-9, 1700 Spring Garden Street, Philadelphia, PA 19130, Telephone (215) 496-6164; or the College Information Center (215) 751-8010.

# Culinary Arts Associate in Applied Science Course Sequence

Course Number and Name	Prerequisites and Corequisites	Credits	Gen Ed Req.
First Semester			
CAHM 161 - Food Service Safety and Sanitation		2	
<u>CAHM 110</u> - Introduction to the Hospitality Industry		3	
ENGL 101 - English Composition I		3	ENGL 101
FNMT 118 - Intermediate Algebra		3	Mathematics
CAHM 170 - Elementary Food Prep., Principles & Practices		4	

Second Semester			
CIS 103 - Applied Computer Technology		3	Tech Comp
CAHM 171 - Quantity Food Preparation	<u>CAHM 170</u>	4	
CAHM 151 - Elementary Baking and Pastry		4	
DIET 106- Nutrition for a Healthy Lifestyle		3	
ENGL 102 - The Research Paper	ENGL 101 with a grade of "C" or better	3	ENGL 102, Info Lit
Summer			
CAHM 198 - Work Experience (400 hours)	<u>CAHM 110, CAHM 171, CAHM 161</u>	3	
Third Semester			
<u>CAHM 185</u> - Dining Room Management	<u>CAHM 110</u> , <u>CAHM 170</u>	3	
CAHM 210 - American Cuisine	<u>CAHM 171, CAHM 161</u>	4	
Social Science Elective		3	Social Sciences
Humanities Elective		3	Humanities
CAHM 271 - Food, Beverage Management & Labor Cost Controls	<u>CAHM 110</u> , <u>CAHM 170</u> , <u>CIS 103</u> and <u>FNMT</u> <u>118</u> or MATH 118 or higher	3	
Fourth Semester			
<u>CAHM 211</u> - International Cuisine	<u>CAHM 171, CAHM 161</u>	4	
CAHM 270 - Advanced Culinary Skills	<u>CAHM 171, CAHM 161</u>	4	
Science elective *		3/4	Natural Science
<u>CAHM 280</u> - Introduction to Supervision in the Hospitality Industry	<u>CAHM 110</u> & <u>CAHM 198</u>	3	
Minimum Credits Needed to Graduate: 65			

All General Education requirements are met through required courses (as indicated above) except for the **American/Global Diversity** requirement, the **Interpretive Studies** requirement and the **Writing Intensive** requirement. Therefore, in order to graduate, students in this program must choose one course that is designated **American/Global Diversity**, one course that is designated **Writing Intensive** and one course that is designated **Interpretive Studies**. The same course may be used to fulfill all three requirements. View the courses that fulfill all <u>degree requirements</u> and receive a more detailed explanation of the College's general education requirements to help in your selection.

#### For More Information Contact:

The Division of Business and Technology, Room C1-9, 1700 Spring Garden Street, Philadelphia, PA 19130, Telephone (215) 496-6164; or the College Information Center (215) 751-8010.

<sup>\*</sup> Students who plan to transfer to four-year institutions should choose their science elective based on the science requirements of their intended transfer institution.

# Cybersecurity

# Description:

As the number of computers being used to store sensitive information for personal, business, and government purposes increases, the need for securing computers and other systems that store this information becomes more obvious. Information security professionals are needed to provide security for these infrastructures. The Associate of Applied Science (A.A.S) program in Cybersecurity is designed for students who are interested in pursuing careers in cybersecurity, network/systems administration, and system programmers. This program will also consist of courses that help to prepare students for these industry certification exams:

- CompTIA Security+
- GIAC Security Essentials (GSEC)
- Certified Information Privacy Professional (CIPP)
- Systems Security Certified Practitioner (SSCP)
- · Certified Ethical Hacker (CEH)
- Security Certified Network Professional (SCNP)
- Global Information Assurance Certification (GIAC)

#### **Student Learning Outcomes:**

Upon successful completion of this program, students will be able to:

- · Use technology and critical thinking skills effectively to analyze and communicate matters of information security
- Detect, analyze, identify and resolve security vulnerabilities, threats & breaches using appropriate tools
- · Install, configure and monitor information systems security devices/software, as well as apply software patches and service packs
- · Identify the implications of information systems configuration weaknesses
- Identify the implications of information systems policy/procedure weaknesses as well as human errors
- Determine the necessity for cyber investigation and retrieve/seize cyber evidence from computer systems without contamination
- Utilize basic security features to configure and harden operating systems

#### **Program Entry Requirements:**

New students are normally required to take the College's placement test at their time of entry. Students who have had prior computer-related experience may be placed in more advanced courses after consultation with and the approval of the department chairperson. Also, students who possess business computer application skills may test out of CIS 103: Computer Technology & Concepts. Students who are identified as needing developmental course work must satisfactorily complete the appropriate English and mathematics courses as part of their degree program.

## Program of Study and Graduation Requirements:

A total of 61 credit hours as prescribed must be satisfactorily completed with a grade point average of 2.0 ("C" average).

# Cybersecurity Course Sequence

Course Number and Name	Prerequisites and	Credits	Gen Ed Req.
Course Number and Name	Corequisites	Credits	Gell Eu Req.
First Semester			
CIS 103 - Applied Computer Technology		3	Tech Comp
CIS 150 - Network Technology		4	
ENGL 101 - English Composition I		3	ENGL 101
FNMT 118 - Intermediate			

Algebra or Higher Math		3	Mathematics
General Elective		3	
Second Semester			
CIS 152 - Introduction to Cybersecurity	<u>CIS 150</u>	3	
CIS 155 - Principles of Operating Systems		3	
ENGL 102 - The Research Paper	ENGL 101 with a grade of "C" or better	3	ENGL 102, Info Lit
SOC 101 - Introduction to Sociology or SOC 115 - Women and Men in America or ANTH 112 - Cultural Anthropology	For <u>SOC 115</u> : ENGL 101	3	Social Sciences, Am/Global Div., Interpretive Studies, Writing Intensive
ENGL 115 - Public Speaking or ENGL 117 - Group and Team Communication	ENGL 101, which may be taken concurrently	3	Humanities
Third Semester			<del>.</del>
CIS 114 - Java Script		4	
CIS 204 - Fundamentals of Linux and Unix	<u>CIS 105</u> or <u>CIS 155</u>	3	
CIS 252 - Windows Server Configuration	CIS 150	4	
CIS 259 - Computing & Network Security	CIS 150 with a C or better	4	
Fourth Semester			
MATH 121- Computer and Logic		3	
PHYS 105 - Survey of Physics (preferred) or ASET 130 - Quality Control/Quality Assurance	For <u>ASET 130</u> : <u>FMNT 118</u>	4	Natural Science
CIS 261 - Cyber Investigation	<u>CIS 155</u>	4	
CIS 274 - Ethical Hacking & Penetration Testing	CIS 152 and CIS 259	4	

### MINIMUM CREDITS NEEDED TO GRADUATE: 61

### **General Education Requirements:**

All general education requirements necessary for graduation are met through the courses in the program as indicated above. Students who wish to take courses that differ from the general education courses indicated above must consult with an advisor or counselor before registering. A more detailed explanation of the College's general education requirements appear at <a href="http://ccp.edu/college-catalog/degree-requirements">http://ccp.edu/college-catalog/degree-requirements</a>

#### For More Information Contact:

The Division of Business and Technology, Room B2-22, 1700 Spring Garden Street, Philadelphia, PA 19130, Telephone (215) 751-8785; or the College Information Center (215) 751-8010.

# Dental Hygiene

## Description:

The Dental Hygiene program prepares graduates to be competent oral health clinicians and educators with the ability to develop effective oral health programs that can be utilized in private practice sites, schools and alternative practice settings in the community.

The clinical training is conducted on campus in a 16-chair, free dental hygiene clinic. Students have the opportunity to treat diverse patient populations, many with advanced periodontal disease.

The Dental Hygiene program is designed so that students, upon matriculation, can complete the program in 24 consecutive months.

Graduating Dental Hygiene students are eligible to take the Northeast Regional Board Examination and the National Board Dental Hygiene Examination.

#### Accreditation:

The Dental Hygiene program is accredited by the Commission on Dental Accreditation of the American Dental Association, a specialized accrediting body recognized by the Council on Post-Secondary Accreditation and the U.S. Department of Education.

The Commission on Dental Accreditation will review complaints that relate to a program's compliance with the accreditation standards. The Commission is interested in the sustained quality and continued improvement of dental and dental-related education programs but does not intervene on behalf of individuals or act as a court of appeals for individuals in matters of admission, appointment, promotion or dismissal of faculty, staff or students.

A copy of the appropriate accreditation standards and/or the Commission's policy and procedure for submission of complaints may be obtained by contacting the Commission at 211 East Chicago Avenue, Chicago, IL 60611-2678 or by calling 1-800-621-8099 extension 4653.

## Student Learning Outcomes:

Upon completion of this program graduates will be able to:

- Qualify for all national and regional examinations required to obtain licensure as a Registered Dental Hygienist (RDH) in the Commonwealth of Pennsylvania.
- Work effectively as a team member and make decisions regarding dental hygiene services that reflect critical thinking and problem solving.
- Demonstrate quality patient care and disease prevention for patients with a variety of oral health needs while using the phases of assessment, planning, implementation and evaluation in a safe and service-oriented environment.
- Review contemporary scientific literature in the dental hygiene field which will enable the graduate to remain mindful of current trends.
- Formulate informed decisions using evidenced-based patient-centered dental hygiene care for all.
- · Manage patient treatment and information, ensuring confidentiality and compliance with relevant legislation and ethical responsibilities.

### Program Entry Requirements:

Admission is selective and requires that potential students fulfill all admission requirements of the College. The requirements for admission to the Dental Hygiene program are:

- 1. High school diploma or general education diploma (GED).
- 2. A minimum of one year of high school biology, chemistry and college preparatory math, all with "C" or better grades, within the past 10 years. In the absence of these requirements, placement in MATH 118 and a grade of "C" or better In BIOL 106 and CHEM 110 satisfies these requirements.
- Applicants must demonstrate readiness for ENGL 101 and MATH 118 as determined by the College's placement tests or by successfully completing identified developmental course work.
- 4. Applicants with previous college experience must have a minimum of a 2.50 grade point average.
- 5. Applicants are required to participate in the pre-entrance Allied Health testing program.

Students are admitted to the program on a competitive basis as space allows.

## Conditions For Acceptance:

- 1. Results of complete physical and dental examinations, including laboratory test results of a complete blood count, serology, urinalysis, tuberculin PPD test and immunizations must be on file in the program office before the start of any dental course (September of starting year).
- 2. Verification of medical insurance is mandatory.
- 3. Applicants must attend a scheduled program orientation prior to entry.
- 4. Students must purchase uniforms and a Dental Hygiene supply kit prior to the start of the program (August of starting year).
- 5. Students must attend a fall and spring Study Skills Workshop.
- 6. Students must obtain a criminal record check, FBI (federal) clearance and a child abuse clearance prior to entrance into the program. This Dental Hygiene requirement is mandated by the Commonwealth of Pennsylvania per 24 P.S. 1-111 of the Pennsylvania Public School Code and 23 Pennsylvania C.S.A. 6355 of the Pennsylvania Child

Protective Services Law.

The College, in its admission process, will consider information regarding criminal conviction and/or crimes of moral turpitude. Admission is conditional pending receipt and evaluation of a criminal background check, FBI (federal) clearance and child abuse clearance to determine whether there is any conviction which may bar the student from the Dental Hygiene program and/or state licensure. The following guidelines are used in making decisions about an applicant's criminal and child abuse background:

#### Child Abuse Clearance:

Any record results in denial of admission into the DH program.

#### Criminal Background Check:

Any felony conviction within the past 10 years results in denial of admission to the DH program. Any felony conviction more than 10 years old will be evaluated based on the nature of the offense, length of time since the offense and any explanatory letters/materials submitted by the applicant or student. Any misdemeanor will be evaluated based on the nature of the offense, length of time since the offense, and explanatory letter/materials submitted by the applicant or student. (Any punishment over one year indicates a felony according to federal sentencing guidelines.)

#### Reconsideration:

An applicant who believes that an error of fact has been made in terms of the information provided to the decision-making committee can request reconsideration by the committee. This request must be made in writing within 10 days from the date of the letter notifying the applicant of the decision. The reconsideration should address what the applicant considers to be errors of fact.

Following reconsideration by the decision making committee, the applicant can appeal the committee's decision to the vice president for Academic Affairs whose decision is final.

Any official change or the initiation of any governmental proceeding affecting the information revealed by the required criminal or child abuse background check must be reported immediately to the DH curriculum supervisor.

Involvement in any incident which resulted in a disciplinary action against a student at Community College of Philadelphia or any post-secondary institution is considered in the admissions process. The DH program reserves the right to deny admission to any applicant who has a history of violating College rules and regulations or who has been previously suspended or expelled from the College or any other post-secondary educational institution.

#### Readmission:

- 1. One-time readmission into the Dental Hygiene program is permitted.
- 2. Students requesting a readmission must meet program entry requirements, conditions for acceptance, and are selected on a competitive basis as space permits.
- 3. Students may be required to retake dental and/or general education courses as determined by the program director.
- 4. A student seeking readmission to the Dental Hygiene program must demonstrate clinical and didactic proficiency at the acceptable course level stated in the appropriate clinical courses, this conditional acceptance for returning students will be determined by the Program Director.
- 5. Students who were dropped for unprofessional conduct or safety issues will not be considered for readmission.
- 6. The program must be completed within five years of initial enrollment.

#### Program Of Study Requirements:

- Students exhibiting unprofessional conduct or violation of safety policies may be dropped from the curriculum pending a program review.
- To continue in the Dental Hygiene curriculum, students must maintain an overall 2.50 GPA.
- Students will not be permitted to continue in a clinical course without a yearly medical and dental exam and proof of medical insurance on file.
- Dental Hygiene students must follow the curriculum sequence according to courses listed in each semester, unless approval is granted by the program director.
- Dental Hygiene students must submit proof of two-year CPR certification prior to entering the first year's spring semester.

#### **Graduation Requirements:**

To qualify for the Associate in Applied Science (A.A.S.) degree in Dental Hygiene, students must complete 83 credit hours as prescribed and must maintain an overall 2.50 GPA and no grade below a "C" in any course.

NOTE: Students who become pregnant while in the Dental Hygiene program must submit appropriate documentation from their obstetrician to the program director. Since students may be exposed to radiation during the clinical practice of dental radiography, it may become necessary for the student to withdraw from the program.

The College cannot assume responsibility for any harm that might occur to a fetus as a result of exposure to ionizing radiation. A student who is required to withdraw from the Dental Hygiene program because of pregnancy can gain readmission to the program by following the established procedure.

## Dental Hygiene Course Sequence

Course Number and Name	Prerequisites and Corequisites	Credits	Gen Ed Req.
Summer Session II			
CIS 103 - Applied Computer Technology		3	Tech Comp

ENGL 101 - English Composition I		3	ENGL 101
First Semester—Fall			
DH 115 - Oral Head and Neck Anatomy	ENGL 101, CIS 103	3	
<u>DH 135</u> - Dental Radiology	ENGL 101, CIS 103	3	
DH 150 - Dental Auxiliary Practices	ENGL 101, CIS 103	4	
DH 191 - Clinical Dental Hygiene I	ENGL 101, CIS 103, CPR Certification	3	
BIOL 109 - Anatomy and Physiology I		4	Natural Science
Second Semester—Spring			
DH 165 - Nutrition and Biochemistry	BIOL 109, DH 115, DH 135, DH 150, DH 191	4	
DH 192 - Clinical Dental Hygiene II	BIOL 109, ENGL 102, DH 115, DH 135, DH 150, DH 191	3	
DH 121 - Oral Histology and Embryology	BIOL 109, DH 115, DH 135, DH 150, DH 191	2	
BIOL 110 - Anatomy and Physiology II	BIOL 109	4	
ENGL 102 - The Research Paper	ENGL 101 with a grade of "C" or better	3	ENGL 102, Info Lit
Summer Session I			
DH 210 - Local Anesthesia	DH 121, 165, 192, and BIOL 110	3	
PSYC 101 - Introduction to Psychology		3	Social Sciences
Summer Session II			
SOC 101 - Introduction to Sociology		3	Am/Global Diversity, Writing Intensive, Interpretive
BIOL 241 - Principles of Microbiology		4	
Third Semester—Fall			
DH 241 - Oral Pathology	BIOL 110, BIOL 241, DH 121, DH 165, DH 192, ENGL 102	2	
DH 245 - Dental Pharmacology and Pain Management	BIOL 110, BIOL 241, DH 121, DH 165, DH 192, ENGL 102	2	
DH 247 - Periodontics	BIOL 110, BIOL 241, DH 121, DH 165, DH 192, ENGL 102	4	

Fourth Semester—Spring				
ENGL 115 - Public Speaking	ENGL 101, which may be taken concurrently	3	Humanities	
DH 271 - Community Dentistry	BIOL 241, DH 241, DH 245, DH 247, DH 293; ENGL 115 which may be taken concurrently	3		
DH 294 - Clinical Dental Hygiene IV	BIOL 241, DH 241, DH 245, DH 247, DH 293; ENGL 115 which may be taken concurrently	6		
FNMT 118 or Higher		3	Mathematics	
Summer Session I				
DH 295 - Clinical Dental Hygiene V	DH 271, DH 294, ENGL 115	2		
Minimum Credits Needed to Graduate: 83				

All General Education requirements are met through required courses (as indicated above).

## For More Information Contact:

The Division of Math, Science and Health Careers, Room W2-7, 1700 Spring Garden Street, Philadelphia, PA 19130, Telephone (215) 751-8430; or the College Information Center (215) 751 8010.

# Diagnostic Medical Imaging

## Program Description:

The mission of the Diagnostic Medical Imaging Program is to prepare individuals in the judicious use of ionizing radiation in both diagnostic radiographic and fluoroscopic procedures. This is accomplished by the application of knowledge in anatomy, physiology, and osteology; in the skillful positioning of the client-patient; the selection of correct technical factors; the proper handling and manipulation of radiation producing equipment; the utilization of accepted radiation protection procedures; and the processing of the image in preparation for diagnostic interpretation.

The Diagnostic Medical Imaging Program at the Community College of Philadelphia is accredited by the Joint Review Committee on Education in Radiologic Technology (JRCERT) (20 N. Wacker Drive, Suite 2850, Chicago, II 60606; phone: 312-704-5300; email: <a href="mail@jrcert.org">mail@jrcert.org</a>; website: <a href="www.jrcert.org">www.jrcert.org</a>). The College seeks to provide a program in compliance with the JRCERT Standards, and encourages students to be cognizant of the <a href="Standards for an Accredited Educational Program in Radiography">Standards for an Accredited Educational Program in Radiography</a>.

The Diagnostic Medical Imaging curriculum begins once a year in Late Summer Session (July). The curriculum consists of eight consecutive semesters (24 months, including summer sessions) combining classroom/laboratory components at the College with Clinical Education courses at an area affiliate hospital. During Clinical Education, the student is supervised by College faculty and clinical staff while interacting with patients in the Radiology Department.

## Program Goals and Student Learning Outcomes:

Upon completion of this program, students will:

1. Competently and safely perform radiographic/fluoroscopic procedures.

Student Learning Outcomes:

- · Perform routine radiographic procedures
- Demonstrate quality patient care
- Practice/apply appropriate radiation protection of patients, themselves and others

#### 2. Communicate effectively

Student Learning Outcomes:

- Demonstrate effective oral communication skills
- Demonstrate effective written communication skills
- 3. Think critically and problem solve in various patient care situations.

Student Learning Outcomes:

- Demonstrate logical image sequencing for patients with multiple exams
- Demonstrate knowledge of C-arm equipment and OR procedures
- · Identify diagnostic quality images and correct non-quality images accordingly

#### 4. Demonstrate professionalism.

Student Learning Outcomes:

• Demonstrate professional behavior in delivering patient care

#### Programmatic Effectiveness

In addition to evaluating program goals and student learning outcomes, the Diagnostic Medical Imaging Program evaluates the program completion rate, credentialing examination pass rate, graduate employment, graduate satisfaction, and employer satisfaction for programmatic effectiveness. Current data is as follows:

#### Program completion rate:

26 students started the program in July 2015 and 21 graduated in June 2017 for a program completion rate of 80.7%.

Credentialing Examination Pass Rate

100% of the 82 graduates from 2013-2017 have passed the ARRT Radiography examination on the first attempt, within six months of graduation.

## Graduate Employment

Between 2012 and 2016, 50 graduates actively sought employment in Medical Imaging and 48 are employed for a five-year job placement rate of 96%.

As stated in Standard Five-Objective 5.2 of the 2014 JRCERT Standards for an Accredited Educational Program in Radiography, "not actively seeking employment" is defined as: Graduate fails to communicate with program officials regarding employment status after multiple attempts OR

Graduate is unwilling to seek employment that requires relocation OR Graduate is unwilling to accept employment due to salary or hours OR Graduate is on active military duty OR Graduate is continuing education.

Additional information with regard to Programmatic Effectiveness can be obtained here.

#### **Admissions Process**

Admission into the Diagnostic Medical Imaging Program is selective, competitive, and requires potential students to fulfill all admission requirements of the College. Applications submitted from **October 1**<sup>st</sup> until January 1<sup>st</sup> will receive priority in the Allied Health pre-entrance testing and review process.

Students must meet the following minimum requirements before applying to the Diagnostic Medical Imaging Program:

- · High School diploma or GED documentation
- High School Biology or its equivalent (BIOL106) with grade "C" or better in the past 10 years
- Demonstration of readiness for ENGL 101 and MATH 118 as determined by the College's placement tests, or by successfully completing developmental coursework
- Minimum grade point average of 2.50

**Students new to the College** can begin the application process by first <u>applying</u> to the College. Transcript evaluation and completion of a placement test (or test waiver) is required.

**Current College students** can begin the application process by attending a DMI Application Workshop. A list of workshops can be obtained through the Counseling Center (Room BG-07). After completion of the DMI Application Workshop, applicants must:

- Submit official copies of supporting documents (e.g. official transcripts)
- · Complete & sign an application form
- Submit a resume with letter of intent
- · Submit two letters of recommendation
- Complete the pre-entrance Allied Health testing program with benchmark score or higher

Applicants who complete and meet the aforementioned requirements will be eligible to continue in the admissions process and will be contacted, in writing, concerning the scheduling of an admissions interview with the Program Director (or designee). A scheduled interview does not guarantee admission. Upon completion of the admissions interview, the Program Director (or designee) will review and score all applicants with particular attention to:

- 1. Cumulative grade point average
- 2. Strength of secondary/post-secondary academic curriculum
- 3. Allied Health pre-entrance examination score
- 4. Extracurricular activities, community service, and work experience
- 5. Personal interview

#### Conditions For Acceptance

All applicants are notified in writing regarding the admissions decision. All offers of acceptance are contingent upon successful completion of the following:

- $1. \ Acknowledgement \ of \ Core \ Performance \ Standards \ for \ Health \ Care \ Career \ Programs \ and \ physical \ demand \ analysis.$ 
  - Clinical education requires a full range of motion, including pushing, pulling, twisting, lifting and bending. Standing and walking are required for the entire clinical day (8 hours). Students who are registered with the <a href="Center on Disability">Center on Disability</a> must inform the Program Director if special accommodations are required.
- 2. Completion of Criminal Background Check
  - Conviction of serious and/or violent crimes results in denial of admission into the DMI Program.
  - Upon completion of the DMI Program, students will be eligible to apply for the American Registry of Radiologic Technologists certification examination in Radiography. The ARRT reserves the right to deny or reject an application for certification as stated in the <u>ARRT Standards of Ethics</u>. Prior to applying to the DMI Program, candidates are encouraged to complete an <u>Ethics Review Pre-Application</u> with the ARRT for the following circumstances:
    - Criminal proceedings including: Misdemeanor charges and convictions; Felony charges and convictions; Military courts-martials; and/or
    - Disciplinary actions taken by state or federal regulatory authority or certification board; and/or
    - Honor code (academic) violations.
- 3. Completion of Child Abuse Clearance
  - · Any record results in denial of admission into the DMI Program.
- 4. Completion of Drug Screening
  - A positive screening results in denial of admission into the DMI Program.

Additional conditions for Program commencement include:

- Documentation of a complete physical examination, including required laboratory tests. All health information is kept confidential. Students will have direct contact with patients, and have the responsibility to maintain very high standards of health practice.
- Documentation of up to date immunizations prior to clinical assignment. Additional immunizations (e.g. influenza) may be necessary.
- Documentation of current health insurance coverage, which must be maintained throughout the Program.
- Attendance at scheduled Program orientation prior to entry.
- Purchase of DMI student uniform.
- Adult, child, and infant CPR certification for Healthcare Providers (due prior to the commencement of Clinical Education I).

#### Disciplinary Action

Involvement in any incident which resulted in disciplinary action against a student at the Community College of Philadelphia or any post-secondary institution is considered in the admissions process. The Diagnostic Medical Imaging Program reserves the right to deny admission to any applicant who has a documented history of violating College rules and/or regulations or who has been previously suspended or expelled from the College or any other post-secondary educational institution. Students subjected to sanction as a result of violating an academic honor code or suspended or dismissed by an educational program may not qualify for the ARRT certification examination.

#### Reconsideration

An applicant who believes that an error of fact has been made in terms of the information provided to the decision making committee can request reconsideration by the committee. This request must be made in writing within 10 days from the date of the letter notifying the applicant of the decision. The reconsideration should address what the applicant considers to be errors of fact. Following reconsideration by the decision making committee, the applicant can appeal the committee's decision to the vice president for Academic Affairs whose decision is final.

Any official change or the initiation of any governmental proceeding affecting the information revealed by the required criminal or child abuse background check must be reported immediately to the Program Director of DMI.

#### Readmission Policy

Students who withdraw from the Program in good standing may apply for readmission only **once**. The Program must be completed within five (5) academic years after a student's initial enrollment. In order to be considered for Program readmission, the applicant must:

- 1. Successfully complete all DMI Program prerequisite requirements.
- 2. Successfully complete a comprehensive written exam. The exam content will include current material from courses which the student previously completed.
- 3. Successfully demonstrate clinical competence through simulation testing. Competency procedures will be selected based on the course(s) the student has taken.
- 4. Repeat previously completed courses as recommended by Program faculty. Curriculum analysis is conducted annually and course content may change to ensure Program alignment with the American Registry of Radiologic Technologists (ARRT) Content Specifications for the Examination in Radiography and the American Society of Radiologic Technologists (ASRT) Radiography Curriculum. Repeating of recommended courses ensures the student is prepared for Radiography certification and registration in accordance with the ARRT.

The results of the written exam and competency testing, as well as the student's prior academic and clinical progress, will be evaluated by faculty to determine the student's potential for success in the Program and semester placement. DMI courses are offered chronologically and only once a year, therefore a readmission date will be based on the semester in which the courses are being offered.

Students seeking readmission into the Diagnostic Medical Imaging Program must contact the Program Director in writing prior to the requested entering semester deadline as follows:

- Fall semester readmission May <sup>1st</sup> request deadline
- Spring semester readmission October 1st request deadline
- Early Summer Term readmission February 1st request deadline
- Late Summer Term readmission April 1st request deadline

**Note:** Students who fail the comprehensive written exam or the competency testing will be required to re-apply to the Program by following the Program admissions process. Students may only reapply to the Program **once**.

## Program Of Study Requirements:

- DMI students must follow the curriculum sequence according to courses listed in each semester, unless approval is granted by the Program Director.
- Students in the DMI curriculum may be dropped at any time if, in the opinion of the Faculty and Program Director, such students are not suited to be Radiologic Technologists.
- Students whose attitude and behavior are considered unprofessional may be dropped from the curriculum, pending a review by the Faculty, Program Director and Advisory
  Committee.
- Students may not continue in the DMI curriculum with a grade of "D" or below in any DMI or general education course.
- Any breach of the ARRT Standards of Ethics will result in immediate dismissal from the Program.

## Graduation Requirements:

To qualify for the Associate in Applied Science (A.A.S.) degree in Diagnostic Medical Imaging, students must complete 76 credit hours as prescribed, attain a grade point average of 2.00 in all Program core courses, and attain no grade below a "C" in any course. Upon successful completion of the Program, graduates are eligible for certification and registration in *Radiography* by the American Registry of Radiologic Technologists (<u>ARRT</u>).

#### Pregnancy Policy

If a student becomes pregnant while enrolled in the Diagnostic Medical Imaging Program, disclosure of the pregnancy is entirely voluntary. However, since radiation to the unborn child could be harmful, the student is strongly encouraged to notify the Program Director in writing once confirmation of the pregnancy has occurred. Upon notification, the student will be scheduled to meet with the Radiation Safety Officer or Radiology Department Physicist at the appointed clinical education setting. During the meeting, the student will be provided with potential risks and consequences of prenatal radiation exposure.

The student may then choose to do one of the following:

- 1. Withdraw immediately from the Program in good standing. A student who withdraws from the Diagnostic Medical Imaging Program because of pregnancy can gain readmission to the Program by following the established readmission procedure.
- 2. Remain in the program without modification. If the student chooses to do so, the following will occur:
  - a. The student will provide documentation to the Program Director of conception date and expected delivery date.
  - b. The student will sign a "Pregnancy Declaration" as required by the clinical affiliate.
  - c. The student will be provided with ALARA training at the clinical education setting to ensure the monthly embryo-fetal dose does not exceed the NCRP recommendation of 0.5 mSv (5.0 mSv for the entire pregnancy). Neither the College nor the clinical affiliate can assume responsibility for any harm that might occur to an embryo or fetus as a result of exposure to ionizing radiation. Depending upon clinical affiliate policy, the student may be provided with a monthly fetal badge. The badge must be worn at waist level, under the lead apron.
- 3. Withdraw the declaration of pregnancy. The declaration of pregnancy may be withdrawn at any time by contacting the Program Director in writing.

#### Magnetic Fields

Exposure to magnetic fields can occur during clinical education. Certain factors such as tattoos, body piercings, permanent makeup, external insulin pumps, and ear and eye implants may preclude students from participating in some clinical experiences but will not affect Program completion.

## Diagnostic Medical Imaging Course Sequence

Course Number and Name	Prerequisites and Corequisites	Credits	Gen Ed Req.
Late Summer Term - Year 1			
<u>DMI 101</u> - Introduction to Diagnostic Medical Imaging		2	
FNMT 118 or higher		3	Mathematics
Fall Semester - Year 1			
DMI 105 - Image Production and Evaluation I	Coreq: DMI 131	4	
DMI 119 - Intro to Radiologic Physics		2	
DMI 131 - Patient Care and Procedures I	Coreq: DMI 105	5	
DMI 181 - Radiographic Osteology and Pathology I		2	
BIOL 109 - Anatomy & Physiology I		4	Natural Science
Spring Semester - Year 1			
DMI 106 - Image Production and Evaluation II	<u>DMI 105</u> , Coreq: <u>DMI 132</u>	2	
DMI 120 - Radiographic Equipment and Operation	DMI 119	2	
DMI 132 - Patient Care and Procedures II	<u>DMI 105</u> & <u>DMI 131</u> Coreq: <u>DMI 106</u>	5	Am/Global Diversity
DMI 182 - Radiographic Osteology and Pathology II	DMI 181	2	
BIOL 110 - Anatomy & Physiology II	BIOL 109	4	

rly Summer Term - Year 1			
DMI 198 - Clinical Education III	<u>DMI 132</u>	2	
CIS 103 - Applied Computer Technology		3	Tech Comp
Late Summer Term - Year 2			
DMI 199 - Clinical Education IV	DMI 198	2	
Fall Semester - Year 2			
DMI 221 - Advanced Imaging/Computer Modalities	DMI 106, DMI 120, DMI 199 Coreq: CIS 103	4	
DMI 231 - Patient Procedures III	<u>DMI 132</u>	5	
DMI 261 - Radiation Biology and Protection	DMI 119, DMI 120	2	
ENGL 101 - English Composition I		3	
Social Science Elective		3	Social Sciences
Spring Semester - Year 2			
DMI 222 - Angiographic/Interventional Procedures	DMI 221	2	
DMI 232 - Patient Procedures IV	DMI 231	5	
Humanities Elective		3	Humanities
ENGL 102 - The Research Paper	ENGL 101 with a grade of "C"or better	3	ENGL 102, Info Lit
Early Summer Term - Year 2			
DMI 299 - Clinical Education VII	DMI 232	2	

All General Education requirements are met through required courses (as indicated above) except for the **Writing Intensive** requirement and the **Interpretive Studies** requirement. Therefore, in order to graduate, students in this program must choose one course that is designated **Writing Intensive** and one course that is designated **Interpretive Studies**. The same course may be used to fulfill both requirements. View the courses that fulfill all <u>degree requirements</u> and receive a more detailed explanation of the College's general education requirements to help in your selection.

All General Education courses maybbe completed before entering the DMI Program or along with DMI Program courses. Students are encouraged to complete General Education requirements prior to Program commencement to make their schedules more manageable.

#### For More Information Contact:

The Division of Math, Science and Health Careers, Room W2-7, 1700 Spring Garden Street, Philadelphia, PA 19130, Telephone (215) 751-8430; or the College Information Center (215) 751 8010.

# Digital Forensics

## Description:

The Digital Forensics program provides a sound educational foundation for the performance of professional activities within the digital forensics discipline. A sequence of courses is offered which will enable students to: (1) develop a knowledge base about computer crime, digital evidence and technological investigations; (2) adopt a set of professional values; and (3) develop skills related to best practices in the field of digital forensics. Students completing the Digital Forensics program will be prepared to engage in digital forensic analysis in public or private sector environments as digital forensics analysts or examiners, digital evidence technicians, consultants and expert witnesses, litigation support and e-discovery specialists, and members of incident response teams in cyber security. Individuals working in Digital Forensics or a related field will enhance their current knowledge and skills. Student Learning Outcomes:

Upon completion of this program graduates will be able to:

- Explain how computers, networks, and digital technology are used in cyber-crimes, civil wrongs, and policy violations.
- Recognize, identify and properly collect digital media, network data, and digital storage devices.
- · Conduct forensic acquisition, verification, and authentication of digital media and network data for use in court.
- · Analyze artifacts from computer systems, networks, and digital storage media with value in civil, criminal, or internal investigations.
- Employ legal, ethical, and best practice methodologies in performing digital forensics duties, laboratory management, and case documentation.

#### Program Entry Requirements:

Students entering the curriculum are required to demonstrate competency in basic skills by acceptable performance on the College's placement tests (English 101 placement). Some students, as part of the curriculum, may be required to complete appropriate developmental English and mathematics courses.

Students will also be required to submit to a criminal record check and may be excluded from the program for convictions.

#### Program of Study and Graduation Requirements:

To qualify for the Associate in Applied Science (A.A.S.) degree in Digital Forensics, the student must complete a minimum of 62 prescribed credit hours and attain a minimum grade point average of 2.0 ("C" average).

## Credit for Prior Academic Experiences:

Persons who have graduated from the Philadelphia Police Academy may be eligible to receive academic credit for Justice 101, Justice 221, Justice 241 and Justice 261. For more information, contact the Digital Forensics curriculum coordinator.

### Digital Forensics Course Sequence

Course Number and Name	Prerequisites and Corequisites	Credits	Gen Ed Req.
First Semester			
ENGL 101 - English Composition I		3	ENGL 101
JUS 101 - Survey of Justice		3	
CIS 103 - Applied Computer Technology		3	Tech Comp
FNMT 118 - Intermediate Algebra (or higher)		3	Mathematics
ENGL 115 - Public Speaking		3	Humanities
Second Semester			
ENGL 102 - The Research Paper	ENGL 101 with a grade of "C" or better	3	ENGL 102, Info Lit

CIS 150 - Network Technology		4	
JUS 221 - Criminal Investigation	JUS 101	3	
DF 101 - Introduction to Digital Forensics	PLS 101 or JUS 101	3	
JUS 241 - Criminal Law	JUS 101 or PLS 101	3	
Third Semester			
JUS 261 - Criminal Evidence and Procedure	<u>JUS 101</u>	3	
DF 201 - Digital Forensics II	<u>DF 101</u>	3	
DF 203 - Networking and Forensics	DF 101, CIS 150	3	
Natural Science Elective		3/4	Natural Science
Social Science Elective		3	Social Science
Fourth Semester			
Social Science Elective		3	
Humanities Elective		3	Humanities
DF 220 - Intrusion Response	DF 101, CIS 150	3	
DF 250 - Digital Forensics Case and Laboratory Management	DF 201	3	
General Elective		3	
Minimum Credits Needed to Graduate: 62			

All General Education requirements are met through required courses (as indicated above) except for the **Writing Intensive** requirement, the **Interpretive Studies** requirement and the **American/Global Diversity** requirement. Therefore, in order to graduate, students in this program must choose one course that is designated **Writing Intensive**, one course that is designated **Interpretive Studies** and one course that is designated **American/Global Diversity**. The same course may be used to fulfill more than one of these requirements. View the courses that fulfill all <u>degree requirements</u> and receive a more detailed explanation of the College's general education requirements to help in your selection.

## For More Information Contact:

The Division of Liberal Studies, Room BR-21, 1700 Spring Garden Street, Philadelphia, PA 19130, Telephone (215) 751-8450; or the College Information Center (215) 751-8010

## Digital Video Production

## Description:

The Digital Video Production curriculum prepares students as entry-level professionals in the digital video production field. Classroom lecture and practical assignments in the use of state-of-the-art digital technology lead to the development of technical and aesthetic skills required for success in the digital video production field. Students gain practical experience by creating programs for the College's CCPTV educational broadcast channel as part of their course work. Students completing this program will be prepared to work as videographers, audio technicians, video editors, producers, directors and related occupational roles.

Extensive computer activities and location and studio production are required for some courses in this curriculum. Students are encouraged to develop artistic appreciation and imagination in their work. Upper-level courses emphasize advanced technical and creative skills and professional practices. Students exit this program with a digital portfolio of their work to aid in obtaining employment in the digital video field.

## **Student Learning Outcomes:**

Upon completion of this program, students will be able to:

- Demonstrate proficiency in the operation of digital video cameras, lighting equipment for location and studio production, audio for digital video production, and digital video editing hardware and software.
- · Evaluate technical and aesthetic qualities of digital video productions in the context of historical and contemporary trends
- Employ current business practices as applied to the practice of digital video production

## Program Entry Requirements:

This program is open to interested students, assuming space is available. However, new students are required to take the College s placement tests at their time of entry. Students who are identified as needing developmental course work must satisfactorily complete the appropriate English and mathematics courses as a part of their degree program. Students must complete PHOT 104 with a grade of B or better to continue in the DVP curriculum.

#### Requirements for Graduation:

To qualify for the Associate in Applied Science (A.A.S.) degree in Digital Video Production, a student must complete at least 60 credit hours and attain a grade point average of 2.0 ( C average.)

## Digital Video Production Course Sequence

Course Number and Name	Prerequisites and Corequisites	Credits	Gen Ed Req.	
First Semester				
PHOT 104 - Introduction to Video Production		3		
FNMT 118 -Intermediate Algebra or higher		3	Mathematics	
PHOT 151 - Digital Imaging		3		
ENGL 101 - English Composition		3	ENGL101	
CIS 103 - Applied Computer Technology		3	Tech Comp	
Second Semester				
DVP 120 - Camera and Lighting Techniques for Digital Video Production	PHOT 104 with grade B or better	4		
DVP 130 - Audio Techniques for Digital Video Production	PHOT 104 with grade B or better	4		

PHOT 104 with grade B or better	4	
ENGL 101 with a grade of "C" or better	3	ENGL 102, Info Lit
PHOT 104 with B grade or better	4	
	3	Social Science
	3	Natural Science
	3	Humanities American/Global Diversity Interpretive Studies
For DVP 240: DVP 140 For ENGL 107, ENGL 116 and ENGL 117: ENGL 101, which may be taken concurrently For ENGL 205, ENGL 271, and ENGL 272: ENGL 101 For ENGL 282: ENGL 205 For PHOT 211: PHOT 104	3/4	
DVP 120, DVP 130, DVP 140, DVP 150	4	
DVP 120, DVP 130, DVP 140, DVP 150	4	
DVP 120, DVP 130, DVP 140, DVP 150; DVP 210 and DVP 220 may be taken concurrently	3	
For DVP 240: DVP 140 For ENGL 107, ENGL 116 and ENGL 117: ENGL 101, which may be taken concurrently For ENGL 205, ENGL 271, and ENGL 272: ENGL 101 For ENGL 282: ENGL 205 For PHOT 211: PHOT 104	3/4	
	ENGL 101 with a grade of "C" or better  PHOT 104 with B grade or better  For DVP 240: DVP 140 For ENGL 107, ENGL 116 and ENGL 117: ENGL 101, which may be taken concurrently For ENGL 205, ENGL 271, and ENGL 272: ENGL 101 For ENGL 282: ENGL 205 For PHOT 211: PHOT 104  DVP 120, DVP 130, DVP 140, DVP 150  DVP 120, DVP 130, DVP 140, DVP 150; DVP 210 and DVP 220 may be taken concurrently  For DVP 240: DVP 130, DVP 140, DVP 150; DVP 210, which may be taken concurrently  For ENGL 205, ENGL 271, and ENGL 117: ENGL 101, which may be taken concurrently For ENGL 205, ENGL 271, and ENGL 272: ENGL 101 For ENGL 282: ENGL 205	ENGL 101 with a grade of "C" or better 3  PHOT 104 with B grade or better 4  3  For DVP 240: DVP 140 For ENGL 107, ENGL 116 and ENGL 117: ENGL 101, which may be taken concurrently For ENGL 205, ENGL 271, and ENGL 272: ENGL 101 For ENGL 282: ENGL 205 For PHOT 211: PHOT 104  DVP 120, DVP 130, DVP 140, DVP 150  DVP 120, DVP 130, DVP 140, DVP 150: DVP 210 and DVP 220 may be taken concurrently For ENGL 101, which may be taken concurrently For ENGL 101, which may be taken concurrently For ENGL 101, which may be taken concurrently For ENGL 205, ENGL 271, and ENGL 272: ENGL 101, which may be taken concurrently For ENGL 205, ENGL 271, and ENGL 272: ENGL 101 For ENGL 282: ENGL 271, and ENGL 272: ENGL 101 For ENGL 282: ENGL 271, and ENGL 272: ENGL 101 For ENGL 282: ENGL 271, and ENGL 272: ENGL 101 For ENGL 282: ENGL 205

All General Education requirements are met through required courses (as indicated above) except for the **Writing Intensive** requirement. Therefore, in order to graduate, students in this program must choose one course that is designated **Writing Intensive**. View the courses that fulfill all <u>degree requirements</u> and receive a more detailed explanation of the College's general education requirements to help in your selection.

### For More Information Contact:

The Division of Liberal Studies, Room BR-21, 1700 Spring Garden Street, Philadelphia, PA 19130, Telephone 215-751-8450; or the College Information Cent er, 215-751-8010.

# Facility Management - Construction Option

## Description:

The Facility Management program leads to an Associate of Applied Science (A.A.S.) degree in Facility Management. Facility Managers are the people who plan and manage the buildings, grounds and systems of large businesses and institutions. Often working behind the scenes, as a group they are involved in a broad array of activities: planning, management, finance and real estate, design, and building operations issues, including security and communications. The field is rapidly professionalizing, and opportunities abound in this highly-regarded industry. This program provides students with a foundational education addressing the multi-disciplinary character of the field, thereby allowing for diverse job opportunities. The core of the Facility Management curriculum addresses gaining the basic technical knowledge of construction materials, processes and systems, as well as the business management and real estate areas.

The Facility Management – Construction Option is designed to prepare students for an entry-level position as a facility manager or construction manager. Their construction knowledge may be applied in overseeing the building of new or renovated facilities, the installation of updated systems, or determining the construction issues related to expansion or new uses. They will work closely with those in the design areas. In any of these roles, the students will be prepared to interact with the senior management of their employer, dealing with multiple real estate issues.

The Construction Option focuses on construction and management issues specific to the building and renovating process, such as the installation of updated systems and finishes, building codes, cost estimating, and scheduling and contracting. This program gives the student an opportunity to understand the fundamentals of building construction, such as interpreting construction documents and specifications, understanding construction contracts, creating construction cost estimates, scheduling and managing building projects, and being familiar with the technical aspects of building materials and systems.

The Facility Management program also offers a Design Option (listed separately) that focuses on developing a student's planning and design skills to apply on both new and renovated buildings.

Students who are interested in the program are encouraged to consult an advisor within the program for a more detailed explanation of the two options. Also, the program has a set of core courses which are common to both degrees. Students who are unsure as to which option they would like to pursue may wish to begin with those courses which are required by both options, so that they may change their option more easily at a later point.

The Facility Management program is accredited by the International Facility Management Association (IFMA) Foundation.

### Student Learning Outcomes:

Upon completion of this program graduates will be able to:

- Interpret architectural and construction drawings and documents.
- Demonstrate knowledge of various building materials and methods and related building technologies.
- · Utilize computer systems for communication in technical drafting and documentation, project planning and management.
- Apply basic principles of planning, management and real estate practice.
- Communicate effectively and work as part of a team, using graphic, oral and written modes.

#### Program Entry Requirements:

Students are required to take the College's placement tests at the time of entry. Students identified as needing developmental course work must satisfactorily complete the appropriate English and mathematics courses in addition to the requirements of their degree program.

### Program of Study and Graduation Requirements:

To qualify for the A.A.S. degree in Facility Management, a student must complete a minimum of 62 credits as prescribed and attain a minimum grade point average of 2.0 ("C" average).

## Facility Management - Construction Option Course Sequence

Course Number and Name	Prerequisites and Corequisites	Credits	Gen Ed Req.
First Semester			
ADC 101 – Introduction to Design and Construction		3	Tech Comp*

ADC 103 – CAD Basics		3	Tech Comp*
ADC 136 – Construction Safety and Building Codes		3	
ENGL 101 – English Composition I		3	ENGL 101
MATH 137 - Geometry for Design (or higher MATH <sup>1</sup> )		3	Mathematics
Second Semester			
ADC 112 – Construction Materials and Detailing: Properties	ADC 103 or ADC 109	3	
ADC 163 – Digital Documentation in Architecture and Construction	ADC 103	3	
MNGT 121 – Introduction to Business		3	
ENGL 102 – The Research Paper	ENGL 101 with a grade of "C" or better	3	ENGL 102, Info Lit
ECON 182 – Principles of Economics		3	Soc Sci
Third Semester			
ADC 146 – Construction Supervision & Business Practices	ADC 101	3	
ADC 236 – Construction Cost Estimating I	ADC 101	3	
ADC 246 – Contracts and Specifications	ADC 101	3	
ADC 253 – Environmental Systems I	ADC 101 and ADC 103 or ADC 109	3	
Humanities Elective		3	Humanities
Fourth Semester			
ADC 254 – Environmental Systems II	ADC 253	3	
ADC 261 – Construction Management and Scheduling	ADC 246	3	
RE 101 – Real Estate Fundamentals		3	
Management Elective Choose one:			
MNGT 141 –Principles of Management Or MNGT 142 – Management Information Systems Or MNGT 262 – Business Law	MNGT 121	3	
Science Elective <sup>1</sup>		3/4	Natural Science
Minimum Credits Needed to Graduate: 60			

All General Education requirements are met through required courses (as indicated above) except for the **Writing Intensive**, **Interpretive Studies** and **American/Global Diversity** requirement. Therefore, in order to graduate, students in this program must choose one course that is designated Writing Intensive, one course that is designated **Interpretive** 

Studies and one course that is designated American/Global Diversity. The same course may be used to fulfill all three requirements. View the courses that fulfill all degree requirements and receive a more detailed explanation of the College's general education requirements to help in your selection.

## For More Information Contact:

The Division of Liberal Studies, Room BR-21, 1700 Spring Garden Street, Philadelphia, PA 19130, Telephone (215) 751-8450; or the College Information Center (215) 751-8010.

<sup>\*</sup> Students must complete <u>ADC 101</u> and <u>ADC 103</u> to meet the Technological Competency requirement.

<sup>&</sup>lt;sup>1</sup>Transfer institutions vary on the courses accepted for transfer. Consult transfer agreements and departmental advisors or the specific schools to determine choice.

# Facility Management - Design Option

## Description:

The Facility Management curriculum leads to an Associate of Applied Science (A.A.S.) degree in Facility Management. Facility managers are the people who plan and manage the buildings, grounds and systems of large businesses and institutions. Often working behind the scenes, as a group they are involved in a broad array of activities: planning, management, finance and real estate, design and building operations issues, including security and communications. The field is rapidly professionalizing, and opportunities abound in this highly-regarded industry. This program provides students with a foundational education addressing the multidisciplinary character of the field, thereby allowing for diverse job opportunities. The core of the Facility Management curriculum addresses gaining the basic technical knowledge of construction materials, processes and systems, as well as the business management and real estate areas. The Design Option focuses particularly on developing planning and design skills for both new and renovated buildings.

The Facility Management – Design Option is intended to prepare a student for an entry-level position as a facility manager, space programmer, space planner or move coordinator. Their design skills will be utilized in designing renovations, planning expansions and supervising outside design consultants. They will work closely with those in the construction areas. In any of these roles, the students will be prepared to interact with the senior management of their employer, dealing with multiple real estate issues.

The Design Option listed here gives the student an opportunity to acquire design skills to apply toward new and renovated buildings, as well as evaluating and planning development sites. Experience with working in teams, as well as communicating design concepts is emphasized. The design studio, the core learning environment in design education, offers the opportunity to develop design skills and understand the conceptual framework of the design process.

The Facility Management program also offers a Construction Option (listed separately) which focuses on construction and management issues specific to the building and renovating process such as the installation of updated systems and finishes, building codes, cost estimating, and scheduling and contracting.

Students who are interested in the program are encouraged to consult an advisor within the program for a more detailed explanation of the two options. Also, the program has a set of core courses which are common to both degrees. Students who are unsure as to which option they would like to pursue may wish to begin with those courses which are required by both options, so that they may change their option more easily at a later point.

The Facility Management program is accredited by the International Facility Management Association (IFMA) Foundation.

#### Student Learning Outcomes:

Upon completion of this program graduates will be able to:

- Demonstrate an understanding of the design process by solving specific design problems, synthesizing and applying technical, historical, cultural and theoretical concepts.
- Develop design drawings and models utilizing freehand drawing and modeling, mechanical drawing, and computer drafting and modeling.
- Apply basic principles of planning, management and real estate practice.
- Demonstrate knowledge of various finish materials and methods, furnishings and related interior products.
- Communicate effectively and work as part of a team, using graphic, oral and written modes.

#### Program Entry Requirements:

Students are required to take the College's placement tests at the time of entry. Students identified as needing developmental course work must satisfactorily complete the appropriate English and mathematics courses in addition to the requirements of their degree program.

#### Program of Study and Graduation Requirements:

To qualify for the A.A.S. degree in Facility Management – Design Option, a student must complete a minimum of 62 credits as prescribed and attain a minimum grade point average of 2.0 ("C" average).

# Facility Management - Design Option Course Sequence

Course Number and Name	Prerequisites and Corequisites	Credits	Gen Ed Req.
First Semester			
ADC 101 – Introduction to Design and Construction		3	Tech Comp*
ADC 103 – CAD Basics		3	Tech Comp*

ADC 136 – Construction Safety and Building Codes		3	
ENGL 101 – English Composition I		3	ENGL 101
MATH 137 - Geometry for Design (or higher MATH <sup>1</sup> )		3	Mathematics
Second Semester			
ADC 109 - Design Studio I		4	
ADC 112 – Construction Materials and Detailing: Properties	ADC 103 or ADC 109	3	
ENGL 102 – The Research Paper	ENGL 101 with a grade of "C" or better	3	ENGL 102, Info Lit
MNGT 121 – Introduction to Business		3	
ECON 182 - Principles of Economics (Microeconomics)		3	Social Sciences
Third Semester			
ADC 146 - Construction Supervision & Business Practices	ADC 101	3	
ADC 159 Design Studio II	ADC 103 & ADC 109	4	
ADC 160 - Presentation Techniques	ADC 103	3	
ADC 253 – Environmental Systems I	ADC 101 and ADC 103 or ADC 109	3	
Humanities Elective		3	Humanities
Fourth Semester			
ADC 192 - Color & Lighting	ADC 101	3	
ADC 254 - Environmental Systems II	ADC 253	3	
RE 101 – Real Estate Fundamentals		3	
Management Elective Choose One:		3	
MNGT 141 - Principles of Management	MNGT 121		
MNGT 142 - Management Information Systems Management			
MNGT 262 - Business Law			
Science Elective <sup>1</sup>		3/4	Natural Science
Minimum Credits Needed to Graduate: 62			

All General Education requirements are met through required courses (as indicated above) except for the **Writing Intensive**, **Interpretive Studies** and **American/Global Diversity** requirement. Therefore, in order to graduate, students in this program must choose one course that is designated **Writing Intensive**, one course that is designated **Interpretive Studies** and one course that is designated **American/Global Diversity**. The same course may be used to fulfill all three requirements. View the courses that fulfill all degree requirements and receive a more detailed explanation of the College's general education requirements to help in your selection.

<sup>\*</sup> Students must complete <u>ADC 101</u> and <u>ADC 103</u> to meet the Technological Competency requirement.

<sup>1</sup> Transfer institutions vary on the courses accepted for transfer. Consult transfer agreements and departmental advisors or the specific schools to determine choice.
For More Information Contact:
The Division of Liberal Studies, Room BR-21, 1700 Spring Garden Street, Philadelphia, PA 19130, Telephone (215) 751-8450; or the College Information Center (215) 751-8010.

## Fire Science

## Description:

Continued technical progress and expanded emphasis on fire prevention, fire safety and pre-fire planning have created increased demands for skilled fire service personnel. The Fire Science curriculum is designed to serve the needs of Philadelphia firefighters and volunteer firefighters desiring to progress in expertise, skill and rank. Philadelphia firefighters who earn the A.A.S. Degree in Fire Science receive an additional half point on all Philadelphia Fire Department promotional examinations. The Fire Science Curriculum also serves students interested in becoming fire safety professionals. They may work in pre-fire planning or as fire code enforcement officers, building inspectors, fire protection technicians and designers, fire prevention equipment sales representatives or technical experts, and fire safety officials or risk managers for businesses, school districts and government agencies.

Program course offerings accommodate diverse schedules. The program has a dual admissions agreement with Holy Family University that allows our students desiring to continue their studies in fire science to transfer all of their credits there with guaranteed junior standing.

### **Student Learning Outcomes:**

Upon completion of this program graduates will be able to:

- Demonstrate skills needed for leadership in the fire service or a position in a related field, such as code enforcement, pre-fire planning, building inspection, risk management, or emergency planning.
- Explain the various requirements for fire detection and suppression systems in differing types of occupancies and structures.
- Prepare a pre-fire plan for a building using computer-assisted design software to draw floor and site plans.
- Explain fireground strategy and tactics and identify the occupational risks firefighters face and the health and safety management strategies available to reduce injuries.
- Apply the principles of the scientific approach to fire investigation and explain the important role that fire investigation and fire prevention programs play in reducing a
  community's risk of fire.
- Conclusively determine the type of building construction and explain how this interfaces with hazardous materials and their impact on operations at emergency scenes.

## **Program Entry Requirements:**

This program is open to all interested students. New students are normally required to take College placement tests at their time of entry. Students identified as needing developmental course work must satisfactorily complete the appropriate English and mathematics courses as part of their degree program.

#### Program of Study and Graduation Requirements:

To qualify for the Associate in Applied Science (A.A.S.) degree in Fire Science, a student must complete a minimum of 62 credits as prescribed and attain a minimum grade point average of 2.0 ("C" average).

## Fire Science Course Sequence

Course Number and Name	Prerequisites and Corequisites	Credits	Gen Ed Req.
First Semester			
FSCI 104 – Fire Prevention and Building Codes		3	
ENGL 101 - English Composition I		3	ENGL 101
FSCI 111 – Emergency Scene Management		3	
FNMT 118 - Intermediate Algebra or higher		3	Mathematics
FSCI 142 – Introduction to Occupational Health and Safety for Firefighters		3	
Second Semester			

ENGL 102 - The Research Paper	ENGL 101 with a grade of "C" or better	3	ENGL 102, Info Lit
FSCI 181 – Building Construction for the Fire Service		3	
CHEM 110 - Introductory Chemistry		4	Natural Science
FSCI 271 – Hazardous Materials		3	
CIS 103 – Applied Computer Technology		3	Tech Comp
Third Semester			
Social Science Elective		3	Social Sciences
<u>FSCI 172</u> – Fire Detection and Suppression Systems		3	
<u>FSCI 221</u> – Fire Prevention and Protection		3	
Foreign Language (first of two semester sequence)		3	Humanities, Am/Global Diversity
PHYS 105 – Survey of Physics		4	
Fourth Semester			
Social Science Elective		3	
FSCI 281 – Fire Investigation		3	
FSCI 241 – Fire Administration		3	
FSCI 291 – Computer Assisted Pre-Fire Planning		3	
Foreign Language (second of two semester sequence)		3	
Minimum Credits Needed to Graduate: 62			

All General Education requirements are met through required courses (as indicated above) except for the **Writing Intensive** requirement and the **Interpretive Studies** requirement. Therefore, in order to graduate, students in this program must choose one course that is designated **Writing Intensive** and one course that is designated **Interpretive Studies**. The same course may be used to fulfill both requirements. View the courses that fulfill all <u>degree requirements</u> and receive a more detailed explanation of the College's general education requirements to help in your selection.

### For More Information Contact:

The Division of Liberal Studies, Room BR-21, 1700 Spring Garden Street, Philadelphia, PA 19130, Telephone (215) 751-8450; or the College Information Center (215) 751-8010.

## Hospitality Management

## Description:

The Hospitality Management degree program gives students a broad foundation of courses enabling them to enter a range of industry segments including but not limited to contract services, sports stadiums, casinos, health care and university foodservices, as well as hotels and restaurants.

The Hospitality Management program offers courses in the management of personnel, equipment maintenance, food preparation, lodging, merchandising and other related aspects of lodging, restaurant or food service operations. Graduates of the program are prepared for positions as managers of food, catering, banquet, conference services, front desk, concierge and housekeeping.

Following completion of the Hospitality Management Associate in Applied Science (A.A.S.) degree requirements, some students may wish to use the program as a foundation for continuing their education at a four-year college or university.

## Student Learning Outcomes:

Upon completion of this program graduates will be able to:

- Demonstrate their knowledge and skills of basic hospitality/food service management principles.
- Demonstrate the ability to effectively perform various functions of supervisors and managers in the hospitality industry and make educated, lawful, ethical and productive decisions.
- . Demonstrate the ability to assess and resolve conflicts in situations involving customers, employees and other parties in the hospitality industry.

## Program Entry Requirements:

New students are required to take College placement tests at the time of entry. Students identified as needing developmental course work must satisfactorily complete the appropriate English and mathematics courses as part of their degree program.

#### Program of Study and Graduation Requirements:

To qualify for the Hospitality Management Associate in Applied Science (A.A.S.) degree, a student must complete a total of 66 credit hours and attain a minimum grade point average of 2.0 ("C" average). Additional expenses for students in the program include uniforms, knife sets, medical and dental examinations and a field trip to New York City.

## Hospitality Management Course Sequence

Course Number and Name	Prerequisites and Corequisites	Credits	Gen Ed Req.
First Semester			
<u>CAHM 110</u> – Introduction to the Hospitality Industry		3	
ENGL 101 – English Composition I		3	ENGL 101
<u>FNMT 118</u> - Intermediate Algebra or higher		3	Mathematics
<u>CAHM 170</u> – Elementary Food Preparation, Principles, and Practices		4	
Second Semester			
CIS 103 – Applied Computer Technology		3	Tech Comp
<u>CAHM 171</u> – Quantity Food Preparation	<u>CAHM 170</u>	4	
CAHM 120 – Hotel Front Office Management	<u>CAHM 110</u> , <u>CIS 103</u> , FNMT 118 or MATH 118		

	or higher placement	3	
ECON 181 – Principles of Economics (Macroeconomics)		3	
Social Science Elective		3	Social Science
Summer I			
<u>CAHM 198</u> – Hospitality Work Experience	<u>CAHM 110, CAHM 170</u>	3	
Humanities Elective		3	Humanities
Third Semester			
<u>CAHM 185</u> – Dining Room Management	<u>CAHM 110, CAHM 170</u>	3	
ENGL 102 – The Research Paper	ENGL 101 with a grade of "C" or better	3	
<u>CAHM 266</u> – Hospitality Law		3	
ACCT 101 – Financial Accounting		4	
<u>CAHM 130</u> – Hotel Facilities Management	CAHM 110	3	
Fourth Semester			
Science Elective*		3/4	Natural Science
<u>CAHM 278</u> – Hospitality Marketing		3	
<u>CAHM 271</u> – Food, Beverage Management & Labor Cost Controls	CAHM 110, CAHM 170, CIS 103 & FNMT 118 or MATH 118 or higher	3	
CAHM 276 – Food & Beverage Management	<u>CAHM 171</u>	3	
<u>CAHM 280</u> – Introduction to Supervision in the Hospitality Industry	CAHM 110, CAHM 198	3	
Minimum Credits Needed to Graduate: 66			

All General Education requirements are met through required courses (as indicated above) except for the **American/Global Diversity** requirement, the **Interpretive Studies** requirement and the **Writing Intensive** requirement. Therefore, in order to graduate, students in this program must choose one course that is designated **American/Global Diversity**, one course that is designated **Writing Intensive** and one course that is designated **Interpretive Studies**. View the courses that fulfill all <u>degree requirements</u> and receive a more detailed explanation of the College's general education requirements to help in your selection.

### For More Information Contact:

The Division of Business and Technology, Room C1-9, 1700 Spring Garden Street, Philadelphia, PA 19130, Telephone (215) 496-6164; or the College Information Center (215) 751-8010.

<sup>\*</sup>Students who plan to transfer to four-year institutions should choose their science elective based on the science requirement for their intended transfer institution.

<sup>\*\*</sup>Although not required, it is recommended that Hospitality Management students take CAHM 161 Foodservice Safety and Sanitation. Consult the curriculum coordinator or an academic advisor for for more information.

## **Justice**

## Description:

The Justice program provides the education, knowledge, and skills needed to protect the public and work within the law enforcement and criminal justice systems. A sequence of courses is offered to help students 1) establish a knowledge base about Justice, 2) develop a set of professional values and 3) improve skills related to professional activity.

Upon completion of the program, persons already working in a justice setting will substantially enhance their knowledge, values and skills. Students will also be prepared to transfer to a four-year institution or to enter a justice setting at an entry level.

Students completing the Justice program will be prepared to work as state or municipal police officers/troopers, state or municipal corrections officers, parole and probation officers, private security managers, private investigators, homeland security investigators/screeners and youth detention counselors.

In addition to four core Justice courses (<u>JUS 101</u>, <u>JUS 171</u>, <u>JUS 241</u> and <u>JUS 291</u>), that are required for all students, students are required to select five Justice electives. The Justice electives are organized in four different career clusters. The courses in each career cluster focus on the knowledge and skills that are typically associated with a certain justice-related career within the broader field of criminal justice. Students are not required to choose courses from one specific career cluster, but they should select courses that meet their own academic, professional or personal interests.

The **Police career cluster** is designed for students interested in the law enforcement profession. It provides them with the skills and knowledge needed to respond to and protect a crime scene, retrieve and analyze evidence, and maintain and protect the chain of evidence throughout the entire prosecution process. The **Corrections career cluster** provides students with a strong foundation in the correctional process. It provides them with the knowledge to work successfully within the American correctional system from the moment a defendant is convicted through his/her incarceration period and subsequent reintegration into society. The **Parole/Probation career cluster** provides students with the skills and knowledge needed to manage cases from a defendant's conviction to his/her completion of probation or parole in both the juvenile and adult systems. Finally, the **Corporate/Homeland Security career cluster** provides students with a broad foundation in key aspects of the corporate environment, such as asset protection, homeland security and the investigation of corporate crimes.

### Student Learning Outcomes:

Upon completion of this program graduates will be able to:

- Identify the foundation, structure and components of the contemporary criminal justice system.
- Identify and analyze the core principles, practices and skills required for a successful career in criminal justice.
- Describe and evaluate the role of the criminal justice concepts of reasonable suspicion, probable cause and proof beyond a reasonable doubt from interrogation, arrest, prosecution and conviction.
- Describe the legal concept of juvenile delinquency including the traits and social characteristics that are the common correlates of delinquent behavior, explaining the difference between the juvenile process and procedures and the adult processes and procedures.
- Analyze the role of ethical principles and behavior that permeate multiple aspects of the criminal justice system.

#### Program Entry Requirements:

All students interested in the Justice field may enroll in this curriculum. Those identified as needing developmental coursework must satisfactorily complete the appropriate English and mathematics courses as part of their degree program.

#### Program of Study and Graduation Requirements:

To qualify for the Associate in Applied Science (A.A.S.) degree in Justice, the student must complete a minimum of 60 prescribed credit hours and attain a minimum grade point average of 2.0 ("C" average).

## Philadelphia Police Officers and Correctional Officers:

Persons who have graduated from the Philadelphia Police Academy may be eligible to receive academic credit for Justice 101, Justice 151, Justice 221, Justice 241 and Justice 261. Graduates of the Philadelphia Correctional Training Center may be eligible to receive credit for Justice 235 and BHHS 241.

### Justice Course Sequence

Course Number and Name	Prerequisites and Corequisites	Credits	Gen Ed Req.
First Semester			

JUS 101 - Survey of Justice		3	
JUS 171 - Juvenile Justice		3	Social Sciences
ENGL 101 - English Composition I		3	ENGL 101
SOC 101 - Introduction to Sociology		3	Writing Intensive, Interpretive Studies, Am/Global Diversity
CIS 103 - Applied Computer Technology		3	Tech Comp
Second Semester			
PSYC 101 - Introduction to Psychology		3	
JUS 241 - Criminal Law	JUS 101 or PLS 101	3	
Career cluster course - select one from the lists below	<u>JUS 101</u> (except for <u>BHHS 121</u> )	3	
Career cluster course - select one from the lists below	<u>JUS 101</u> (except for <u>BHHS 121</u> )	3	
ENGL 102 - The Research Paper	ENGL 101 with a grade of "C" or better	3	ENGL 102, Info Lit
Third Semester			
Career cluster course - select one from the lists below	<u>JUS 101</u> (except for <u>BHHS 121</u> )	3	
Career cluster course - select one from the lists below	<u>JUS 101</u> (except for <u>BHHS 121</u> )	3	
JUS 291 - Contemporary Issues in Justice	<u>JUS 101</u> , <u>171</u> and <u>241</u>	3	
FNMT 118 - Intermediate Algebra (or higher)		3	Mathematics
Natural Science		3/4	Natural Science
Fourth Semester			
Career cluster course - select one from the lists below	<u>JUS 101</u> (except for <u>BHHS 121</u> )	3	
Social Science Elective <sup>1</sup>		3	
General Elective <sup>1</sup>		3	
General Elective <sup>1</sup>		3	
Humanities Elective		3	Humanities
Minimum Credits Needed to Graduate: 60			

Career Cluster Course - Select courses from the following clusters according to career goal. All concentration courses except BHHS 121 have JUS 101 as a prerequisite.

## Police:

- JUS 121 Legal Issues in Justice and Human Services
- JUS 151 Police Operations
- JUS 181 Community Relations
- JUS 201 Introduction to Terrorism
- JUS 221 Criminal Investigation

- JUS 251 Comparative Police Systems
- JUS 261 Criminal Evidence and Procedure
- JUS 281 Organized Crime

#### Corrections:

- JUS 121 Legal Issues in Justice and Human Services
- JUS 221 Criminal Investigation
- JUS 235 American Correctional Institutions
- JUS 237 Community-Based Corrections
- JUS 281 Organized Crime
- BHHS 121 Foundations of Addiction Studies

#### Parole/Probation:

- JUS 121 Legal Issues in Justice and Human Services
- JUS 181 Community Relations
- JUS 221 Criminal Investigation
- JUS 237 Community-Based Corrections
- JUS 281 Organized Crime
- BHHS 121 Foundations of Addiction Studies

### Corporate/ Homeland Security:

- JUS 105 Introduction to Corporate and Homeland Security
- JUS 181 Community Relations
- JUS 201 Introduction to Terrorism
- JUS 221 Criminal Investigation
- JUS 261 Criminal Evidence and Procedure
- JUS 281 Organized Crime

## General Education Requirements:

All General Education requirements are met through required courses (as indicated above). View the courses that fulfill all <u>degree requirements</u> and receive a more detailed explanation of the College's general education requirements to help in your selection.

## For More Information Contact:

The Division of Liberal Studies, Room BR-21, 1700 Spring Garden Street, Philadelphia, PA 19130, Telephone (215) 751-8450; or the College Information Center (215) 751-8010.

<sup>&</sup>lt;sup>1</sup> Students planning to transfer are strongly advised to take <u>SOC 215 - Criminology</u> as one of their electives because of its emphasis on theory.

## Medical Laboratory Technician

### Description:

The Medical Laboratory Technician curriculum prepares students for positions as technicians in hospital laboratories, physician offices, pharmaceutical companies, private laboratories or other types of clinical laboratory facilities.

Under appropriate supervision, technicians perform clinical laboratory procedures in chemistry, blood banking, microbiology, immunology, hematology, coagulation and other areas of the clinical laboratory, developing data used by a physician to determine the presence and extent of disease, as well as monitoring the patient's treatment.

The student will spend time in clinical laboratories during their course of study to become familiar with the instrumentation, workload and day-to-day operations of the clinical laboratory.

#### Accreditation:

The Medical Laboratory Technician program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS).\* Graduates of the MLT curriculum are eligible to take the "MLT" ASCP Board of Certification Exam.

\* 5600 N. River Road Suite 720 Rosemont, IL 60018 773-741-8880 www.naacls.org

## Student Learning Outcomes:

Upon completion of this program graduates will be able to:

- · Collect biological samples safely and according to standard operating procedures
- Analyze biological samples safely and according to standard operating procedures
- Demonstrate a broad knowledge of basic laboratory tests for all lab departments in preparation for a certification exam
- · Apply professional and ethical behaviors in the clinical laboratory setting
- Use problem solving skills to integrate laboratory data for patient diagnosis.

## **Program Entry Requirements:**

Admission is selective and requires that potential students fulfill all College admission requirements. Applicants for the program must have:

- 1. Minimum grade point average of 2.25
- 2. High school diploma or general education diploma (GED).
- 3. A minimum of one year of high school biology and chemistry or their applicable equivalents within the last 10 years with a grade of "C" or better.
- 4. Applicants must demonstrate readiness for English 101 and FMNT 118 as determined by the College's placement tests or by successfully completing identified developmental course work.
- 5. Results of a physical examination, TB tests and immunizations must be on file prior to beginning any Clinical Laboratory Technician classes. Health problems which would interfere with the applicant's ability to meet program objectives will be dealt with on an individual basis.
- 6. Second year students must receive a second TB test prior to the start of their second year in the program.
- 7. All students must show proof of health insurance prior to the start of each semester.
- 8. Applicants must obtain a Criminal Record Check and a Child Abuse Clearance prior to entering the program.

The following guidelines are used in making decisions about an applicant's criminal and child abuse background:

#### Child Abuse Clearance:

• Any record results in denial of admission into the MLT program.

#### Criminal Background Check:

- Any felony conviction within the past 10 years results in denial of admission to the MLT program.
- Any felony conviction more than 10 years old will be evaluated based on the nature of the offense, length of time since the offense and any explanatory letters/materials submitted by the applicant or student.
- Any misdemeanor will be evaluated based on the nature of the offense, length of time since the offense, and explanatory letter/materials submitted by the applicant or students. (Any punishment over one year indicates a felony according to federal sentencing guidelines.)

#### Reconsideration:

An applicant who believes that an error of fact has been made in terms of the information provided to the decision making committee can request reconsideration by the committee. This request must be made in writing within ten days from the date of the letter notifying the applicant of the decision. The reconsideration should address what the applicant considers to be errors of fact.

Following reconsideration by the decision making committee, the applicant can appeal the committee's decision to the Vice President for Academic and Student Success, whose decision is final. Any official change or the initiation of any governmental proceeding affecting the information revealed by the required criminal or child abuse background check must be reported immediately to the MLT curriculum coordinator.

#### Drug Screening:

The MLT program requires participation in clinical education. Some clinical affiliates of the MLT program require evidence of a negative drug screening test in order for a student to participate in the clinical part of the clinical laboratory program at their facility. Therefore, any student with a positive drug screening test cannot be admitted into the MLT program.

Involvement in any incident which resulted in a disciplinary action against a student at Community College of Philadelphia or any post-secondary institution is considered in the admissions process. The MLT program reserves the right to deny admission to any applicant who has a history of violating College rules and regulations or who has been previously suspended or expelled from the College or any other post-secondary educational institution.

Additional expenses for students in the program include travel to clinical facilities, purchase of uniforms, shoes, laboratory coats, required textbooks, a physical examination and inoculations.

To remain in the program, students must earn a grade of "C" or better in each professional course and in each science course. All general science prerequisites must be completed prior to entering the second year of the program.

A student in the Clinical Laboratory Technician program whose skills, attitude and behavior are viewed as inconsistent with professional standards may be dropped from the program by the program director.

Students dropped from the program because of academic deficiencies will be considered for a second admission to the program after remediation of the deficiencies and recommendation of the MLT faculty. Students may be readmitted to the program only once. Part-time students must complete the program within five years of their initial enrollment.

Program of Study and Graduation Requirements: To qualify for the Associate in Applied Science (A.A.S.) degree as a clinical laboratory technician, a student must complete 63 credit hours as prescribed, attain a grade point average of 2.0 or better, and earn no grade below "C" in any required course for the curriculum.

## Medical Laboratory Technician Course Sequence

Course Number and Name	Prerequisites and Corequisites	Credits	Gen Ed Req.	
First Semester				
MLT 102 - Phlebotomy		4		
ENGL 101 - English Composition I		3	ENGL 101	
BIOL 108 - Fundamentals of Human Anatomy and Physiology or BIOL 109 and BIOL 110 - Anatomy and Physiology <sup>1</sup>	For BIOL 108, FNMT 118 For BIOL 109, BIOL 106 or high school biology and chemistry within 10 years For BIOL 110, BIOL 109 with a "C" or better	4/8	Natural Science	
FNMT 118 - Intermediate Algebra		3	Mathematics	
CHEM 110 - Introductory Chemistry or CHEM 121 - College Chemistry I	For CHEM 121, CHEM 110 with a "C" or better and FNMT 118	4		
Second Semester				
CIS 103 - Applied Computer Technology		3	Tech Comp	
MLT 155 - Clinical Hematology	BIOL 108 or BIOL 110 which may be concurrently and MLT 102, which may be taken	4		

	concurrently		
ENGL 102 - The Research Paper	ENGL 101 with a grade of "C" or better	3	ENGL 102, Info Lit
CHEM 118 - Intro to Biochemistry or CHEM 122 - College Chemistry II	For CHEM 118, CHEM 101, CHEM 110 or CHEM 121 with a grade of "C" or better  For CHEM 122, CHEM 110 with a "C" or better and FNMT 118 and CHEM 121 with grade of "C" or better	4	
BIOL 241 - Principles of Microbiology	BIOL 106 or BIOL 108 or BIOL 109 or BIOL 123 with a "C" or better	4	
Summer Session I			
MLT 205 - Immunohematology and Immunology	BIOL 108 or BIOL 109 and BIOL 110 and MLT 155	4	
Third Semester			
MLT 225 - Clinical Chemistry	BIOL 108 or BIOL 110, CHEM 110 and CHEM 118 or CHEM 121 and CHEM 122, CLT 155 MLT 205	4	
MLT 245 - Clinical Microbiology	BIOL 241, CHEM 110 and CHEM 118 or CHEM 121 and CHEM 122 MLT 205	4	
SOC 101- Introduction to Sociology or GEOG 103 - Introduction to Human Geography		3	Social Science Interpretive Studies Writing Intensive American/Global Diversity
Fourth Semester			
HUM 101 or HUM 102 - Cultural Traditions or Foreign Language	For HUM 101 and HUM 102, ENGL 101, which may be taken concurrently	3	Humanities American/Global Diversity
MLT 265 - Current Topics in Clinical Lab Sciences	MLT 225 and MLT 245	3	

All general education requirements necessary for graduation are met through the courses in the program as indicated above. Students who wish to take courses that differ from the general education courses indicated above must consult with an advisor or counselor before registering. A more detailed explanation of the College's general education requirements appear at <a href="http://ccp.edu/college-catalog/degree-requirements">http://ccp.edu/college-catalog/degree-requirements</a>.

<sup>&</sup>lt;sup>1</sup> Students in this program must take either <u>BIOL 108</u> or both <u>BIOL 109</u> & <u>BIOL 110</u>. Students who choose the two-semester 109 & 110 sequence should take <u>BIOL 241</u> in the summer between the second and third semester.

## Phlebotomy Certificate Program

CLT 102 - Phlebotomy is a one-semester course that includes two hours of lecture, three hours of student lab and eight hours of clinical rotation per week in a hospital laboratory or outpatient facility. The program is approved by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS).\* Students who successfully complete the program are eligible to take the PBT (ASCP) Certification exam.

### Admission requirements are:

- 1. High school diploma or general education diploma (GED).
- 2. English 101 and FNMT 017 placement.
- 3. Results of a physical examination, immunizations, including Hepatitis B and a current PPD test.
- 4. Verification of medical insurance is mandatory.
- 5. The student must present a negative criminal record check, child abuse clearance and drug screening prior to entering the program.

Students are not required to take the certification exam to receive the Phlebotomy Certificate.

\* 5600 N. River Road Suite 720 Rosemont, IL 60018 773-741-8880 www.naacls.org

## For More Information Contact:

The Division of Math, Science and Health Careers, Room W2-7, 1700 Spring Garden Street, Philadelphia, PA 19130, Telephone (215) 751-8430; or the College Information Center (215) 751 8010.

# Network Technology Management and Administration

## Description:

The Network Technology Management and Administration program provides students with knowledge essential to implementing and managing a network technology business, including the technical skills needed to participate in the management of Network Operation Centers, Network Technology Departments, and their associated technicians and staff members. The degree offers students the knowledge and expertise needed to work in positions such as project manager, network administrator, network engineer, and coordinator of technology. The program learning outcomes are closely linked to international network technology certification standards required by CompTIA, Cisco and Microsoft.

#### **Student Learning Outcomes:**

Upon completion of the Network Technology Management and Administration Degree, students will be able to:

- · Analyze and discuss business concepts, structures, and project management techniques relevant to today's workplace
- Identify theories of group dynamics and hone skills specific to working in and managing groups and teams
- · Identify the basic knowledge and practical skills needed to install and support computer operating systems
- Install, configure and manage major network server types, i.e. VoIP (Voice over IP), streaming video, web, database and remote access servers
- Determine the hardware and software needs for enterprise-level networks, including network setup and the costs involved for equipment, staff, and construction
- · Configure enterprise-level network devices such as routers, switches and wireless access points
- · Install server operating systems to perform various functions (i.e., user accounts, internet access, security gateways and email servers)

### Program Entry Requirements:

The Network Technology Management and Administration degree program will be open to all interested full-time, part-time, continuing education and professional development students. Students identified as needing developmental course work must satisfactorily complete the appropriate English and mathematics courses as a part of their degree program.

## Program of Study and Graduation Requirements:

The minimum number of credits required for graduation is 61. A grade point average of 2.0 is necessary for graduation. It is highly recommended that the degree be completed within a three-year period to ensure up-to-date knowledge and skill acquisition.

## Network Technology Management and Administration Degree Course Sequence

Course Number and Name	Prerequisites and Corequisites	Credits	Gen Ed Req.	
First Semester				
CIS 103 - Applied Computer Technology		3	Tech Comp	
CIS 150 - Network Technology		4		
ENGL 101 - English Composition I		3	ENGL 101	
General Elective		3		
Second Semester				
SOC 101 - Introduction to Sociology or SOC 115 - Women and Men in America or ANTH 112 - Cultural Anthropology	For <u>SOC 115</u> : <u>ENGL 101</u>	3	Social Sciences, Am/Global Div., Interpretive Studies, Writing Intensive	
ENGL 102 - The Research Paper	ENGL 101 with a grade of "C" or better	3	ENGL 102, Info Lit	
MNGT 121 - Introduction to Business		3		
CIS 252 - Windows Server Configuration	<u>CIS 150</u>	4		

CIS 253 - Windows Server Administration	CIS 252	4	
Third Semester			
FNMT 118 - Intermediate Algebra or Higher Math		3	Mathematics
ENGL 112 - Report and Technical Writing	ENGL 101	3	
CIS 256 - Cisco Routing Technology	CIS 150	4	
CIS 257 - Advanced Cisco Routing and Switch Technology	CIS 256	4	
Fourth Semester			
ASET 130 - Quality Control/Quality Assurance (preferred) or ASET 101 - Science, Technology, and Public Policy	For ASET 130: FMNT 118	3	Natural Science
ENGL 117 - Group and Team Communication	ENGL 101, which may be taken concurrently	3	Humanities
MNGT 142- Management Information Systems	MNGT 121	3	
CIS 105 - Computer Systems Maintenance		4	
CIS 297 - Network Technology Capstone	CIS 253, CIS 257, MNGT 142 (which may be taken concurrently), ENGL 117 (which may be taken concurrently)	4	
MINIMUM CREDITS NEEDED TO GRADUATE: 61			

#### **General Education Requirements:**

All general education requirements necessary for graduation are met through the courses in the program as indicated above. Students who wish to take courses that differ from the general education courses indicated above must consult with an advisor or counselor before registering. A more detailed explanation of the College's general education requirements appear at <a href="http://ccp.edu/college-catalog/degree-requirements">http://ccp.edu/college-catalog/degree-requirements</a>

### For More Information Contact:

The Division of Business and Technology, Room B2-22, 1700 Spring Garden Street, Philadelphia, PA 19130, Telephone (215) 751-8785; or the College Information Center (215) 751-8010.

## Nursing

#### Description:

The Nursing curriculum prepares students for beginning staff nurse positions in acute, long-term care and community-based facilities. Staff nurses plan, provide and evaluate nursing care for individual health maintenance or health promotion needs. Upon successful completion of the curriculum, students receive an Associate in Applied Science (A.A.S.) degree and are eligible to sit for the state licensure examination to become a registered nurse (R.N.).

Nursing students attend classes at the College. Selected clinical laboratory learning experiences under the guidance of nursing faculty are provided at a variety of health care agencies in Philadelphia. These experiences provide students with the opportunity to apply classroom learning in client care situations. The availability of learning experiences may necessitate evening or weekend clinical laboratory assignments for students.

The Nursing curriculum is accredited by the Accreditation Commission for Education in Nursing, 3343 Peachtree Road, NE Suite 850, Atlanta, GA 30326, 404-975-5000, <a href="https://www.acenursing.org">www.acenursing.org</a> and is approved by the Pennsylvania State Board of Nursing.

The Department of Nursing is recognized by the National League for Nursing as a Center of Excellence in Nursing Education in the category of Enhancing the Professional Development of Students. This fourth designation is from 2016-202.

The Accreditation Commission for Education in Nursing requires the disclosure of licensure pass rates for a 3 year period of time.

National Council of State Board of Nursing Licensure Examination Pass Rates for CP First Time Test Takers

Year	Pass Rate
2014	67.07%
2015	83.17%
2016	87.5%

#### **Student Learning Outcomes:**

Upon completion of this program graduates will be able to:

- Integrate theories and concepts from science and liberal arts in the practice of nursing.
- Collaborate with nurses and other members of the health care team to provide safe, culturally sensitive, effective nursing care to clients in a variety of settings.
- Practice within the legal and ethical framework of nursing.

#### Program Entry Requirements:

#### Prerequisites:

- High school diploma or GED
- Biology 106 (or one year of high school biology)\*
- Chemistry 110 (or one year of high school chemistry)\*
- Two years of college preparatory math with a C or better
- Placement in MATH 118
- Placement in ENGL 101
- GPA of 2.75 or higher

\*Science courses must be less than 10 years old. For applicants holding a high school diploma, the 10-year requirement is calculated from the date of graduation. For all other applicants, the date is calculated from the semester and year the course was successfully completed.

STS 101 (there is only one course) may be substituted for BIO 106 and CHEM 110.

#### Admission Process:

- Attend an information session facilitated by the Counseling Department for Nursing between October and December.
- Applications are due by January 15.
- All prerequisite courses must be complete and posted by January 31.

- All transfer credits must be posted to the students Community College of Philadelphia record by January 31.
- Kaplan Pre Nursing test must be completed by March 16, 2018.

#### Requirements Upon Admission:

Admission is considered conditional until all health and background information is received and reviewed.

#### Nursing Health Requirement:

A record of complete physical examination including required laboratory test results and immunizations must be in the Nursing department office before applicants can begin a Nursing course. A physical examination is also required of students prior to the beginning of the second year of the program. Immunizations may be supplemented with additional immunizations as clinical agencies require, such as but not limited to seasonal flu vaccinations. Health requirements must be documented in English by a U.S. health care provider.

During College nursing skills laboratory and clinical agency experiences, physical activity is required. Standing and walking are required during the entire work day (6 to 12 hours). Students should be able to have full range of motion, push, pull, twist, lift and bend. Health problems that could interfere with the applicant's ability to meet program objectives will be considered individually. Students will be asked to complete the Essential Functions document.

Students who are registered with the Center on Disability must inform the instructor by the end of the first week of class if special accommodations are required. An accommodation is an adjustment in how a task is achieved, with out compromising the objective, integrity, or essential nature of the course of the program.

#### Background Checks:

Clinical experience in the Nursing program includes contact with children and older adults. This experience could be in hospitals, schools or other community agencies. In order to participate in these experiences, students must obtain a criminal record check and child abuse history clearance prior to entrance into the Nursing program. This Nursing program requirement is mandated by the Commonwealth of Pennsylvania per 24 P.S. 1-111 of the Pennsylvania Public School Code and 23 Pennsylvania C.S.A. 6355 of the Pennsylvania Child Protective Services Law. Any official change or the initiation of any governmental proceeding affecting the information revealed by the required criminal or child abuse background check must be reported immediately to the head of the Nursing program.

The Professional Nursing law permits the Nursing Board to consider the "moral character of any nursing candidate." The Pennsylvania Board of Nursing makes the final determination concerning an applicant's eligibility for R.N. licensure. The Pennsylvania Board of Nursing considers any and all prior convictions, including guilty plea, plea of nolo contendere, receiving probation without verdict, accelerated rehabilitative disposition (ARD), or any other disposition (excluding acquittal or dismissal) of any criminal charges, felony or misdemeanor, including DUI/DWI, drug law violations, pending and/or unresolved charges and expunged and juvenile records, when determining whether to allow an applicant to apply for R.N. licensure.

The Pennsylvania State Board of Nursing reserves the right to deny a license to any candidate who has been convicted of any felonious act. Conviction includes a judgment, an admission of guilt or a plea of nolo contendere, probation without verdict, or incomplete ARD. Further, the board shall not issue a license to any applicant who has been:

- 1. convicted of a felonious act prohibited by the act of April 14, 1972 (P.L. 233, No. 64), known as The Controlled Substance, Drug, Device and Cosmetic Act; or
- 2. convicted of a felony relating to a controlled substance in a court of law of the United States or any other state, territory or country unless:
  - a. at least 10 years have elapsed from the date of the conviction;
  - b. the applicant satisfactorily demonstrates to the board significant progress in personal rehabilitation since the conviction such that licensure should not create a substantial risk of further violations; and
  - c. the applicant otherwise satisfies the qualifications contained in this act.

The College, in its admissions process, will consider information regarding criminal convictions and/or crimes of moral turpitude. Admission is conditional pending receipt and evaluation of a Pennsylvania State Police and F.B.I. criminal background check, child abuse check and drug screening test. A positive result in any of these areas may bar the student from being admitted into the Nursing program.

The following guidelines are used for making decisions about an applicant's criminal and child abuse background:

#### Child Abuse Clearance:

• Any record results in denial of admission into the Nursing program.

#### Criminal Background Checks:

- Any felony conviction within the past ten years results in denial of admission to the Nursing program.
- Any felony conviction more than 10 years old will be evaluated based on the nature of the offense, length of time since the offense, and any explanatory letters/materials submitted by the applicant or student.
- Any misdemeanor will be evaluated based on the nature of the offense, length of time since the offense, and explanatory letter/materials submitted by the applicant or student. (Any punishment over one year indicates a felony according to federal sentencing guidelines.)

#### **Drug Screening Clearance**

• The Nursing program requires participation in clinical education. Clinical affiliates of the Nursing program require evidence of a negative drug screening test in order for a student to participate in the clinical education part of the nursing program at their facility. Therefore any student with a positive drug screening test cannot be admitted into the Nursing program.

#### Additional Requirements:

CPR Certification - health care provider

- Health Insurance
- · Professional Liability insurance
- · Transportation to clinical facilities
- Purchase of uniforms and supplies
- · Meet essential functions requirements

#### Reconsideration:

An applicant who believes that an error of fact has been made in terms of the information provided to the decision-making committee can request reconsideration by the committee. This request must be made in writing within 10 days from the date of the letter notifying the applicant of the decision. The reconsideration should address what the applicant considers to be errors of fact.

Following reconsideration by the decision-making committee, the applicant can appeal the committee's decision to the vice president for Academic and Student Success, whose decision is final.

#### Disciplinary Action:

Involvement in any incident which resulted in disciplinary action against a student at the Community College of Philadelphia or any postsecondary institution is considered in the admissions process. The Nursing program reserves the right to deny admission to any applicant who has a documented history of violating College rules and regulations or who has been previously suspended or expelled from the College or any other post-secondary educational institution.

#### Progression:

To remain in the Nursing curriculum, students must maintain a grade of C or better in all nursing and required pre- and corequisite courses. During all clinical laboratory experiences, students must maintain client safety. Violation of safety may result in an immediate clinical failure, an administrative withdrawal and a grade of "F" for the course. Students whose attitudes and behavior are viewed as inconsistent with professional standards may be dropped from the curriculum pending the results of a departmental hearing. A nursing student must inform the Head of the Department of Nursing immediately if there is a change in the student's criminal background or child abuse clearance while the student is enrolled in the nursing program. If changes occur in the student's criminal background or child abuse clearance during enrollment in the nursing program, the student's situation will be reevaluated and this may lead to termination from the Nursing program.

#### Readmission

Students requesting readmission to the Nursing program must meet program entry requirements and conditions for acceptance. Students requesting readmission are selected on a competitive basis as space permits. The program must be completed within four years of initial enrollment. Students who were dropped from the program for unprofessional conduct or violation of patient safety issues may not be considered for readmission.

Students applying for readmission must have a college GPA of 2.75 by July 1 for September enrollment or by September 1 for January enrollment. Additional requirements apply. Applications for readmission can be obtained through the Counseling department.

#### Advanced Placement Option:

Licensed practical nurses, corpsmen, and candidates who have had one year of successful previous nursing school experience in the U.S. may apply for advanced placement through Credit by Prior Learning Assessment for Nursing 101. Advanced placement candidates must complete all admission requirements for consideration by the department. Successful completion of Health B9026, the noncredit transition course, is required before advanced placement is granted. Students who meet these criteria are admitted on a space-available basis. Applications are due by May 15. Application does not ensure admissions.

All Advance Placement Option applicants must complete the following courses, with a C or higher, by May 31 prior to the anticipated September transition course and January enrollment. Transfer credits must be posted on the student record by June 30.

- GPA of 2.75 or higher
- CHEM 110 (or high school equivalent less than 10 years old)
- FNMT 118
- BIOL 109
- DIET 111
- ENGL 101

Documentation of Prior Learning is required. LPNs must submit a current, active LPN license in good standing in the Commonwealth of Pennsylvania and a transcript from the LPN school. Medics/corpsmen must submit evidence of honorable discharge from a branch of the U.S. military indicating training and service as a medic/corpsman.

Students who plan to transfer from another school of nursing in the United States must provide a transcript showing a GPA of 2.75 or higher, at least one year of clinical courses with satisfactory performance (provide course descriptions) and a letter of reference from the school.

#### Program of Study and Graduation Requirements:

To qualify for the A.A.S. degree in Nursing, students must complete 64 credit hours as prescribed, attain a grade point average of 2.0 or better and no grade below C in any course. All students must complete the nursing course sequence within four academic years of the date of admission to the first nursing course.

### Nursing Course Sequence

First Semester			
NURS 101 – Nursing I	BIOL 109, DIFT 111, ENGL 101 (must be taken prior to or concurrently)	7	
BIOL 109 – Anatomy and Physiology		4	Natural Science
DIET 111 – Introduction to Nutrition	BIOL 109 with a grade of "C" or better	3	
ENGL 101 – English Composition I		3	ENGL 101
Second Semester			
NURS 132 – Nursing II	NURS 101 must be taken prior; BIOL 110, ENGL 102, MATH 118 or above (must be taken prior to or concurrently)	7	Writing Intensive
BIOL 110 – Anatomy and Physiology	BIOL 109	4	
ENGL 102 – The Research Paper	ENGL 101 with a grade of "C" or better	3	ENGL 102, Info Lit
FNMT 118 or higher		3	Mathematics
Third Semester			
NURS 231 – Nursing III	NURS 132 must be taken prior; BIOL 241, SOC 101, CIS 103 (must be taken prior to or concurrently)	7	
BIOL 241 – Principles of Microbiology	BIOL 106, BIOL 107, BIOL 109 or BIOL 123	4	
SOC 101 – Introduction to Sociology		3	Social Sciences, Am/Global Diversity, Interpretive
CIS 103 – Applied Computer Technology		3	Tech Comp
Fourth Semester			
NURS 232 – Nursing IV	NURS 231	7	
Humanities Elective (excluding ENGL 108)		3	_
General Elective		3	
Minimum Credits Needed to Graduate: 64			·

## General Education Requirements:

All General Education requirements are met through required courses as indicated above. A more detailed explanation of the College's general education requirements can be found on the following degree requirements Web page.

#### For More Information Contact:

<sup>&</sup>lt;sup>1</sup> MATH 251: Statistics for Science fulfills the General Elective requirement. It is recommended because it is required for all RN-BSN programs. Students may substitute another course for the General Elective requirement.

<sup>&</sup>lt;sup>2</sup> PHIL 101: Introduction to Philosophy, PHIL 111: Critical Thinking, PHIL 211: Ethical Problems and ENGL 115: Public Speaking are suggested Humanities electives that are generally required by RN-BSN programs. Students may substitute another Humanities course for the Humanities Elective requirement.

The Division of Math, Science and Health Careers, Room W2-7, (215) 751-8010.	, 1700 Spring Garden Street, Philadelphia, PA	A 19130, Telephone (215) 751-8430; or the	College Information Center

## Paralegal Studies

## Description:

The Paralegal Studies curriculum leads to the Associate in Applied Science (A.A.S.) degree, which is approved by the American Bar Association. This curriculum provides students with a varied and general grounding in the practical skills necessary to be a paralegal along with a strong liberal arts background. The program is suitable for students seeking either to transfer to a four-year institution in a law-related program or to enter the work force as a paralegal, particularly in small to mid-sized law firms, businesses, government, and public and private agencies.

Community College of Philadelphia trains paralegals who must operate under the supervision of a licensed attorney and are prohibited from practicing law. This program has been approved by the American Bar Association.

### Student Learning Outcomes:

Upon completion of this program graduates will be able to:

- · Work successfully as entry-level paralegals.
- Apply ethical concepts to hypothetical examples and real-life situations.
- Draft legal documents, conduct legal research both manually and through computer-assisted research and undertake the full scope of tasks assumed by entry-level paralegals.
- · Demonstrate legal analytical skills and legal writing skills.
- Cultivate a supportive professional network and learn how to remain current in the legal profession.
- Demonstrate an understanding of legal terminology in civil litigation and a variety of practice areas.
- Demonstrate practical skills in a variety of practice areas.
- Understand the role of technology in the modern law office and have practical experience using legal technology programs.

#### Program Entry Requirements:

New students are required to take the College's placement tests at their time of entry. Students who are identified as needing developmental course work must satisfactorily complete the appropriate English and mathematics courses as a part of their degree program.

Students transferring into the Paralegal Studies Program may transfer in up to thirty credits (one half of the credits required for an A.A.S. in Paralegal Studies) from other accredited institutions in accordance with the College's general transfer policies. Of those thirty credits, the Paralegal Studies Program at Community College of Philadelphia will accept up to fifteen credits of Paralegal Studies courses in transfer from an ABA approved institution with the following conditions:

- 1. PLS 111 and PLS 211 will not be accepted in transfer.
- 2. Upon request, students who seek transfer credit for Paralegal courses must provide evidence indicating whether the Paralegal courses to be transferred were taken in a distance, hybrid or traditional classroom format in order to ensure that the ABA policy regarding limits on distance courses is met by all graduates.

#### Program of Study and Graduation Requirements:

A minimum of 60 credits, a grade of "C" or better in all Paralegal Studies courses and a grade point average of 2.0 are required for graduation. Certain courses required for graduation may be substituted with the approval of the program coordinator and the dean of Liberal Studies. Students whose behavior is viewed as inconsistent with professional standards may be dropped from the curriculum pending the results of a departmental hearing. All students are required to sign an integrity statement in all Paralegal Studies courses agreeing to abide by standards of ethics and integrity in all assignments and undertakings.

All students seeking the A.A.S degree are advised that they must complete 10 credit hours of legal specialty classes in a traditional classroom format. Courses in traditional format include those meeting entirely in the classroom and classroom hours of hybrid sections. Legal specialty classes are those designed by PLS. Students are urged to meet with a paralegal advisor prior to registering for courses and are cautioned that a degree will not be awarded until this requirement is met.

Students in the Paralegal Studies Program are advised that it is important to have current knowledge in order to successfully compete in today's legal environment and are urged to complete all Paralegal Studies courses within five years of graduation. To ensure that graduates possess current knowledge and skills, the following requirements apply:

- Because of the need to possess current knowledge of technology, PLS 115 (Legal Technology) must be taken within five years of graduation.
- Any student who has taken Introduction to Paralegal Studies, (<u>PLS 101</u>), Civil Litigation, (<u>PLS 121</u>), Legal Research and Writing I, (<u>PLS 211</u>) more than five academic years before his / her proposed graduation date must demonstrate current knowledge. The student should meet with the Program Coordinator and develop a plan to demonstrate current knowledge and skills.

#### Accelerated Program/ Post Degree Program:

For students who have all or most of their general education requirements, the Paralegal Studies Program offers courses in evening, accelerated, weekend and online formats.

Internship:

A legal internship is offered to students enrolled in the program who have completed at least 36 credits toward the degree and who have attained a grade point average of at least 2.5 at that time. The internship is a 3-credit course requiring the student to perform without pay at least 120 hours of paralegal tasks in a legal employment setting approved by the Program Coordinator. Students who receive a grade of less than "C" are ineligible to retake this course. Those students who are ineligible for or who do not select the internship will be required to take another course from the concentration courses selections.

#### Law Library And Computers:

The College Library maintains a complete law library which exceeds American Bar Association guidelines. Students are also exposed in class to computer-assisted legal research sources, such as online databases, the Internet and legal materials available on CD-ROM and are introduced to discipline-specific legal software in all advanced courses.

### Paralegal Studies Course Sequence

Course Number and Name	Prerequisites and Corequisites	Credits	Gen Ed Req.
First Semester			
ENGL 101 – English Composition I		3	ENGL 101
<u>FNMT 118</u> - Intermediate Algebra or higher		3	Mathematics
PLS 101 –Introduction to Paralegal Studies		3	
CIS 103 – Applied Computer Technology		3	Tech Comp
Social Science Elective		3	Social Sciences
Second Semester			
ENGL 102 – The Research Paper	ENGL 101 with a grade of "C" or better	3	ENGL 102, Info Lit
PLS 111 – Legal Research & Writing I	PLS 101	3	Writing Intensive, Interpretive Studies
PLS 115 – Legal Technology	CIS 103 & PLS 101	3	
Natural Science Elective		3/4	Natural Science
PLS 121 – Civil Litigation I	PLS 101	3	
Third Semester			
Social Science Elective		3	
Humanities Elective <sup>1</sup>		3	Humanities
PLS 211 – Legal Research & Writing II	PLS 111, ENGL 102	3	
Concentration Course – Select one from the following <sup>2</sup> :		3	
PLS 215 – Electronic Discovery	PLS 121		
PLS 221 – Civil Litigation II	PLS 121		
PLS 231 – Family Law	PLS 111, PLS 121		
PLS 241 – Tort Law	PLS 121		

PLS 251 – Real Estate Law for Paralegals	PLS 111		
PLS 255 – Business Organizations for Paralegals	PLS 111, ENGL 101		
PLS 261 – Wills, Trusts & Estate Administration	PLS 111		
PLS 265 – Intellectual Property	PLS 111		
PLS 271 – Bankruptcy Law	PLS 121		
PLS 275 – Employment Law	PLS 111		
PLS 281 – Environmental Law	PLS 111		
PLS 285 – Immigration Law	PLS 121		
PLS 295 – Legal Internship	PLS 111, PLS 121, completion of 36 credits and GPA of 2.5 or better		
<u>IUS 241</u> – Criminal Law	JUS 101 or PLS 101		
Concentration Course – Select one from the list above		3	
Fourth Semester			
General Elective		3	
General Elective		3	
Concentration Elective – Select one from the list above		3	
Concentration Elective – Select one from the list above		3	
Concentration Elective – Select one from the list above		3	

### General Education Requirements

Minimum Credits Needed to Graduate: 60

All General Education requirements are met through required courses (as indicated above) except for the **American/Global Diversity** requirement. Therefore, in order to graduate, students in this program must choose one course that is designated **American/Global Diversity**. The same course may be used to fulfill both requirements. View the courses that fulfill all <u>degree requirements</u> and receive a more detailed explanation of the College's general education requirements to help in your selection.

#### For More Information Contact:

The Division of Liberal Studies, Room BR-21, 1700 Spring Garden Street, Philadelphia, PA 19130, Telephone (215) 751-8450; or the College Information Center (215) 751-8010.

<sup>&</sup>lt;sup>1</sup> See a Paralegal Studies academic advisor.

<sup>&</sup>lt;sup>2</sup> The curriculum has been designed so that any five of the following 13 courses will provide a coherent course of study in preparation for employment as a paralegal.

## Photographic Imaging

## Description:

The Photographic Imaging curriculum provides special emphasis in several professional areas. Classroom lecture and laboratory assignments lead to the development of technical and aesthetic skills and knowledge preparing students to qualify for jobs in photographic imaging and related occupations. Students completing the Photographic Imaging program will be prepared to work as photographers, studio assistants and imaging lab technicians. Extensive darkroom, studio and imaging lab work is required, using both silver-based and digital technologies in both black and white and color.

Location or studio assignments are required in all courses. Professional practices and production are emphasized, and students are encouraged to develop artistic appreciation and imagination in their work. Upper-level courses emphasize working with advanced techniques and portfolio preparation.

#### Policy Regarding Student Work:

The Department reserves the right to retain all student work submitted for grading for educational use or exhibition, or to select an example or samples for its permanent collection.

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Students are required to supply all film, paper, digital storage media, textbooks, presentation material and other supplies. Film cameras, digital cameras, and video production equipment may be provided by the department when available. Students in 200-level courses will be advised regarding the purchase of professional equipment. Approximate supply costs appear after each course description.

#### **Student Learning Outcomes:**

Upon completion of this program graduates will be able to:

- Create photographs, videos and/or digital slide shows to satisfy commercial clients' specifications.
- Demonstrate proficiency with camera operation, lighting, digital image processing, portfolio presentation, audio and video production.
- Evaluate their photographs in the context of historical and contemporary trends.
- Employ current business practices as applied to photographic imaging.

#### Program Entry Requirements:

This program is open to interested students, assuming space is available. However, new students are normally required to take the College's placement tests at their time of entry. Students who are identified as needing developmental course work must satisfactorily complete the appropriate English and mathematics courses as a part of their degree program.

#### Requirements For Graduation:

To qualify for the Associate in Applied Science (A.A.S.) degree in Photographic Imaging, a student must complete at least 63 credit hours and attain a grade point average of 2.0 ("C" average).

## Photographic Imaging Course Sequence

Course Number and Name	Prerequisites and Corequisites	Credits	Gen Ed Req.
First Semester			
PHOT 101 - Introduction to 35mm Film Camera and Darkroom Techniques or PHOT 105 - Introduction to Digital Photography		4	
PHOT 104 - Introduction to Video Production		3	
PHOT 111 - History of Photography or PHOT 113: Digital Technology, Art, and Culture		3	Humanities, Interpretive Studies, American/Global Diversity

ENGL 101 - English Composition I		3	ENGL 101
CIS 103 – Applied Computer Technology		3	Tech Comp
Second Semester			
PHOT 103 - Architectural and Landscape Photography	PHOT 101 or PHOT 105 with a C or better or permission of the department head	4	
PHOT 151 - Digital Imaging		3	
PHOT 152 - Introduction to Color Photography and Digital Printing	PHOT 151, which may be taken concurrently	3	
ENGL 102 – The Research Paper	ENGL 101 with a grade of "C" or better	3	ENGL 102, Info Lit
MATH 137 - Geometry for Design	FNMT 118 or higher placement	3	Mathematics
Third Semester			
PHOT 201 - Commercial Photography Basic Studio	PHOT 103	4	
PHOT 202 - Commercial Photography Portraiture	PHOT 152, which may be taken concurrently	4	
PHOT 217 - Digital Photojournalism	PHOT 104, PHOT 151; PHOT 152, which may be taken concurrently	4	
Science Elective		3/4	Natural Science
Fourth Semester			
PHOT 205 - Commercial Photography Advanced Studio	PHOT 152 and PHOT 201	4	
PHOT 211 - Corporate and Event Videography	PHOT 104	3	
PHOT 299 - Professional Practices in Photographic Imaging and Digital Video Production	PHOT 202 and PHOT 205 which may be taken concurrently	3	
HIST 103 - United States History: The 20 <sup>th</sup> Century or GEOG 103 - Introduction to Human Geography		3	Social Science, Writing Intensive
Minimum Credits Needed to Graduate: 60			

## General Education Requirements:

All general education requirements necessary for graduation are met through the courses in the program as indicated above. Students who wish to take courses that differ from the general education courses indicated above must consult with an advisor or counselor before registering. A more detailed explanation of the College's general education requirements appear at <a href="http://ccp.edu/college-catalog/degree-requirements">http://ccp.edu/college-catalog/degree-requirements</a>

### For More Information Contact:

The Division of Liberal Studies, Room BR-21, 1700 Spring Garden Street, Philadelphia, PA 19130, Telephone (215) 751-8450; or the College Information Center (215) 751-8010.

## Respiratory Care Technology

## Description:

This curriculum prepares students as advanced practitioners in respiratory care technology. Students learn diagnostic and therapeutic procedures applicable to pulmonary care. Therapeutic procedures include use and administration of oxygen and other medical gases, aerosolization of drugs for inhalation, set up and maintenance of mechanical ventilators (to assist or control ventilation), performance of chest physical therapy maneuvers and certification in cardiopulmonary resuscitation. Respiratory care personnel perform diagnostic procedures such as pulmonary function studies and arterial blood gas analysis, and are involved in rehabilitation of the patient with cardiopulmonary abnormalities. The Respiratory Care Technology program is a 22-consecutive-month associate's degree program that is fully accredited by the Commission on Accreditation for Respiratory Care. The program's graduates are eligible to sit for all credentialing examinations administered by the National Board for Respiratory Care, including the entry-level examination, the written registry and clinical simulation examinations and specialty exams in pulmonary function technology and neonatal/pediatric respiratory care. In addition, graduates are eligible for Pennsylvania state licensure, a requirement for practicing in the state, and licensure in all states. Students will also become student members of the American Association for Respiratory Care.

In addition to classroom and laboratory program components, clinical experience at selected area hospitals and health care facilities is required. The clinical phase requires the student to be in the hospital approximately eight hours per day, up to five days per week, starting as early as 7 a.m. As a prerequisite to the clinical phase of the program, students must provide evidence of personal medical insurance, certification in all CPR techniques and the results of complete physical examination. Laboratory test results will include a complete blood count, serology and urinalysis. A tuberculosis skin test is also required and, if indicated, a chest X-ray may be necessary. In addition, recent immunization documentation must be provided for measles, mumps, rubella, diphtheria, pertussis, tetanus, polio and Hepatitis B. A second complete physical exam is required prior to beginning the second year of the program. Health problems that might interfere with the ability to meet stated program objectives will be considered on an individual basis.

## **Student Learning Outcomes:**

Upon completion of this program graduates will be able to:

- Explain the structure, function, and pathophysiology of the pulmonary and cardiovascular systems
- · Assess and treat patients with acute and chronic respiratory diseases by using critical thinking skills to recommend appropriate diagnostic and therapeutic procedures
- · Provide age-specific treatment, management, and care of patients with deficiencies and abnormalities associated with respiration and ventilation
- · Recommend and perform procedures to maintain the airway, remove secretions, and assure ventilation and tissue oxygenation
- · Perform a full physical assessment and provide safe respiratory care by modifying therapy based on the patient's response to their current therapeutic regimen
- Perform cardiopulmonary therapeutic procedures and modalities appropriate to the level of training
- Initiate, conduct, or modify respiratory care techniques in an emergency
- · Promote disease prevention and wellness by educating patients on the proper use and care of respiratory equipment
- Demonstrate the knowledge and skills needed to successfully pass the National Board of Respiratory Care licensing exams for the certified respiratory therapist (CRT) and the registered respiratory therapist (RRT)

#### Program Entry Requirements:

To apply to the program, applicants must have a diploma from an accredited high school or a state equivalency diploma.

Applicants must also fulfill the following requirements:

- Required knowledge and competency in anatomy and physiology as demonstrated by having taken and passed a four-credit, college-level Anatomy and Physiology I course (such as BIOL 109) with a grade of C or better. The course must have been taken within the past 5 years.
- Placement in FNMT 118: Intermediate Algebra or higher placement
- Placement in ENGL 101: English Composition I
- GPA of 3.0 or higher
- Attainment of sufficient skills in reading, writing and mathematics as demonstrated by performance on the Kaplan Health Care Test.

Applicants will be admitted only upon favorable recommendation of the Respiratory Care Technology faculty. Admission is considered conditional until all health and background information is received and reviewed.

#### Readmission:

Students petitioning for a second admission to the program must have a 2.75 grade point average and will be readmitted only upon favorable recommendation of the entire faculty.

#### Clinical Experience Requirements:

Clinical experience in the program includes contact with children. Acceptance to the program is conditional pending receipt and evaluation of a criminal background check and child abuse clearance check. Completed checks must be received by the program director by August 15, prior to the fall semester of the first year of the program.

The following guidelines are used in making decisions about an applicant's criminal and child abuse background:

#### Child Abuse Clearance:

Any record results in denial of admission into the Respiratory Care program.

#### Criminal Background Checks:

- Any felony conviction within the past 10 years results in denial of admission to the Respiratory Care program.
- Any felony conviction more than 10 years old will be evaluated based on the nature of the offense, length of time since the offense and any explanatory letters/materials submitted by the applicant or student.
- Any misdemeanor will be evaluated based on the nature of the offense, length of time since the offense and explanatory letter/materials submitted by the applicant or student. (Any punishment over one year indicates a felony according to federal sentencing guidelines.)

Note: The State has the final decision when granting a license.

#### Reconsideration

An applicant who believes that an error of fact has been made in terms of the information provided to the decision-making committee can request reconsideration by the committee. This request must be made in writing within 10 days from the date of the letter notifying the applicant of the decision. The reconsideration should address what the applicant considers to be errors of fact.

Following reconsideration by the decision-making committee, the applicant can appeal the committee's decision to the Vice President for Academic and Student Success whose decision is final.

#### **Progression:**

To remain in the Respiratory Care program students must maintain a grade of "C" or better in all Respiratory Care and required pre- and co-requisite courses. During all clinical laboratory experiences, the student must maintain client safety and receive a passing grade for any clinical component of a course. Failure to do so will result in either a failure in the course or administrative or student-initiated withdrawal.

Students whose attitudes and behaviors appear inconsistent with professional standards may not be admitted or may be dropped from the program at any time, pending the results of a departmental hearing.

#### Program of Study and Graduation Requirements:

To qualify for the Associate in Applied Science (A.A.S.) degree as a respiratory care practitioner, a student must complete 69 credit hours as prescribed and attain a grade point average of 2.0 ("C" average).

#### For Reference:

The Pennsylvania State Board of Medicine and the Pennsylvania State Board of Osteopathic Medicine reserves the right to deny certification to any candidate who has been convicted of a felonious act. Conviction includes a judgment, an admission of guilt or a plea of nolo contendere, probation without verdict, or incomplete ARD. Further, the board shall not issue a license to any applicant who has been:

1. convicted of a felonious act prohibited by the act of April 14, 1972 (P.L. 233, No. 64) known as The Controlled Substance, Drug, Device and Cosmetic Act; or

2. convicted of a felony relating to a controlled substance in a court of law of the United States or any other state, territory or country unless:

- at least 10 years have elapsed from the date of the conviction;
- the applicant satisfactorily demonstrates to the board significant progress in personal rehabilitation since the conviction such that licensure should not create a substantial risk of further violations; and
- the applicant otherwise satisfies the qualifications contained in this act.

Involvement in any incident which resulted in disciplinary action against a student at Community College of Philadelphia or any post-secondary institution is considered in the admissions process.

The Respiratory Care Technology program reserves the right to deny admission to any applicant who has a documented history of violating College rules and regulations or who has been previously suspended or expelled from the College or any other post-secondary educational institution.

## Respiratory Care Technology Course Sequence

Course Number and Name	Prerequisites and Corequisites	Credits	Gen Ed Req.
First Semester			
First Semester			
RESP 100 - Introduction to Respiratory Care Technologies	RESP 101, must be taken concurrently	4	
RESP 101 - Fundamentals of Respiratory Care Techniques I	RESP 100, must be taken concurrently	4	

ENGL 101 – English Composition I		3	ENGL 101
BIOL 110 - Anatomy and Physiology II	BIOL 109	4	Natural Science
FNMT 118 - Intermediate Algebra		3	Mathematics
Second Semester			
RESP 102 - Fundamentals of Respiratory Care Techniques II	RESP 100, RESP 101	4	
CIS 103 – Applied Computer Technology		3	Tech Comp
ENGL 102 – The Research Paper	ENGL 101 with a grade of "C" or better	3	ENGL 102, Info Lit
Third Semester			
RESP 103 - Fundamentals of Respiratory Care Techniques III	RESP 102	3	
CHEM 110 - Introductory Chemistry or CHEM 101 - General Chemistry		4	
Fourth Semester			
RESP 104 - Clinical Practicum I	RESP 103	3	
Fifth Semester			
RESP 210 - Cardiopulmonary Pathophysiology I	RESP 104 RESP 220 must be taken concurrently	4	
RESP 220 - Advanced Respiratory Care Procedures I	RESP 104 RESP 210 must be taken concurrently	5	
BIOL 241 – Principles of Microbiology	BIOL 106 or BIOL 108, BIOL 109 or BIOL 123 with a "C" or better	4	
Sixth Semester			
ENGL 115 - Public Speaking*	ENGL 101, which may be taken concurrently	3	Humanities
RESP 211 - Cardiopulmonary Pathophysiology II	RESP 210 with a grade of C or better RESP 211, must be taken concurrently	4	
SOC 101 - Introduction to Sociology*		3	Social Sciences American/Global Diversity Interpretive Studies Writing Intensive
RESP 221 - Advanced Respiratory Care Procedures II	RESP 220, with a grade of "C" or better RESP 211, must be taken concurrently	6	
Seventh Semester			

RESP 211 and RESP 221 with a grade of "C" or better

3

Minimum Credits Needed to Graduate: 70 (minimum credits do not include BIOL 109)

## General Education Requirements:

All general education requirements necessary for graduation are met through the courses in the program as indicated above. Students who wish to take courses that differ from the general education courses indicated above must consult with an advisor or counselor before registering. A more detailed explanation of the College's general education requirements appear at <a href="degree requirements">degree requirements</a>.

### For More Information Contact:

The Division of Math, Science and Health Careers, Room W2-7, 1700 Spring Garden Street, Philadelphia, PA 19130, Telephone (215) 751-8430; or the College Information Center (215) 751-8010.

## Sound Recording and Music Technology

## Description:

The Sound Recording and Music Technology curriculum is designed for students interested in pursuing a career in the music industry. Jobs in this industry include those of music producers, sound recording engineers, music production staff, artist agents, concert managers and many others for which both musical and technological knowledge are essential. This curriculum gives students a thorough academic and applied preparation for entry-level positions in the music industry. Students are trained in the use of industry standard equipment and software to provide them with the necessary skills for employment.

#### Student Learning Outcomes:

Upon completion of this program, graduates will:

- Demonstrate basic musicianship and knowledge of the theoretical, historical and technological backgrounds needed to understand how music is created, understood and performed.
- Demonstrate the ability to use industry-standard music technology hardware and software for pre- and postproduction of music and multimedia.
- Apply fundamentals of the music business to market a musical product—including live concerts and publications (print music/recordings/videos).

#### Program Entry Requirements:

This program is open to interested students. New students are normally required to take the College's placement test at their time of entry. Students who are identified as needing developmental course work must satisfactorily complete the appropriate English and mathematics courses as a part of their degree program.

Students with a foundational music theory background should contact the Music Department Chair to complete the MUS 100: Music Reading course requirement as a credit by exam. MUS 100 covers key signatures, major scales, intervals, music language and rhythmic recognition.

#### Program of Study and Graduation Requirements:

To qualify for the A.A.S. degree, a student must complete 67 credits, including a music internship, and attain a minimum grade point average of 2.0 ("C" average) and a minimum of "C" in all Music courses.

## Sound Recording and Music Technology Course Sequence

Course Number and Name	Prerequisites and Corequisites	Credits	Gen Ed Req.
Survey Services			
Summer Session			
MUS 100 - Music Reading		3	
<u>MUS 101</u> - Piano I		1	
First Semester			
MUS 102 - Piano II	MUS 101	1	
MUS 196 - Ensemble I or MUS 197 Ensemble II or MUS 296 Ensemble III or MUS 297 Ensemble IV		1	
MUS 115 - Introduction to Music Technology		3	
FNMT 118 - Intermediate Algebra or higher		3	Mathematics
CIS 103 – Applied Computer Technology		3	Tech Comp
ENGL 101 – English Composition I			

		3	ENGL 101
MUS 111 - Aural Theory I	MUS 100	3	
Second Semester			
MUS 103 - Introduction to Music		3	Humanities
MUS 114 - Harmony I	MUS 100	3	
MUS 215 - Advanced Music Technology and Multimedia	MUS 115	3	
ENGL 102 – The Research Paper	ENGL 101 with a grade of "C" or better	3	ENGL 102, Info
MUS 197 - Ensemble II or MUS 196 - Ensemble I or MUS 296 - Ensemble III or MUS 297 Ensemble IV		1	
MUS 113 - Aural Theory II	MUS 111	3	
Third Semester  ACCT 101 – Financial Accounting		4	
MUS 214 - Harmony II	MUS 114	3	
MUS 220 - ProTools - Digital Audio Editing	MUS 215	3	
MUS 180 - Music Business		3	
MUS 211 - Aural Theory III	MUS 113	3	
Fourth Semester			
PHYS 125 – Musical Acoustics		3	Natural Science
MUS 260 - Sound Reinforcement and Recording Session	MUS 215	3	
MUS 107 - Music Composition	MUS 100, MUS 115	3	
Social Science Elective		3	Social Science
MUS 290 - Music Internship	MUS 180, MUS 260 which may be taken concurrently	2	
Minimum Credits Needed to Graduate: 67	·		

## General Education Requirements:

All General Education requirements are met through required courses (as indicated above) except for the **Writing Intensive** requirement, the **Interpretive Studies** requirement and the **American/Global Diversity** requirement. Therefore, in order to graduate, students in this program must choose one course that is designated **Writing Intensive**, one course that is designated **Interpretive Studies** and one course that is designated **American/Global Diversity**. The same course may be used to fulfill all three requirements. View the courses that fulfill all degree requirements and receive a more detailed explanation of the College's general education requirements to help in your selection.

#### For More Information Contact:

The Division of Liberal Studies, Room BR-21, 1700 Spring Garden Street, Philadelphia, PA 19130, Telephone (215) 751-8450; or the College Information Center (215) 751-8010.

## Creative Writing Academic Certificate

## Description:

The certificate program in Creative Writing is a 33-credit program designed to help students grow as writers and readers. Guided by our accomplished faculty, students will take a sequence of literature and creative writing courses, have opportunities to interact with visiting writers, and attend readings, workshops, festivals and other special events. The program culminates in a capstone course, Portfolio Development, designed to help students prepare to apply to four-year writing programs and develop manuscripts for publication. Students earning the certificate in Creative Writing may elect to continue their education at the College by earning the A.A. degree in Liberal Arts by completing 28 additional credits.

#### Student Learning Outcomes:

Upon completion of this program graduates will be able to:

- Examine literature as a model for their original work.
- Understand and use techniques necessary for the mastery of the craft of creative writing.
- Improve their creative writing skills through feedback and continued revision.
- Gain insight into local and national resources for writers and the publication process.
- Complete a portfolio of original work for publication or submission to other creative writing programs.

#### Program Entry Requirements:

This program is open to all interested students. Students identified as needing developmental course work must satisfactorily complete the appropriate English and mathematics courses as part of their certificate program.

#### Program of Study and Graduation Requirements:

Receipt of the academic certificate is based on completion of a minimum of 33 credits of required courses, with a minimum cumulative grade point average of 2.0 ("C" average).

## Creative Writing Academic Certificate Course Sequence

Course Number and Name	Prerequisites and Corequisites	Credits
Summer Session		
ENGL 101 - English Composition I		3
First Semester		
FNMT 118 - Intermediate Algebra or higher		3
CIS 103 - Applied Computer Technology		3
Social Science Elective		3
ENGL 205 - Creative Writing	ENGL 101	3
Second Semester		
Literature course	ENGL 101 must be completed prior to taking any literature courses except for ENGL 190 where ENGL 101 and ENGL 190 may be taken concurrently.	3

ENGL 101 with a grade of "C" or better	3
ENGL 101	3
ENGL 205 ENGL 205 ENGL 205 ENGL 102 or ENGL 205	3
ENGL 205 ENGL 205 ENGL 205 ENGL 102 or ENGL 205	3
Prerequisite: Enrollment in the certificate program in Creative Writing. Two of the following: ENGL 280, 281, 282, 283 one of which may be taken concurrently	3
	ENGL 205 ENGL 205 ENGL 205 ENGL 205 ENGL 102 or ENGL 205  ENGL 205 ENGL 205 ENGL 205 ENGL 205 ENGL 205 ENGL 205 ENGL 205 ENGL 205 ENGL 205 ENGL 205 ENGL 205 ENGL 205 ENGL 205 ENGL 205 ENGL 205 Or ENGL 205

#### For More Information Contact:

The Division of Liberal Studies, Room BR-21, 1700 Spring Garden Street, Philadelphia, PA 19130, Telephone (215) 751-8450; or the College Information Center (215) 751-8010.

## Gainful Employment Information

Gainful employment information is intended to provide students with better information about the effectiveness of college programs in preparing students for careers. Information provided includes estimated program costs and time needed to complete the program, financing options and related careers.

## **Energy Conservation Academic Certificate**

## Description:

This program prepares students for a variety of careers in the energy conservation industry and related fields, such as energy auditors, product specifiers, quality control supervisors, materials testers, and site inspectors. Individuals interested in developing small independent energy conservation contracting businesses will also find this program useful toward achieving that goal. Courses within this program utilize the latest industry-standard scientific methods, instruments and software for determining the energy consumption profile for buildings.

#### **Student Learning Outcomes:**

Upon completion of this program graduates will be able to:

- Conduct performance audits of energy consumption in existing buildings.
- Plan energy renovation projects.
- Provide leadership in creating and maintaining a safe working environment.
- · Organize and run an independent construction business.

#### Program Entry Requirements:

Students are normally required to take the College's placement tests at the time of entry. Students identified as needing developmental course work must satisfactorily complete the appropriate English and mathematics courses in addition to the requirements of their program.

## Program of Study and Graduation Requirements:

To qualify for the Academic Certificate in Energy Conservation, a student must complete a minimum of 30 credits as prescribed and attain a minimum grade point average of 2.0 ("C" average).

## **Energy Conservation Academic Certificate**

Course Number and Name	Prerequisites and Corequisites	Credits
First Semester		
ADC 101 - Introduction to Design & Construction		3
ADC 103 - CAD Basics		3
ADC 136 - Construction Safety and Building Codes		3
ENGL 101 - English Composition I		3
MATH 137 - Geometry for Design (or higher MATH)		3
Second Semester		
ADC 112 - Construction Materials & Detailing: Principles	ADC 103 or 109	3
ADC 146 Construction Supervision & Business Practices	ADC 101	3
ADC 161 - Energy Auditing, Mediation and Monitoring	ADC 101	3
ADC 286 - Building Rehabilitation and Energy Retrofit	ADC 101	3
ENGL 102 - The Research Paper	ENGL 101 with a grade of "C" or better	

## Minimum Credits Needed to Graduate: 30

#### For More Information Contact:

The Division of Liberal Studies, Room BR-21, 1700 Spring Garden Street, Philadelphia, PA 19130, Telephone (215) 751-8450; or the College Information Center (215) 751-8010.

## Gainful Employment Information

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### Human Services Academic Certificate

## Description:

The Human Services certificate program of study is primarily for persons in Human Service agencies who wish to expand their career options and for students expressing an interest in the field. Career options include social and human service assistants, community and social service specialists, personal and home care aides, counselor aides and mental health technicians. Students will be provided with courses that will help in their development of core academic skills in reading, writing, mathematics and computer literacy. They will also be provided with core helping skills by taking key courses in Behavioral Health and Human Services, in areas such as group dynamics and case management. Students will also do one practicum, which may be completed at their place of employment. Along with the core helping skills, students will be introduced to job-specific helping courses in fields of practice such as addictions, disabilities, gerontology or youth work. Students will also select either Child Abuse and Family Violence or Crisis Intervention to complete the certificate.

#### Student Learning Outcomes:

Upon completion of this program graduates will be able to:

- Demonstrate a basic set of helping skills (warmth, empathy, reflective listening) needed for entry-level employment in human service agencies.
- Work as a culturally sensitive ethical practitioner.
- Demonstrate a stronger sense of self resulting from personal growth experiences.
- Use critical thinking and writing skills needed for working with clients.

## Program Entry Requirements:

The program is open to interested students. New students are required to take College placement tests. Students identified as needing developmental course work must satisfactorily complete the appropriate English courses prior to program entry. Students requiring developmental mathematics courses must complete them in addition to the requirements of their certificate program.

## Program Of Study And Graduation Requirements:

Graduation from this program is based on successful completion of the required 33 credits of course work with a grade of "C" or better in the core BHHS courses and a minimum cumulative grade point average of 2.0.

#### Human Services Academic Certificate Course Sequence

Course Number and Name	Prerequisites and Corequisites	Credits
First Semester		
BHHS 101 - Introduction to Behavioral Health and Human Services		3
BHHS 111 - Introduction to Helping Skills	BHHS 101, which may be taken concurrently	3
BHHS 105 - Introduction to Group Dynamics		3
ENGL 101 - English Composition I		3
YW 101 - Foundations of Youth Work or  BHHS 121 - Foundations of Addiction Studies or  BHHS 171 - Introduction to Social Gerontology or  BHHS 161 - Introduction to Disability Studies		3
CIS 103 - Applied Computer Technology*		3
Second Semester		

BHHS 194 - Case Management Practice	BHHS 111 with a "C" grade or better	3
BHHS 195 - Practicum in Behavioral Health/Human Services I	BHHS 111 with a "C" grade or better	3
ENGL 102 - The Research Paper	ENGL 101 with a grade of "C" or better	3
BHHS 151 - Family Violence, Abuse and Trauma or BHHS 241 - Crisis Intervention		3
FNMT 118 - Intermediate Algebra (or higher)		3

Minimum Credits Needed to Graduate: 33

### For More Information Contact:

The Division of Liberal Studies, Room BR-21, 1700 Spring Garden Street, Philadelphia, PA 19130, Telephone (215) 751-8450; or the College Information Center (215) 751-8010.

## Gainful Employment Information

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<sup>\*</sup>Students with computer experience may apply for credit by exam through the Computer Technologies Department.

## Recovery and Transformation Academic Certificate

## Description:

The Behavioral Health/Human Services (BHHS) curriculum offers a certification process to further develop appropriate and effective professional education and training for jobs as addiction counselors, rehabilitation specialists and case management specialists in the fields of chemical dependency and other addictions such as nicotine and gambling. Students must meet both regular College admission requirements and those of the Behavioral Health/Human Services curriculum. The certificate also may be taken in conjunction with the degree program in BHHS. Individuals working in the addictions field require diverse backgrounds, training and experience. Students come to the program degreed, non-degreed and from various academic disciplines, bringing with them varied levels of understanding and expertise in the assessment and treatment of mental health and substance abuse.

## Student Learning Outcomes:

Upon completion of this program graduates will be able to:

- Demonstrate a basic set of helping skills (warmth, empathy, reflective listening) needed for entry employment in the addictions field.
- Work as a culturally sensitive ethical practitioner.
- Demonstrate a stronger sense of self resulting from personal growth experiences.
- Use critical thinking and writing skills needed for working with clients.

#### **Program Entry Requirements:**

The program is open to interested students. New students are required to take College placement tests. Students identified as needing developmental course work must satisfactorily complete the appropriate English courses prior to program entry. Students requiring developmental mathematics courses must complete them in addition to the requirements of their certificate program. Admission to the program also requires that the student attend an orientation session before a decision of acceptance is made. Permission of the BHHS curriculum coordinator is required for admission.

#### Program of Study and Graduation Requirements:

To qualify for the academic certificate in Recovery and Transformation, a student must complete 33 credit hours as prescribed and attain a grade point average of 2.0 ("C" average).

#### Certified Addiction Counselor (Cac) Status:

The Pennsylvania Certification Board requires 300 clock-hours of training with appropriate paid experience and a bachelor's degree in a human service field to achieve the credential of Certified Addictions Counselor (CAC). However, persons can become eligible for addiction counselor positions while working on their CAC credential. Pennsylvania Bulletin, v. 26, n. 5 for February 3, 1996 states the following: A person with an associate's degree in human services from an accredited college with a major in chemical dependency and two years of experience is eligible for the position of addictions counselor. Without experience, the community college graduate, with an associate's degree and a major in chemical dependency, is prepared for the position of assistant addiction counselor. Community College of Philadelphia will help all qualified students apply for AAC I (Associate Addictions Counselor) and AAC II status. Those students with a bachelor's degree will be advised of the procedure for applying for the CAC as well as the necessary educational credits needed to comply with the certification board. It should be noted that three college credit hours is equivalent to 45 clock-hours of training.

## Recovery and Transformation Academic Certificate

Course Number and Name	Prerequisites and Corequisites	Credits
First Semester		
BHHS 121 - Foundations of Addiction Studies		3
BHHS 101 - Introduction to Behavioral Health and Human Services		3
BHHS 111 - Introduction to Helping Skills	BHHS 101, must be taken concurrently or prior; acceptance into the BHHS curriculum or related certificate program	3
ENGL 101 - English Composition I		3
CIS 103 - Applied Computer Technology*		3

FNMT 118 - Intermediate Algebra (or higher)		3
Second Semester		
BHHS 105 - Introduction to Group Dynamics		3
BHHS 131 - Faith and Spirituality in Human Services or BHHS 194 - Case Management Practice	BHHS 111	3
BHHS 195 - Practicum in Behavioral Health/Human Services I	BHHS 111 with "C" grade or better	3
ENGL 102 - The Research Paper	ENGL 101 with a grade of "C" or better	3
BHHS 222 - Assessment and Service Planning in Recovery	BHHS 121	3
Minimum Credits Needed to Graduate: 33		

<sup>\*</sup>Students with computer experience may apply for credit by exam through the Computer Technologies Department.

## For More Information Contact:

The Division of Liberal Studies, Room BR-21, 1700 Spring Garden Street, Philadelphia, PA 19130, Telephone (215) 751-8450; or the College Information Center (215) 751-8010.

## Gainful Employment Information

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## Accounting Paraprofessional Proficiency Certificate

### Description

The Accounting Paraprofessional Proficiency Certificate is a 16 credit-hour program designed for persons interested in pursuing careers as accounting paraprofessionals in business, government, and non-profit organizations. Students earning the Accounting Paraprofessional Proficiency Certificate may elect to continue their education at the College by earning the A.A.S. degree in Accounting.

#### Student Learning Outcomes:

Upon successful completion of the courses in the Accounting Paraprofessional Proficiency Certificate the student will be able to:

- Explain the contents of the financial statements prepared according to Generally Accepted Accounting Principles (GAAP).
- Analyze and record transactions, and complete the accounting cycle using computerized general ledger software.
- Demonstrate the knowledge and skills necessary to obtain an entry-level position in as an accounting clerk or tax preparer.
- Effectively communicate with users of financial information orally and in writing.

#### Program Entrance Requirements:

This certificate is open to interested students. New students are normally required to take the College's placement test at their time of entry. Students who are identified as needing developmental course work must satisfactorily complete the appropriate English and mathematics courses as part of the certificate.

## Accounting Paraprofessional Proficiency Certificate Course Sequence

Course Number	Course Title	Prerequisites	Credits
ACCT 101	Financial Accounting		4 credits
ENGL 101	English Composition I		3 credits
ACCT 102	Managerial Accounting I	ACCT 101 with a grade of C or better	3 credits
ACCT 103	Microcomputers in Accounting	ACCT 101 with a grade of C or better	3 credits
ACCT 208 ACCT 215	Tax Accounting; or  Nonprofit Accounting	For ACCT 215: ACCT 102 or ACCT 101 and department approval	3 credits

#### Total Credits: 16

#### **Successful Completion:**

Successful completion of the program requires a "C" grade or better in each of the courses listed above. In order to receive a "C" grade or better and thus demonstrate competency, students must complete exams, writing assignments and participate in class activities.

#### For More Information Contact:

The Division of Business and Technology, Room B2-22, 1700 Spring Garden Street, Philadelphia, PA 19130, Telephone (215) 751-8785; or the College Information Center (215) 751-8010.

## Gainful Employment Information

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## **Acting Proficiency Certificate**

### Description:

This proficiency certificate will provide the opportunity for students to develop basic acting and performance skills, preparing them for auditions and background work in the theater and film industries. Additional areas for employment include working as camp activities leaders and in marketing and promotions. When completed, the courses can be applied to the Associate Degree in Theater.

#### **Student Learning Outcomes:**

Upon successful completion of the Acting Proficiency Certificate, students will be able to:

- Identify and utilize the foundations and principles of acting;
- Demonstrate their ability to create and develop characters;
- Recognize the collaborative nature of the craft of acting and collaborate effectively with others.

#### Program Entrance Requirements:

This proficiency certificate is open to interested students. New students are normally required to take the College's placement test at their time of entry. Students who are identified as needing developmental course work must satisfactorily complete the appropriate English courses as part of the Certificate.

## Acting Proficiency Certificate Course Sequence

Course Number	Course Title	Prerequisites	Credits
ENGL 131	Acting I		3 credits
ENGL 132	Acting II	ENGL 131	3 credits
ENGL 142	Rehearsal and Performance	ENGL 132	4 credits
Select one of the following: Engl 120 Engl 135	Voice and Articulation Movement and Dance for Actors		3 credits
		Te	otal Credits: 13

#### **Successful Completion:**

Successful completion of the program requires a C or better grade in each of the courses listed above. In order to achieve a C or better and thus demonstrate competency, students must perform scripted material, complete writing assignments, and participate in class activities.

#### For More Information Contact:

The Division of Liberal Studies, Room BR-21, 1700 Spring Garden Street, Philadelphia, PA, 19130. Telephone (215) 751-8450; or call the College Information Center (215) 751-8010

## Architectural Visualization Proficiency Certificate

## Description:

This certificate prepares students interested in the field of computer-assisted design technology, current workers desiring more training, and those with a background in related technical fields for careers as architectural visualization (AV) specialists. Entry-level AV specialists assist design professionals in the architecture, engineering and construction fields in translating ideas, sketches and technical information into complex three-dimensional digital models that often employ animation. Students taking this certificate will build both the technical competencies and the strong collaboration skills needed to work in today's professional AV environments.

#### **Student Learning Outcomes:**

Upon successful completion of the Acting Proficiency Certificate, students will be able to:

- Communicate effectively in written, oral, and graphic modes and work as part of a team
- · Develop digital models utilizing computer drafting and rendering in both two and three dimensions
- · Develop solutions for design and construction documentation by utilizing graphic techniques, including rendering and animation
- Interpret architectural and construction drawings and documents

#### **Program Entrance Requirements:**

New students are required to take College placement tests at the time of entry. Students identified as needing developmental course work must satisfactorily complete the appropriate English and mathematics courses as part of their degree program.

## Architectural Visualization Proficiency Certificate Course Sequence

Course Number	Course Title	Prerequisites	Credits
ADC 103	CAD Basics		3
ADC 160	Presentation Techniques	ADC 103, which may be taken concurrently	3
ADC 163	Digital Documentation in Architecture and Construction	ADC 103	3
ADC 260	Advanced Presentation Techniques	ADC 160 and ADC 209 which may be taken be taken concurrently, or ADC 163 which may be taken concurrently	3
ADC 263	Digital Animation and Rendering	ADC 103 or ART 150	3
ADC 273	Advanced CAD Applications	ADC 163	3
		Tot	tal Credits: 18

## **Successful Completion:**

Successful completion of the program requires a "C" grade or better in each of the courses listed above.

#### **For More Information Contact:**

The Division of Liberal Studies, Room BR-21, 1700 Spring Garden Street, Philadelphia, PA 19130, Telephone (215) 496-6164; or the College Information Center (215) 751-8010.

## Automotive Service I Proficiency Certificate

### Description:

The Automotive Service I Proficiency Certificate is designed for individuals who are interested in entering the field of automotive technology with a basic set of core skills. Students who complete the Proficiency Certificate will be prepared to obtain employment in a small shop, dealership, or franchise-based repair facility. When completed, the courses may be applied towards the Automotive Technology Associate in Applied Science Degree.

#### Student Learning Outcomes:

Upon successful completion of the Automotive Service I proficiency certificate, students will be able to:

- · Perform remedial mechanical engine repairs
- Diagnose and repair an automotive braking system, including anti-lock braking concerns
- · Repair an automotive steering and suspension system and perform four-wheel alignment using alignment equipment
- Diagnose an electrical fault using a wiring schematic and repair the electrical system

#### **Entrance Requirements:**

This certificate is open to interested students. New students are normally required to take the College's placement test at their time of entry. Students who are identified as needing developmental course work must satisfactorily complete the appropriate English and mathematics courses as part of the certificate.

## Automotive Service I Proficiency Certificate Course Sequence

Course Number	Course Title	Prerequisites	Credits
<u>AT 100</u>	Introduction to Automotive Technology		3
AT 111	Automotive Suspension and Steering Systems	AT 100, which may be taken concurrently	4
AT 121	Principles of Automotive Electricity and Electronics	AT 100, which may be taken concurrently	3
AT 150	Automotive Braking Systems	AT 100, which may be taken concurrently	2
AT 181	Automotive Engine Mechanical Repair	AT 100, which may be taken concurrently	4
AT 250	Advanced Braking Systems and Controls	AT 121, AT 150	2
			Total Credits: 18

#### Successful Completion:

Successful completion of the program requires a "C" grade or better in each of the courses listed above. In order to receive a "C" grade or better and thus demonstrate competency, students must complete assignments, exams and participate in class activities.

### **Industry Certification Preparation:**

- ASE A1 Automotive Engine Repair
- ASE A6 Automotive Electrical Systems
- ASE A4 Steering and Suspension Systems
- ASE A5 Automotive Braking Systems
- PA Safety Inspector License
- PA Emission Inspector License

#### Intended Audience:

The Automotive Service Proficiency Certificate is designed for individuals who are:

- Working in the industry as technicians and who are seeking to upgrade their skills and improve their employment opportunities.
- Seeking to acquire the technician skills to begin careers in the automotive industry in entry-level positions.

#### For More Information Contact:

The Division of Business and Technology, Room B2-22, 1700 Spring Garden Street, Philadelphia, PA 19130, Telephone (215) 751-8785; or the College Information Center (215) 751-8010.

## Gainful Employment Information

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## Automotive Service II Proficiency Certificate

## Description:

The Automotive Service II Proficiency Certificate is designed for individuals who are interested in building upon their previously gained Automotive Service Proficiency Certificate. Students who complete the Automotive Service II Proficiency Certificate will be prepared to obtain advanced technical employment in a small shop, dealership, or chain-based repair facility. When completed, the courses may be applied towards the Automotive Technology Associate in Applied Science Degree.

#### Student Learning Outcomes:

Upon successful completion of the Automotive Service II Proficiency Certificate, students will be able to:

- Diagnose advanced electronic circuits used in many automotive systems.
- Repair engine performance related faults such as fuel injection and ignition system failures.
- Analyze, disassemble, diagnose and reassemble automatic transmissions and transaxles.
- Analyze, disassemble, diagnose and reassemble manual transmissions and transaxles.

#### **Entrance Requirements:**

Students must have completed the Automotive Service I Proficiency Certificate in order to enroll in the Automotive Service II Proficiency Certificate.

## Automotive Service II Proficiency Certificate Course Sequence

Course Number	Course Title	Prerequisites	Credits
First Semester			
FMNT 118	Intermediate Algebra		3
AT 221	Advanced Automotive Electrical Systems	AT 121 and FMNT 118 (may be taken concurrently	4
AT 261	Engine Performance and Diagnosis	AT 221 (may be taken concurrently) ar FMNT 118 (may be taken concurrently	4
Second Semester			
AT 131	Automotive Manual Transmissions and Drivelines	AT 100 (may be taken concurrently)	4
AT 241	Automatic Transmissions and Transaxles	AT 121 and AT 131	4
			Total Credits:

#### Successful Completion:

Successful completion of the program requires a "C" grade or better in each of the courses listed above.

#### For More Information Contact:

The Division of Business and Technology, Room B2-22, 1700 Spring Garden Street, Philadelphia, PA 19130, Telephone (215) 751-8785; or the College Information Center (215) 751-8010.

## Gainful Employment Information

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# Biomedical Equipment Technology I Proficiency Certificate

## Description:

Biomedical Equipment Technicians (BMETs) are professionals that work in health care settings to test, maintain and repair medical equipment, such as ECG and blood pressure monitors, defibrillators, ventilators, infusion pumps, among others. BMETs typically work for hospitals, medical device manufacturers, or third party companies that provide service to hospitals. To be successful in this field, BMETs need to have an understanding of the operation and functions of a range of medical devices and their clinical applications and the ability to test medical device operation to a set of specifications.

Students who complete the proficiency certificate for Biomedical Equipment Technology I will be able to function as entry level BMETs. Students may continue their education by earning an additional Biomedical Technology Proficiency Certificate, which will

increase qualifications and enhance the potential for advancement. All credits earned towards the BMET Proficiency Certificates can be applied to earning an Associate of Applied Science degree in Applied Science and Engineering Technology.

### Student Learning Outcomes:

Upon completion of the Biomedical Technician Proficiency Certificate the student will be able to:

- Explain the role of biomedical equipment technicians in health care settings
- · Solve basic circuit problems involving DC and AC circuits
- Explain the structure and function of major organ systems in the human body, such as the cardio-vascular, nervous, endocrine, and renal systems
- Describe the theory of operation, functioning and clinical application of medical devices such as heart monitors, blood pressure monitors, pulse oximeters, infusion pumps, suction devices, and centrifuges and carry out operational checks on such devices

#### **Entrance Requirements:**

This certificate is open to interested students. New students are normally required to take the College's placement test at their time of entry. Students who are identified as needing developmental course work must satisfactorily complete the appropriate English and mathematics course(s) as part of the certificate.

## Biomedical Technician I Proficiency Certificate Course Sequence

Course Number	Course Title	Prerequisites	Credits
<u>BMET 101</u>	Biomedical Equipment Technology I	BIOL 108 or BIOL 110, which may be taken concurrently	4
BIOL 108*	Essentials of Human Anatomy and Physiology	High school Biology or permission of the Department Chair	4
<u>FNMT 118</u> or MATH 118	Intermediate Algebra (or higher)	FNMT 017 or placement at the FNMT 118 or MATH 118 level	3
ELEC 120	Electric Circuits	FNMT 118 or MATH 118, which may be taken concurrently	4
BMET 102	Biomedical Equipment Technology II	BMET 101 with a "C" or better and ELEC 120, which may be taken concurrently	4
<u>CIS 105</u>	Windows Professional Operating System		4
BMET 103	Biomedical Equipment Technology Internship	BMET 102 with a "C" or better and FNMT 118 or higher	1

**Total Credits: 24** 

<sup>\*</sup> Completion of BIOL 109/110 with a "C" also fulfills this requirement. Students who have completed BIOL 109 may take BIOL 110 as a pre or co requisite for BMET 101.

## Successful Completion:

Successful completion of the program requires a "C" grade or better in each of the courses listed above. In order to receive a "C" grade or better and thus demonstrate competency, students must complete assignments, exams and participate in class activities.

Pending departmental review, students may be terminated from the Program for behavior that is inconsistent with the professional standards of the field.

#### For More Information Contact:

The Division of Math, Science and Health Careers, Room W2-7, 1700 Spring Garden Street, Philadelphia, PA 19130, Telephone (215) 751-8430

# Gainful Employment Information

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# Biomedical Equipment Technology II Proficiency Certificate

## Description:

Biomedical Equipment Technicians (BMETs) are professionals that work in health care settings to test, maintain and repair medical equipment, such as ECG and blood pressure monitors, defibrillators, ventilators and infusion pumps, among others. BMETs typically work for hospitals, medical device manufacturers or third party companies that provide service to hospitals. To be successful in this field, BMETs need to have an understanding of the operation and functions of a range of medical devices and their clinical applications, and the ability to test medical device operation to a set of specifications.

Students who complete the proficiency certificate for Biomedical Equipment Technology I will be able to function as entry-level BMETs. Students may continue their education by earning the Biomedical Technology II Proficiency Certificate, which will enable them to troubleshoot more complex equipment problems and address equipment problems that are network/wireless related. The increased qualifications will enhance the potential for advancement. All credits earned toward the BMET proficiency certificates can be applied to earning an Associate of Applied Science degree in Applied Science and Engineering Technology.

#### **Student Learning Outcomes:**

Upon completion of the Biomedical Technician Proficiency II Certificate, the student will be able to:

- · Apply knowledge of medical devices, electronics, computer networks, and anatomy and physiology to resolving medical equipment repair problems.
- Demonstrate professional behavior in the workplace, such as teamwork, communication, etc.
- · Work in accordance with applicable safety procedures to ensure their own safety, as well as that of patients and other employees.
- Follow applicable department, hospital and legal guidelines in relation to record keeping, patient privacy, etc.

#### **Entrance Requirements:**

This certificate is primarily intended for students who have completed the BMET I proficiency certificate, and completion of the BMET I proficiency certificate provides students with the course prerequisites needed for many of the courses in the level II certificate. The program may also be appropriate for individuals currently working in the profession who wish to increase their knowledge and skills. New students are normally required to take the College's placement test at their time of entry. Students who are identified as needing developmental coursework must satisfactorily complete the appropriate English and mathematics courses as part of the certificate.

#### Biomedical Technician II Proficiency Certificate Course Sequence

Course Number	Course Title	Prerequisites	Credits
BMET 201	Medical Devices	BMET 103 with a grade of "C" or better	4
ELEC 124	Semiconductor Devices	ELEC 120 with a grade of "C" or better	4
<u>CIS 150</u>	Network Technology		4
BMET 202	Medical Devices in a Networked Environment	BMET 201, ELEC 130, CIS 105 and CIS 150 (with a "C" or better in each)	4
ELEC 130	Digital Electronics	<u>FNMT 118</u> (or higher math)	4
BMET 203	Biomedical Internship II	BMET 202 (with a "C" or better)	3
		To	otal Credits: 23

#### Successful Completion:

Successful completion of the program requires a "C" grade or better in each of the courses listed above.

Pending departmental review, students may be terminated from the program for behavior that is inconsistent with the professional standards of the field.

#### For More Information Contact:

The Division of Math, Science and Health Careers, Room W2-7, 1700 Spring Garden Street, Philadelphia, PA 19130, Telephone (215) 751-8430.

# Gainful Employment Information

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# Clinical Assistant Proficiency Certificate

## Description:

Clinical assistants are professionals that perform clinical procedures that include obtaining patient medical histories, taking vital signs, administering medication, performing electrocardiography, vision screening, assisting the physician with general and specialty examinations, and performing point-of-care laboratory testing. Clinical assistants serve as a patient advocate and health coach to patients. Professional settings that offer career opportunities to the clinical assistant include outpatient clinics, physicians' offices and other health care facilities.

Students who complete the proficiency certificate for the Clinical Assistant will be able to use these courses to continue their education and obtain an associate's degree in Health Care Studies.

#### Student Learning Outcomes:

Upon successful completion of the Clinical Assistant Proficiency Certificate, students will be able to:

- Use the correct terminology for diseases, symptoms, diagnostic studies, treatments and surgical procedures.
- Demonstrate competency in the performance of clinical skills expected for an entry-level clinical assistant.
- Explain and perform basic lab tests to include collecting blood specimens and point of care testing

#### Admission Requirements:

Admission into the Clinical Assistant Proficiency Certificate is selective, competitive, and requires potential students to fulfill all admission requirements of the College. Applications submitted from October 1st until March 1st will receive priority in the Allied Health admissions review process.

Students must meet the following minimum requirements before applying to the Clinical Assistant Proficiency Certificate:

- · High school diploma or GED
- Demonstration of readiness for ENGL 101 and FNMT 118 as determined by the College's placement tests or by successfully completing developmental coursework
- Applicants with previous college experience must have a minimum grade point average of 2.0

Students new to the College must begin the process of applying to the Clinical Assistant Proficiency Certificate by first <u>applying</u> to the College. Transcript evaluation and completion of a placement test (or test waiver) is required.

Applicants who complete and meet the aforementioned requirements will be eligible to continue in the admissions process and will be contacted, in writing, regarding attendance at a program information session with the AH Department Head (or designee).

#### Conditions for Acceptance:

All applicants are notified in writing regarding the admissions decision. All offers of acceptance are contingent upon successful completion of the following:

- 1. Acknowledgement of Core Performance Standards for Health Care Career Programs and physical demand analysis.
- 2. Completion of Criminal Background Check
  - Conviction of serious and/or violent crimes results in denial of admission into the Clinical Assistant Proficiency Certificate Program.
- 3. Completion of Child Abuse Clearance
  - Any record results in denial of admission into the Clinical Assistant Proficiency Certificate Program.
- 4. Completion of Drug Screening
  - A positive screening results in denial of admission into the Clinical Assistant Proficiency Certificate.
- $5. \ Additional \ conditions \ for \ Program \ commencement \ include:$ 
  - Documentation of a complete physical examination, including required laboratory tests. All health information is kept confidential. Students will have direct contact with patients, and have the responsibility to maintain very high standards of health practice. Health problems, which would interfere with the applicant's ability to meet program objectives, will be dealt with on an individual basis.
  - Documentation of up to date immunizations prior to clinical assignment. Additional immunizations (e.g., influenza) may be necessary.
  - Documentation of current health insurance coverage, which must be maintained while in the clinical experience course.
  - Purchase of student uniform.
  - Adult, child, and infant CPR certification for Healthcare Providers (due prior to the commencement of MLT 102).

The following guidelines are used in making decisions about an applicant's criminal and child abuse background:

#### Child Abuse Clearance:

• Any record results in denial of admission into the Clinical Assistant program.

#### Criminal Background Check:

- Any felony conviction within the past 10 years results in denial of admission to the Clinical Assistant program.
- Any felony conviction more than 10 years old will be evaluated based on the nature of the offense, length of time since the offense, and any explanatory letters/materials submitted by the applicant or student.
- Any misdemeanor will be evaluated based on the nature of the offense, length of time since the offense, and explanatory letter/materials submitted by the applicant or students. (Any punishment over one year indicates a felony according to federal sentencing guidelines.)

#### Reconsideration

An applicant who believes that the committee has made an error of fact in terms of the information provided to the decision making committee can request reconsideration. This request must be made in writing within ten days from the date of the letter notifying the applicant of the decision. The reconsideration should address what the applicant considers to be errors of fact.

Following reconsideration by the decision-making committee, the applicant can appeal the committee's decision to the Vice President for Academic and Student Success, whose decision is final. Any official change or the initiation of any governmental proceeding affecting the information revealed by the required criminal or child abuse background check must be reported immediately to the AH Department Head.

#### Drug Screening:

The Clinical Assistant program requires participation in clinical education. Some clinical affiliates of the Clinical Assistant program require evidence of a negative drug-screening test in order for a student to participate in the clinical experience at their facility. Therefore, any student with a positive drug-screening test cannot be admitted into the OPH program.

Involvement in any incident, which resulted in a disciplinary action against a student at Community College of Philadelphia, or any post-secondary institution is considered in the admissions process. The Clinical Assistant program reserves the right to deny admission to any applicant who has a history of violating College rules and regulations or who has been previously suspended or expelled from the College or any other post-secondary educational institution.

Additional expenses for students in the proficiency certificate include travel to clinical facilities, purchase of a uniform, laboratory coat, required textbooks, a physical examination and inoculations. To remain in the program, students must earn a grade of "C" or better in each course.

The Department Head, in consultation with the program faculty members, may drop a student in the Clinical Assistant Proficiency Certificate whose skills, attitude, and behavior are viewed as inconsistent with professional standards from the program.

Students dropped from the program because of academic deficiencies will be considered for a second admission to the program after remediation of the deficiencies and recommendation of the Clinical Assistant faculty. Students may be readmitted to the program only once. Part-time students must complete the program within five years of their initial enrollment.

### Clinical Assistant Proficiency Certificate Course Sequence

Course Number	Course Title	Prerequisites	Credits
AH 103	Medical Terminology		3 credits
<u>AH 116</u>	Interpersonal and Professional Skills in Health Care		3 credits
<u>BIOL 108</u> *	Essentials of Human Anatomy and Physiology	FNMT 118 or MATH 118 (or higher) placement	4 credits
<u>DIET 106</u> or <u>DIET 111</u>	Nutrition for a Healthy Lifestyle / Introduction to Nutrition	For DIET 111: ENGL 101 and BIOL 109*	3 credits
AH 113	Exam Room Procedures I	AH 103 with a "C" or better	3 credits
AH 115	Exam Room Procedures II	Corequisites: AH 103, AH 113, and BIOL 108 (or BIOL 109 and BIOL 110)*, which may be taken concurrently, all with a "C" or better.	3 credits
MLT 102	Phlebotomy		4 credits

\*BIOL 108, a one semester course in Anatomy and Physiology is the minimum requirement for this Certificate. However, students who have completed the two semester anatomy and physiology sequence (BIOL 109-BIOL 110) may substitute BIOL 109-110 in place of BIOL 108, provided that they have completed both BIOL 109 and BIOL 110.

## Successful Completion:

Successful completion of the program requires a "C"; grade or better in each of the courses listed above.

## For More Information Contact:

The Division of Math, Science and Health Careers, Room W2-7, 1700 Spring Garden Street, Philadelphia, PA 19130, Telephone (215) 751-8430 or email health@ccp.edu.

## Gainful Employment Information

Gainful employment information is intended to provide students with better information about the effectiveness of college programs in preparing students for careers. Information provided includes estimated program costs and time needed to complete the program, financing options and related careers.

# Computer Programming and Software Development Proficiency Certificate

## Description:

The courses in the Computer Programming and Software Development Proficiency Certificate will prepare students for collecting and analyzing information to determine the limitations and possibilities of application programs and to project the timing and performance of software designs. When completed, the courses may be applied to the Computer Science Associate in Science Degree.

#### Student Learning Outcomes:

Upon successful completion of the Computer Programming and Software Development Proficiency Certificate students will be able to:

- Design, code, test, and debug object-oriented applications software.
- Demonstrate proficiency using the java computer programming language.
- Analyze the temporal and spatial efficiency of existing computer software and of computer software designs.
- Work with users and business managers to develop clear, concise and correct specifications for computer software, and to test completed software to see if it meets given specifications.
- Design and implement efficient data structures for applications software.

#### **Entrance Requirements:**

Students should be ENGL 101 and FNMT 118 ready. Students who wish to prepare for employment developing software related to database operations may also wish to complete CIS 205 - Database Management Systems.

## Computer Programming and Software Development Proficiency Certificate Course Sequence

Course Number	Course Title	Prerequisites	Credits
CSCI 111	Computer Science I with Java	FNMT 118 or MATH 118 or higher; or MATH 161 placement	4
<u>CSCI 112</u>	Computer Science II with Java	CSCI 111 with a grade of "C" or better	4
<u>CSCI 211</u>	Data Structures and Algorithms	CSCI 112 with a 'C' or better	4
MATH 163	Discrete Mathematics	MATH 161 completed or MATH 162 or higher placement	4
		T	otal Credits: 16

#### Successful Completion:

Successful completion of the program requires a "C"; grade or higher in each of the courses listed. In order to receive a "C"; grade or better and thus demonstrate competency, students must complete assignments, exams and participate in class activities.

#### For More Information Contact:

The Division of Business and Technology, Room B2-22, 1700 Spring Garden Street, Philadelphia, PA 19130, Telephone (215) 751-8785; or the College Information Center (215) 751-8010.

## Gainful Employment Information

Federal Student Aid regulations require each institution to disclose to prospective students the following information about its 'Gainful Employment Programs.'

Program Description	Software Development

Award level	Proficiency Certificate
Program length in credits	16 credits
Program length in semesters	2 semesters
Expected tuition for completing the program within normal time	\$2,4481
Expected fees for completing the program within normal time	\$1,056 <sup>2</sup>
Typical costs for books and supplies	\$1,600 <sup>3</sup>
Department of Labor's Standard Occupational Classification (SOC) code	15-132 15-1133 15-1134
Link to occupational profiles on the U.S. Department of Labor's O*NET website	http://www.onetcodeconnector.org/

<sup>&</sup>lt;sup>1</sup> Tuition is based on in-county rate of \$153/credit.

<sup>&</sup>lt;sup>2</sup> Fees include general College fee of \$4/credit and technology fee of \$28/credit. Course fees may be applicable on some classes. Please check the College catalog for details. <sup>3</sup> Books and supplies estimated at \$100/credit; actual cost will vary by student and by program of study.

# Culinary Arts I Proficiency Certificate

## Description:

The growing hospitality industry in the city and the region is in need of qualified personnel. This set of courses is designed for the individual seeking to acquire culinary skills for possible employment within the food service industry at an entry-level position as a cook. This proficiency certificate includes courses in the hospitality industry, elementary and quantity food preparation, baking, menu planning, food production and food safety, and sanitation. When completed, the courses may be applied to the Culinary Arts Associate in Applied Science degree.

#### **Student Learning Outcomes:**

Upon successful completion of the Culinary Arts Proficiency Certificate, students will be able to:

- Demonstrate their knowledge of basic culinary arts and basic food service management principles and related skills.
- Apply their acquired skills by preparing hot and cold appetizers, entrees, salads, and desserts in various quantities according to recipes.
- · Apply their acquired skills by preparing basic quick breads, rolls, breakfast items, basic desserts, icings, cakes, cookies and pies.

#### Program Entrance Requirements:

New students are required to take College placement tests at the time of entry. Students identified as needing developmental work must satisfactorily complete the appropriate English and mathematics courses as part of their degree program.

## Culinary Arts Proficiency Certificate Course Sequence

Course Number	Course Title	Prerequisites	Credits
<u>CAHM 110</u>	Intro to Hospitality Industry		3 credits
<u>CAHM 161</u>	Foodservice Safety & Sanitation		2 credits
<u>CAHM 170</u>	Elementary Food Prep Techniques & Skills		4 credits
<u>CAHM 151</u>	Elementary Baking & Pastry		4 credits
<u>CAHM 171</u>	Quantity Food Preparation	<u>CAHM 170</u>	4 credits
		Т	otal Credits: 17

### Successful Completion:

Requires a "C" grade or better in each of the courses listed above.

#### For More Information Contact:

The Division of Business and Technology, Room C1-9, 1700 Spring Garden Street, Philadelphia, PA 19130, Telephone (215) 496-6164; or the College Information Center (215) 751-8010.

# Culinary Arts II Proficiency Certificate

## Description:

The growing hospitality industry in the city and the region is in need of qualified culinarians. This set of five intermediate and advanced courses is designed for the individual seeking to acquire advanced culinary skills for possible employment within the food service industry as a front line manager. When completed, the courses earn a Proficiency Certificate and may be applied as stackable credits to the Culinary Arts Associate in Applied Science Degree program.

#### Student Learning Outcomes:

Upon successful completion of Culinary Arts II, students will be able to:

- Describe and exercise a wide variety of advanced, regional and international food preparation and presentation skills.
- Define and execute preparation and plate presentation procedures for à la carte and banquet style events.
- Demonstrate commitment to the professional culinary principles taught in the CAHM curriculum and emulate culinary best practices.
- Describe significant developments in food history, compare/contrast food consumption and preparation practices across a variety of ethnicities and cultures, and demonstrate
  appreciation of culinary opportunities drawn from this world-wide diversity in the production and consumption of food.

#### **Program Entrance Requirements:**

Students need to have completed Culinary Arts I Proficiency Certificate as a pre-requisite for entering the Culinary Arts II Proficiency Certificate program.

## Culinary Arts II Proficiency Certificate Course Sequence

Course Number	Course Title	Prerequisites	Credits
First Semester			
<u>CAHM 210</u>	Intro to Hospitality Industry	CAHM 170	4 credits
HIST 142			3 credits
Second Semester		-	·
<u>CAHM 211</u>	International Cuisine	CAHM 170	4 credits
<u>CAHM 198</u>	Work Experience	CAHM 110, CAHM 170	3 credits
CAHM 270	Advanced Food Production, Nutrition and Finishing	CAHM 171	4 credits
			Total Credits: 21

### Successful Completion:

Requires a "C" grade or better in each of the courses listed above.

#### For More Information Contact:

The Division of Business and Technology, Room C1-9, 1700 Spring Garden Street, Philadelphia, PA 19130, Telephone (215) 496-6164; or the College Information Center (215) 751-8010.

# Cybersecurity Proficiency Certificates I and II

#### Description:

The Cybersecurity Proficiency Certificate consists of courses that help to prepare students for these industry certification exams:

- CompTIA Security+
- GIAC Security Essentials (GSEC)
- Certified Information Privacy Professional (CIPP)
- Systems Security Certified Practitioner (SSCP)
- Certified Ethical Hacker (CEH)
- Security Certified Network Professional (SCNP)
- Global Information Assurance Certification (GIAC)

Some organizations accept these industry certifications as a stand-alone qualification for employment, especially for entry level jobs.

Students will develop the technical, analytical and problem-solving skills needed to protect both government and organizations' information technology assets. When completed, these courses may be applied to the Cybersecurity Associate in Applied Science Degree.

#### **Student Learning Outcomes:**

Upon successful completion of the Cybersecurity certificate, students will be able to:

- Detect, analyze, identify and resolve security vulnerabilities, threats & breaches using appropriate tools.
- Install, configure and monitor information systems security devices/software, as well as apply software patches and service packs
- · Identify the implications of information systems configuration weaknesses
- · Identify the implications of information systems policy/procedure weaknesses as well as human errors
- Determine the necessity for cyber investigation and retrieve/seize cyber evidence from computer systems without contamination
- Utilize basic security features to configure and harden operating systems

## **Entrance Requirements:**

New students are normally required to take the College's placement test at their time of entry. Students who are identified as needing developmental course work must satisfactorily complete the appropriate English and mathematics courses as part of the certificate. Students need a basic understanding of computer hardware and software concepts. Students without this preparation are encouraged to take CIS 103 – Computer Technology and Concepts.

## Cybersecurity Proficiency Certificates Course Sequence

## Cybersecurity Proficiency Certificate I

Course Number & Name	Prerequisites	Credits
CIS 150 - Network Technology		4
CIS 155 - Principles of Operating Systems		3
CIS 152 – Introduction to Cybersecurity	CIS 150	3
CIS 252 - Windows Server Configuration	CIS 150	4
CIS 259 - Computing & Network Security	CIS 150	4
	Т	otal Credits: 18

### Cybersecurity Proficiency Certificate II

Course Number & Name Prerequisites Credits

CIS 114 - Java Script		4
CIS 204 Fundamentals of Linux and Unix	CIS 105 or CIS 155	3
CIS 261 - Cyber Investigation	CIS 155	4
CIS 274 - Ethical Hacking & Penetration Testing	CIS 152 and CIS 259	4
	Т	otal Credits: 15

## Successful Completion:

Successful completion of the certificate requires a  ${}^{\text{"}}\mathbf{C}{}^{\text{"}}$  grade or better in each of the courses listed above.

## For More Information Contact:

The Computer Technologies Dept., Room C3-1, 1700 Spring Garden Street, Philadelphia, PA 19130, Telephone (215) 496-6134; or the College Information Center (215) 751-8010.

# Digital Imaging Proficiency Certificate

#### **Description:**

This certificate is designed to help students develop skills in basic photography, video production, digital imaging and printing. The photographic imaging industry has undergone a shift towards digital applications in both the professional and amateur markets. The traditional photography custom lab has been transformed into a "service bureau" specializing in postproduction digital imaging services. Professional photographers increasingly shoot in digital form, and the ability to manage digital files is now a prerequisite for the photographer's assistant. Public relations and media firms which previously used film have transitioned to digital video with editing done on the computer. Employment opportunities exist for photographer and video production assistants with experience in digital imaging techniques.

Students who complete this proficiency certificate can continue seamlessly in the A.A.S. program in Photographic Imaging.

#### **Student Learning Outcomes:**

Upon completion of this Digital Imaging proficiency certificate students will be able to:

- Demonstrate proficiency with the tools and process of video production, including preproduction, video acquisition, editing and final output.
- Demonstrate proficiency with Adobe Photoshop tools including creation of composites and image restorations.
- · Demonstrate proficiency with digital camera operation, digital workflow and digital printing techniques while applying color management theory.
- Demonstrate the ability to apply accepted aesthetic criteria to given assignments.

#### **Entrance Requirements:**

This certificate is open to interested students New students are normally required to take the College's placement test at their time of entry. Students who are identified as needing developmental course work must satisfactory complete the appropriate English and mathematics course as part of the certificate.

#### Digital Imaging Proficiency Certificate Course Sequence

Course Number	Course Title	Prerequisites	Credits
<u>PHOT 101</u>	Introduction to 35mm Film Camera and Darkroom Techniques		
or			4
PHOT 105	Introduction to Digital Photography		
<u>PHOT 104</u>	Introduction to Video Production		3
PHOT 151	Digital Imaging		3
PHOT 152	Introduction to Color Photography and Digital Printing	PHOT 151 which may be taken concurrently	3
			Total Credits: 13

#### **Successful Completion:**

Successful completion of the program requires a "C" grade or better in each of the courses listed above. In order to receive a "C" grade or better and thus demonstrate competency, students must complete assignments, exams and participate in class activities.

#### **For More Information Contact:**

The Division of Liberal Studies, Room BR-21, 1700 Spring Garden Street, Philadelphia, PA 19130, Telephone (215) 751-8450; or call the College Information Center (215) 751-8010.

# Digital Video Production Proficiency Certificate

## Description:

This certificate is designed to help students develop skills in basic digital video production and post-production. The fundamental skills students will acquire with this certificate will prepare them to work on digital video production crews and in post-production houses that specialize in digital video. Many corporate enterprises and mass media agencies have also begun to employ people with these skills to satisfy their video production needs in-house. Many employment opportunities exist for video production assistants with experience in digital camera operation, digital sound recording, lighting techniques, and digital video editing.

Students who complete this proficiency certificate may continue seamlessly in the Associate in Applied Science degree program in Digital Video Production.

#### Student Learning Outcomes:

Upon successful completion of the Digital Video Production Proficiency Certificate, students will be able to:

- Demonstrate proficiency in the operation of digital video cameras, lighting equipment for location and studio production, audio for digital video production, and digital video editing hardware and software.
- · Evaluate technical and aesthetic qualities of digital video productions in the context of historical and contemporary trends
- · Demonstrate the ability to perform multiple roles in a professional digital video production crew and professional digital video post-production

#### Program Entrance Requirements:

This certificate is open to interested students. New students are normally required to take the College's placement test at their time of entry. Students who are identified as needing developmental course work must satisfactorily complete the appropriate English and mathematics courses as part of the certificate.

## Digital Video Production Proficiency Certificate Course Sequence

Course Number	Course Title	Prerequisites	Credits
<u>PHOT 104</u>	Introduction to Video Production		3 credits
DVP 120	Camera and Lighting Techniques for Digital Video Production	PHOT 104 with grade of B or better	4 credits
DVP 130	Audio Techniques for Digital Video Production	PHOT 104 with grade of B or better	4 credits
DVP 140	Video Editing Techniques for Digital Video Production	PHOT 104 with grade of B or better	4 credits
<u>DVP 150</u>	Producing and Directing Techniques for Digital Video Production  PHOT 104 with grade		4 credits
		Total	al Credits: 19

### Successful Completion:

Successful completion of the program requires a B grade or better in PHOT 104 and a C grade or better in the DVP courses listed above. In order to achieve a C or better and thus demonstrate competency, students must complete exams, writing assignments, and participate in class activities.

#### For More Information Contact:

For More Information Contact: The Division of Liberal Studies, Room BR-21, 1700 Spring Garden Street, Philadelphia, Pa. 19130. Telephone (215) 751-8450; or call the College Information Center (215) 751-8010.

# Early Childhood Education Proficiency Certificate

## Description:

The Early Childhood Education Proficiency Certificate is primarily for persons in the early care and education field (birth through age five) who wish to expand their career options as well as meet the Pennsylvania Early Learning Keys to Quality Career Lattice Level III. Career options include child care practitioners, assistant group supervisors, and teacher aide para-professionals with young children birth through age five. Students who have completed coursework in ED 135: Family and Community Relationships, ED 151: Heath, Safety, and Nutrition of Young Children, and ED 230: Integrating the Arts into Early Childhood Education will have met the competencies in the areas of child development, family, community communication skills, the health, safety, and nutrition of the young child for growth and development, and developmentally appropriate program planning with a focus on the integrated arts for children birth through age five.

#### Student Learning Outcomes:

Upon successful completion of the Early Childhood Education proficiency certificate, students will be able to:

- Identify key theories of child development
- · Responsibly apply systemic observation, documentation, and other assessment techniques, in partnership with families and other professionals
- · Design, implement, and assess differentiated curricula and experiences to positively
- · Use critical thinking skills to support the health, safety, and nutrition of young children and their growth and development

#### **Program Entrance Requirements:**

This certificate is open to interested students. New students are normally required to take the College's placement test at their time of entry. Students who are identified as needing developmental course work must satisfactorily complete the appropriate English prior to program entry. Students requiring developmental mathematics courses must complete them in addition to the requirements of their certificate program. Students earning an A.A. degree in the College's Education—Early Childhood (Birth-4th) program must take ED 105: Foundations of Early Childhood Education before enrolling in ED 230.

# Early Childhood Education Proficiency Certificate Course Sequence

Course Number	Course Title	Prerequisites	Credits
First Semester			
ED 135	Family and Community Partnerships		3 credits
ED 151	Health, Safety and Nutrition of Young Children		3 credits
ED 230*	Integrating the Arts into Early Childhood Education	ED 105	3 credits
			Total Credits: 9

#### Successful Completion:

Successful completion of the program requires a "C" grade or better in each of the courses listed above.

#### For More Information Contact:

The Division of Liberal Studies, Room BR-21, 1700 Spring Garden Street, Philadelphia, PA 19130, Telephone (215) 751-8450 or the College Information Center (215) 751-8010.

# Electronic Discovery Proficiency Certificate

## Description:

This certificate is designed to enhance the skills of paralegals in the field of electronic discovery.

#### **Student Learning Outcomes:**

Upon successful completion of the Electronic Discovery Proficiency Certificate, students will be able to:

- · Describe the civil litigation process and the law and procedural rules underpinning discovery
- Describe how e-discovery relates to civil litigation
- Articulate the different stages of the Electronic Discovery Reference Model (EDRM)
- Demonstrate an understanding of e-discovery database software programs that includes the organization of data and the evaluation of electronically stored information for relevance and privilege
- · Conduct the acquisition and processing of digital media

# **Entrance Requirements:**

This certificate is open to interested students. New students are normally required to take the College's placement test at their time of entry. Students who are identified as needing developmental course work must satisfactorily complete the appropriate English and mathematics courses as part of the certificate.

# Electronic Discovery Proficiency Certificate Course Sequence:

Course Number	Course Title	Prerequisites	Credits
PLS 101	Introduction to Paralegal Studies		3
PLS 121	Civil Litigation I	PLS 101	3
CIS 105	Computer Systems Maintenance		4
DF 101	Digital Forensics I	CIS 105 and JUS 101 or PLS 101	3
PLS 215	Electronic Discovery	PLS 121	3
		T	otal Credits: 16

#### Successful Completion:

Successful completion of the certificate requires a grade of "C" or better in each of the courses listed. PLS 215 and DF 101 must be taken within five years of beginning the certificate. Students whose behavior is viewed as inconsistent with professional standards may be dropped from the certificate program pending the results of a departmental hearing. All students are required to sign an integrity statement agreeing to abide by standards of ethics and integrity in all assignments and undertakings

#### For More Information Contact:

The Division of Liberal Studies, Room BR-21, 1700 Spring Garden Street, Philadelphia, PA 19130. Telephone (215) 751-8450; or call the College Information Center (215) 751-8010.

# Entrepreneurship Proficiency Certificate

## Description:

The Entrepreneurship Proficiency Certificate is a 12 credit-hour program for students who are interested in becoming entrepreneurs. Students will learn the basics of how to launch an entrepreneurial venture including planning, funding, accounting, and marketing. When completed, the courses may be applied to the Liberal Arts-General Option degree.

#### **Student Learning Outcomes:**

Upon successful completion of the Entrepreneurship Proficiency Certificate, the students will be able to:

- Describe the characteristics of a successful entrepreneur and explain the key aspects of entrepreneurship.
- Describe the essentials of a marketing plan for an entrepreneurial venture.
- · Demonstrate knowledge of key financial and accounting concepts and be able to apply those concepts to an entrepreneurial venture.
- Develop a business plan including a concept statement, feasibility study, and business model.

#### Entrance Requirements:

This certificate is open to interested students. New students are normally required to take the College's placement test at their time of entry. Students who are identified as needing developmental course work must satisfactorily complete the appropriate English and mathematics course as part of the certificate.

## Entrepreneurship Proficiency Certificate Course Sequence:

Course Number	Course Title	Prerequisites	Credits
ENTR 110	Fundamentals of Entrepreneurship		3
ENTR 120	Entrepreneurial Marketing		3
ENTR 130	Entrepreneurial Financial Intelligence		3
ENTR 140	Business Plan Development for Entrepreneurs	<u>ENTR 110</u>	3
		Т	otal Credits: 12

#### Intended Audience:

The Entrepreneurship Proficiency Certificate is designed to attract students who are currently entrepreneurs or who aspire to be entrepreneurs.

#### Successful Completion:

Successful completion of the program requires a "C" grade or better in each of the courses listed above. In order to receive a "C" grade or better and thus demonstrate competency, students must complete assignments and exams as well as participate in class activities

#### For More Information Contact:

The Division of Business and Technology, Room B2-22, 1700 Spring Garden Street, Philadelphia, PA 19130, Telephone (215) 751-8785; or the College Information Center (215) 751-8010.

# Geographic Information Systems Proficiency Certificate

## Description:

GIS is a computerized database management system for capture, storage, retrieval analysis and display of geographic information. The new and fast growing field enables organizations to be more efficient in planning and distribution of resources. GIS has a wide range of applications for corporate, nonprofit and government settings.

The GIS proficiency certificate is designed for individuals who have an interest in a career in GIS, enhancing their skills, learning to use GIS applications in their current profession, or to earn an additional credential. Students will develop basic proficiency with industry standard software.

#### Student Learning Outcomes:

Upon completion of this GIS proficiency certificate students will be able to:

- Demonstrate the skills necessary to perform entry-level GIS tasks in an employment setting.
- Demonstrate basic proficiency in industry standard software.
- Understand the general nature of spatial analysis and application used in GIS software applications.
- Develop a network of professional resources in GIS.

#### Entrance Requirements:

This certificate is open to interested students New students are normally required to take the College's placement test at their time of entry. Students who are identified as needing developmental course work must satisfactory complete the appropriate English and mathematics course as part of the certificate.

#### Courses:

Students will be guided to select three of the courses listed below based on skill level, prior experience and interest.

## Geographic Information Systems Proficiency Certificate Course Sequence

Course Number	Course Title	Prerequisites and Corequisites	Credits
Select 3 of the fo	llowing courses		9
GIS 101	Introduction to Geographic Information Systems		3
GIS 102	Intermediate Geographic Information Systems	GIS 101	3
GIS 104	Principles of Computer Cartography and Visualization	GIS 101	3
GIS 201	Advance Geospatial Applications	GIS 102	3
GIS 203	Remote Sensing and Global Positioning Technologies	GIS 101	3
GIS 206	Introduction to Web GIS	GIS 201	3
		Total	to Graduate: 9

# Successful Complettion:

Successful completion of the program requires a "C" or better in each of the courses listed above. In order to achieve a "C" or better and thus demonstrate competency students must complete exams, writing assignments, and participation in class activities.

#### For More Information Contact:

The Division of Liberal Studies, Room BR-21, 1700 Spring Garden Street, Philadelphia, PA 19130, Telephone (215) 751-8450; or the College Information Center (215) 751-8010.

# Gainful Employment Information

Gainful employment information is intended to provide students with better information about the effectiveness of college programs in preparing students for careers. Information provided includes estimated program costs and time needed to complete the program, financing options and related careers.

# Medical Insurance Billing Proficiency Certificate

## Description:

Medical Insurance Billing Specialists are professionals that prepare, submit and/or process insurance claims for doctor's offices, hospitals, extended care facilities, diagnostic centers, insurance companies and other health-related facilities. Professional settings that offer career opportunities to the Medical Insurance Billing Specialist include outpatient clinics, physicians' offices, medical laboratories, insurance companies, skilled nursing facilities, home health care agencies and independent billing agencies.

Students who complete the proficiency certificate for Medical Insurance Billing will be able to use these courses to continue their education and obtain an associate's degree in Health Care Studies.

#### **Student Learning Outcomes:**

Upon successful completion of the Medical Insurance Billing proficiency certificate, students will be able to:

- Use the correct terminology for diseases, symptoms, diagnostic studies and treatments.
- Explain the purpose of CPT and ICD codes for reimbursement.
- Assign CPT and ICD codes according to official guidelines.
- Describe the importance of effective revenue cycle management in a provider's fiscal stability.
- Define fraud and abuse issues in health care.

#### **Entrance Requirements:**

This certificate is open to interested students. New students are normally required to take the College's placement test at their time of entry. Students who are identified as needing developmental course work must satisfactory complete the appropriate English and mathematics course as part of the certificate.

# Medical Insurance Billing Proficiency Certificate Course Sequence

Course Number	Course Title	Prerequisites	Credits
<u>AH 103</u>	Medical Terminology		3
ENGL 101	English Composition I		3
BIOL 108*	Essentials of Human Anatomy and Physiology		4
AH 120	Reimbursement Methodologies in Health Care		3
AH 190	Human Disease and Treatment	AH 103 and BIOL 108 or BIOL 109	3
<u>AH 201</u>	Basic ICD and CPT coding	AH 103, AH 120, AH 190, BIOL 108 or BIOL 109/110 with a grade of "C" or better in each course.	4
		T	otal Credits: 20

<sup>\*</sup>BIOL 108, a one-semester course in Anatomy and Physiology, is the minimum requirement for this Certificate. However, students who have completed the two-semester Anatomy and Physiology sequence (BIOL 109-BIOL 110) may substitute BIOL 109-110 in place of BIOL 108, provided that they have completed both BIOL 109 and BIOL 110.

#### Successful Completion:

Successful completion of the program requires a "C" grade or better in each of the courses listed above. In order to receive a "C" grade or better and thus demonstrate competency, students must complete assignments, exams and participate in class activities.

### For More Information Contact:

The Division of Math, Science and Health Careers, Room W2-7, 1700 Spring Garden Street, Philadelphia, PA 19130, Telephone (215) 751-8430 or e-mail health@ccp.edu

# Gainful Employment Information

Gainful employment information is intended to provide students with better information about the effectiveness of college programs in preparing students for careers. Information provided includes estimated program costs and time needed to complete the program, financing options and related careers.

# Network and Systems Administration Proficiency Certificate

## Description:

The courses in the Network and Systems Administration Proficiency Certificate are closely linked to professional certification from Comp TIA and Microsoft, and engage students in both the development of technical skills needed to support and maintain computer networks, and the application of analytical skills needed to analyze and manage computer networks. When completed, the courses may be applied to the Computer Information Systems Information Technology Associate in Applied Science Degree.

#### Student Learning Outcomes:

After completing the courses in the Network and Systems Administration Proficiency Certificate, students will be able to:

- Analyze, diagnose and repair common problems with the Windows operating system on a personal computer and on a network sever.
- Determine the hardware and software needs for a common local area network (LAN) of personal computers, including the time needed to setup the network and the costs involved.
- Set up and maintain a common local area network (LAN) of personal computers with the proper equipment.
- Install and manage user accounts on a personal computer system and on a local area network (LAN) of personal computers.
- Install and support peripheral equipment, such as printers, on a local area network (LAN) of personal computers.

#### **Entrance Requirements:**

Students who possess personal computer application skills may test out of <u>CIS 103 - Applied Computer Technology</u>. Students who wish to seek employment as systems analysts may also complete <u>CIS 270 - Systems Analysis and Design</u>.

## Network and Systems Administration Proficiency Certificate Course Sequence

Course Number	Course Title	Prerequisites	Credits	
<u>CIS 103</u>	Applied Computer Technology		3	
<u>CIS 105</u>	Computer Systems Maintenance		4	
<u>CIS 150</u>	Network Technology		4	
Students should choose one series to complete their certificate: either CIS 252 & 253 or CIS 256 & 257				
CIS 252 & CIS 253	Windows Server Configuration Windows Active Directory Services	CIS 150 CIS 252	4 4	
	or			
CIS 256 & CIS 257	CISCO Routing Technology Advanced CISCO Routing and Switch Technology	CIS 150 CIS 256	4 4	
		· · · · · · · · · · · · · · · · · · ·	Total Credits: 19	

#### Successful Completion:

Successful completion of the program requires a "C" grade or better in each of the courses listed above. In order to receive a "C" grade or better and thus demonstrate competency, students must complete assignments, exams and participate in class activities.

## For More Information Contact:

The Division of Business and Technology, Room B2-22, 1700 Spring Garden Street, Philadelphia, PA 19130, Telephone (215) 751-8785; or the College Information Center (215) 751-8010.

# **Industry Certification Preparation:**

- Microsoft Office Users Specialist in Applications
- Microsoft Windows Operating System Certification
- CISCO Router and Switching Certification

# Gainful Employment Information

Gainful employment information is intended to provide students with better information about the effectiveness of college programs in preparing students for careers. Information provided includes estimated program costs and time needed to complete the program, financing options and related careers.

# Ophthalmic Technician Proficiency Certificate

## Description:

This program of study prepares students to become ophthalmic technicians who will work under the supervision of optometrists or ophthalmologists to provide patient care by performing many different eye- and vision-related clinical functions. Ophthalmic technicians take patient histories, perform the pre-testing of comprehensive and follow-up eye and vision examinations, conduct various diagnostic eye and vision care procedures, provide patient education, and perform various clinical practice administrative duties, such as scheduling appointments, telephone management, bookkeeping procedures and insurance claim processing.

Upon graduation, ophthalmic technicians may work in optometry practices, ophthalmology practices or health care clinics; optical dispensaries; optical laboratories; health care and optical equipment businesses; lens, frame or contact lens companies; and pharmaceutical companies.

The program courses will be offered at the College's Northwest Regional Center and at The Eye Institute of Salus University.

### Student Learning Outcomes:

Upon completion of the Ophthalmic Technician Proficiency Certificate, you will be able to:

- Communicate and collaborate effectively as part of an interdisciplinary health care team.
- Apply an understanding of relevant scientific and mathematical concepts to ophthalmic care.
- Demonstrate the ability to solve problems and think critically.
- Display professional and ethical behaviors in the health care environment.
- Demonstrate technical competence when performing ophthalmic procedures.
- Perform administrative duties of an ophthalmic technician competently.
- Calibrate and maintain ophthalmic equipment and instrumentation.

The Ophthalmic Technician Program will be seeking accreditation through the Accreditation Council on Optometric Education (ACOE).

## **Admissions Process:**

Admission into the Ophthalmic Technician Proficiency Certificate is selective, competitive, and requires potential students to fulfill all admission requirements of the College. Applications submitted from October 1st until March 1st will receive priority in the Allied Health admissions review process.

Students must meet the following minimum requirements before applying to the Ophthalmic Technician Proficiency Certificate:

- High school diploma or GED documentation
- Demonstration of readiness for ENGL 101 and FNMT 118 as determined by the College's placement tests, or by successfully completing developmental coursework
- Applicants with previous college experience must have a minimum grade point average of 2.50

Students new to the College can begin the application process by first applying to the College. Transcript evaluation and completion of a placement test (or test waiver) is required.

#### Current College students must complete the OPH Program admissions process:

Applicants who complete and meet the aforementioned requirements will be eligible to continue in the admissions process and will be contacted, in writing, concerning the scheduling of an admissions interview with the Program Director (or designee). A scheduled interview does not guarantee admission.

#### Conditions for Acceptance:

All applicants are notified in writing regarding the admissions decision. All offers of acceptance are contingent upon successful completion of the following:

- 1. Acknowledgement of Core Performance Standards for Health Care Career Programs and physical demand analysis.
- 2. Completion of Criminal Background Check
- 3. Completion of Child Abuse Clearance
- 4. Completion of Drug Screening
- 5. Additional conditions for Program commencement include:
  - Documentation of a complete physical examination, including required laboratory tests. All health information is kept confidential. Students will have direct contact with patients, and have the responsibility to maintain very high standards of health practice. Health problems which would interfere with the applicant's ability to meet

- program objectives will be dealt with on an individual basis.
- Documentation of up to date immunizations prior to clinical assignment. Additional immunizations (e.g., influenza) may be necessary.
- Documentation of current health insurance coverage, which must be maintained throughout the Program.
- Attendance at scheduled Program orientation prior to entry.
- Purchase of student uniform.
- Adult, child, and infant CPR certification for Healthcare Providers (due prior to the commencement of Clinical Education I).

The following guidelines are used in making decisions about an applicant's criminal and child abuse background:

#### Child Abuse Clearance:

• Any record results in denial of admission into the OPH program.

#### Criminal Background Check:

- Conviction of serious and/or violent crimes results in denial of admission into the OPH Proficiency Certificate Program.
- Any felony conviction within the past 10 years results in denial of admission to the OPH program.
- Any felony conviction more than 10 years old will be evaluated based on the nature of the offense, length of time since the offense, and any explanatory letters/materials submitted by the applicant or student.
- Any misdemeanor will be evaluated based on the nature of the offense, length of time since the offense, and explanatory letter/materials submitted by the applicant or students. (Any punishment over one year indicates a felony according to federal sentencing guidelines.)

#### Drug Screening:

The OPH program requires participation in clinical education. Some clinical affiliates of the OPH program require evidence of a negative drug screening test in order for a student to participate in the clinical experience at their facility. Therefore, any student with a positive drug screening test cannot be admitted into the OPH program.

#### Reconsideration:

An applicant who believes that an error of fact has been made in terms of the information provided to the decision making committee can request reconsideration by the committee. This request must be made in writing within ten days from the date of the letter notifying the applicant of the decision. The reconsideration should address what the applicant considers to be errors of fact.

Following reconsideration by the decision making committee, the applicant can appeal the committee's decision to the Vice President for Academic and Student Success, whose decision is final. Any official change or the initiation of any governmental proceeding affecting the information revealed by the required criminal or child abuse background check must be reported immediately to the OPH program director.

Involvement in any incident which resulted in a disciplinary action against a student at Community College of Philadelphia or any post-secondary institution is considered in the admissions process. The OPH program reserves the right to deny admission to any applicant who has a history of violating College rules and regulations or who has been previously suspended or expelled from the College or any other post-secondary educational institution.

Additional expenses for students in the proficiency certificate include travel to clinical facilities, purchase of a uniform, laboratory coat, required textbooks, a physical examination and inoculations. To remain in the program, students must earn a grade of "C" or better in each course.

A student in the Ophthalmic Technician Proficiency Certificate whose skills, attitude, and behavior are viewed as inconsistent with professional standards may be dropped from the program by the program director, in consultation with the Department Head.

Students dropped from the program because of academic deficiencies will be considered for a second admission to the program after remediation of the deficiencies and recommendation of the OPH faculty. Students may be readmitted to the program only once. Part-time students must complete the program within five years of their initial enrollment.

# Ophthalmic Technician Proficiency Certificate Course Sequence

Course Number	Course Title	Prerequisites	Credits
Fall Semester			
OPH 101	Ophthalmic Pre-Testing		3
OPH 102	Ocular and Ophthalmic Concepts		2
OPH 105	Ocular Anatomy, Physiology and Pharmacology		3
ОРН 106	Optical Dispensing		3

OPH 110	Clinical Experience I		1	
Spring Semester				
ОРН 120	Cornea and Contact Lenses	OPH 101, 102, 105, 106 and 110 with a grade of "C" or better	3	
ОРН 130	Ophthalmic Special Testing	OPH 101, 102, 105, 106 and 110 with a grade of "C" or better	3	
ОРН 140	Patient Relations/Practice Management	OPH 101, 102, 105, 106 and 110 with a grade of "C" or better	2	
ОРН 150	Clinical Experience II	OPH 101, 102, 105, 106 and 110 with a grade of "C" or better	2	
АН 116	Interpersonal and Professional Skills in HC		3	
		T	otal Credits: 25	

## Successful Completion:

Successful completion of the program requires a "C" grade or better in each of the courses listed above.

## For More Information Contact:

The Division of Math, Science and Health Careers, Room W2-7, 1700 Spring Garden Street, Philadelphia, PA 19130, Telephone (215) 751-8430

# Gainful Employment Information

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# Paralegal Studies Proficiency Certificate

#### Description:

This American Bar Association Approved Paralegal Studies certificate is designed to provide students who have earned an A.A., A.S. or bachelor's degree from an institution accredited by a regional member of the Commission of Higher Education with the skills and knowledge required to work as entry level paralegals. Community College of Philadelphia trains paralegals that must operate under the supervision of a licensed attorney and are prohibited from practicing law.

Students with an A.A.S. degree may also be eligible; see Entrance Requirements below for specific details.

### Student Learning Outcomes:

Upon successful completion of the Paralegal Studies Proficiency Certificate, students will be able to:

- · Work successfully as entry-level paralegals.
- Apply ethical concepts to hypothetical examples and real-life situations.
- Draft legal documents, conduct legal research both manually and through computer-assisted research and undertake the full scope of tasks assumed by entry-level paralegals.
- Demonstrate legal analytical skills and legal writing skills.
- Cultivate a supportive professional network and learn how to remain current in the legal profession.
- Demonstrate an understanding of legal terminology in civil litigation and a variety of practice areas.
- Demonstrate practical skills in a variety of practice areas.
- · Understand the role of technology in the modern law office and have practical experience using legal technology programs.

#### Entrance Requirements:

This certificate is open to students who have earned a BA, BS, AA or AS degree from an institution accredited by a regional member of the Commission of Higher Education prior to beginning this proficiency certificate program. Students who have earned an AAS degree will also be eligible, providing that the coordinator of Paralegal Studies certifies that the student's transcript reflects compliance with all general education requirements mandated by the ABA.

### Program of Study:

All students seeking the postdegree Paralegal Studies proficiency certificate are advised that they must complete 10 credit hours of legal specialty classes in a traditional classroom format. Courses in traditional format include those meeting entirely in the classroom and classroom hours of hybrid sections. Students are urged to meet with a paralegal advisor prior to registering for courses and are cautioned that a certificate will not be awarded until this requirement is met.

Courses are offered in day, evening, accelerated, weekend, and online formats.

## Paralegal Studies Proficiency Certificate Course Sequence:

Course Number	Course Title	Prerequisites	Credits
PLS 101	Introduction to Paralegal Studies	ENGL 101 readiness	3
PLS 121	Civil Litigation I	PLS 101	3
PLS 111	Legal Research and Writing I	PLS 101	3
PLS 115	Legal Technology	CIS 103, PLS 101	3
PLS 211	Legal Research and Writing II	PLS 111 and ENGL 102	3
Note: students must select four courses from the electives below:			
PLS 215	Electronic Discovery	PLS 121	3

PLS 221	Civil Litigation II	PLS 101 and PLS121	3
PLS 231	Family Law	PLS 111 and PLS 121	3
PLS 241	Tort Law	PLS 121	3
PLS 251	Real Estate Law for the Paralegal	PLS 111	3
PLS 255	Business Organizations for Paralegals	PLS 111, ENGL 101	3
PLS 261	Wills, Trusts and Estate Administration	PLS 111	3
PLS 265	Intellectual Property	<u>PLS 111</u>	3
PLS 271	Bankruptcy Law	<u>PLS 121</u>	3
PLS 275	Employment Law	<u>PLS 111</u>	3
PLS 281	Environmental Law	PLS 111	3
PLS 285	Immigration Law	PLS 101, PLS 121	3
PLS 295	Legal Internship	PLS 101, PLS 111, PLS 121, completion of 36 credits and a GPA of 2.5 or better	3
		To	otal Credits: 27

#### Successful Completion:

A grade of "C" or better in the five required courses and four electives is required to earn the certificate. Students whose behavior is viewed as inconsistent with professional standards may be dropped from the certificate program pending the results of a departmental hearing. All students are required to sign an integrity statement in all Paralegal Studies courses agreeing to abide by standards of ethics and integrity in all assignments and undertakings. Students pursuing the Paralegal Studies Proficiency Certificate are advised that it is important to have current knowledge in order to successfully compete in today's legal environment and are urged to complete all Paralegal Studies courses within five years of graduation. To ensure that graduates possess current knowledge and skills, the following requirements apply:

- Because of the need to possess current knowledge of technology, Legal Technology (PLS 115) must be taken within five calendar years of graduation.
- Any student who has taken Introduction to Paralegal Studies (PLS 101), Civil Litigation (PLS 121), or Legal Research and Writing I (PLS 111) and/or Legal Research and
  Writing II (PLS 211) more than five academic years before his/her proposed graduation date must demonstrate current knowledge. The student must meet with the Program
  Coordinator and develop a plan to demonstrate current knowledge and skills.

#### For More Information Contact:

The Division of Liberal Studies, Room BR-21, 1700 Spring Garden Street, Philadelphia, PA 19130, Telephone (215) 751-8450, or call the College Information Center at (215) 751-8010.

# Gainful Employment Information

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# Patient Service Representative Proficiency Certificate

# Description:

The Patient Service Representative Proficiency Certificate has been designed to provide students with the opportunity to seek employment in a variety of health care settings. This proficiency certificate focuses only on the administrative components of a medical practice. The patient service representative is responsible for greeting patients and families, collecting demographic and insurance information, scheduling patients according to the provider's guidelines and protocols, collecting payments associated with services rendered, and any other duties necessary to provide efficient, timely services to the patients and their families.

The Patient Service Representative Proficiency Certificate will provide students with the foundation courses and skills they need to understand the health care delivery system, and to provide students with the opportunity to seek employment in a variety of health care settings.

The Patient Service Representative Proficiency Certificate can be taken as a certificate-only program, or students can continue their studies and earn an associate's degree in Health Care Studies.

#### **Student Learning Outcomes:**

Students who successfully complete the courses in this certificate will be able to:

- Use the correct terminology for diseases, symptoms, diagnostic studies and treatments.
- Perform computerized administrative and financial procedures used in medical practices.
- Perform front office administrative and financial procedures required in a medical setting.
- Demonstrate the use of effective therapeutic communication skills in health care.
- Demonstrate an understanding of basic ethical and legal issues in health care.

#### Entrance Requirements:

This certificate is open to interested students. New students are normally required to take the College's placement test at their time of entry. Students who are identified as needing developmental course work must satisfactory complete the appropriate English and mathematics course as part of the certificate.

# Patient Service Representative Proficiency Certificate Course Sequence

Course Number	Course Title	Prerequisites	Credits
First Semester			
<u>AH 101</u>	Introduction to Health Care Professions		3
<u>AH 103</u>	Medical Terminology		3
ENGL 101	English Composition I		3
<u>CIS 103</u>	Applied Computer Technology		3
Second Semester			
<u>AH 112</u>	Medical Administrative Procedures		3
<u>AH 116</u>	Interpersonal and Professional Skills in the Health Care Setting		3
<u>AH 204</u>	Medical Law and Ethics	ENGL 101	3
<u>AH 220</u>	Information Management Systems in Health Care	CIS 103 with a grade of "C" or better	3
		Total C	Credits: 24

# Successful Completion:

Successful completion of the certificate requires a "C" grade or better in each of the courses listed above. In order to receive a "C" grade or better and thus demonstrate competency, students must complete assignments, exams and participate in class activities.

# For More Information Contact:

The Division of Math, Science and Health Careers, Room W2-7, 1700 Spring Garden Street, Philadelphia, PA 19130, Telephone (215) 751-8430 or e-mail <a href="mailto:health@ccp.edu">health@ccp.edu</a>.

# Gainful Employment Information

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# Process Technology I Proficiency Certificate

# Description:

Process Technology is a controlled and monitored series of operations, steps, or tasks that converts raw material into a product. A process technician monitors and controls mechanical, physical and/or chemical changes that constitute a process, troubleshoots equipment problems and analyzes, evaluates and communicates data. A proficiency certificate in level one process technology will prepare students for an entry-level position in the industries that use Process Operators — organizations such as Philadelphia Gas Works, the Philadelphia Water Department, Tasty Baking Company and pharmaceutical companies. The proficiency certificate is a credential recognized for preparing students with the basic knowledge and skills to perform entry-level operations in process control.

Several options exist for a student to obtain this certificate. The student may:

- 1. Take only the courses leading to the certificate.
- 2. Take the courses leading to the certificate as part of the Applied Science and Engineering Technology Associate Degree Program.

## **Student Learning Outcomes:**

Students who complete this certificate will be able to:

- Utilize technology to retrieve, prepare, and compile operator specific documentation.
- Interpret processing schedules, operating logs, and test results to determine operating parameters for assigned equipment.
- Analyze specifications, monitor and adjust controls to meet product requirements.
- Establish proper operating conditions for specific production equipment.
- Work as part of a team to ensure safe and effective product output.

## Entrance Requirements:

Students must be English 101 ready. This certificate is open to interested students New students are normally required to take the College's placement test at their time of entry. Students who are identified as needing developmental course work must satisfactory complete the appropriate English and mathematics course as part of the certificate.

# Process Technology I Proficiency Certificate Course Sequence

Course Number	Course Title	Prerequisites	Credits
PTEC 103	Introduction to Process Control and Plant Equipment	FNMT 118 or MATH 118 placement CHEM 110	4
<u>CHEM 110</u>	Introductory to Chemistry	FNMT 118 or MATH 118 placement ENGL 101 ready	4
<u>CIS 103</u>	Applied Computer Technology		3
<u>FNMT 118</u>	Intermediate Algebra		3
ASET 110	Safety, Health and the Environment		3
			Total Credits: 17

# Successful Completion:

Successful completion of the program requires a "C" grade or better in each of the courses listed above. In order to receive a "C" grade or better and thus demonstrate competency, students must complete assignments, exams and participate in class activities.

#### For More Information Contact:

The Division of Math, Science and Health Careers, Room W2-7, 1700 Spring Garden Street, Philadelphia, PA 19130, Telephone (215) 751-8430.

# Gainful Employment Information

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# Recovery and Transformation Proficiency Certificate

# Description:

This certificate provides students with a basic understanding of recovery, resilience and transformation in the field of substance abuse treatment. The biopsychosocial aspects of various addictive behaviors will be examined. This will include the pharmacology of addictive substances, the physiological effects on the user, the psychological consequences of use, and the sociological conditions that cause and result from substance abuse. The historical perspective will be surveyed, along with introducing students to various treatment approaches to addictive behavior. The psychosocial, cultural and spiritual aspects of addictive lifestyles will be examined through the study of alcohol and other drugs of abuse. The student will be introduced to counseling techniques, case management concerns, assessment issues, professional responsibility and ethical practice. Special populations such as dually diagnosed (co-occurring disorders) clients and HIV substance abusers will be discussed.

This certificate is designed for people interested in employment as entry-level case managers, counselor assistants, psychiatric technicians, mental health assistants and beginning human service workers. Individuals who complete this certificate can enter the field of human services as case managers, counselor assistant I and II, resident counselors or social work assistants. When completed, courses may be applied to the associate degree in Behavioral Health/ Human Services and related academic certificates.

#### **Student Learning Outcomes:**

At the completion of the Recovery and Transformation proficiency certificate students will be able to:

- Describe the social context and human meaning of drug and alcohol use in the American culture
- Describe chemical effects, psychological and social consequences of the use of the following drugs: marijuana, psychedelics and hallucinogens, stimulants, depressants, heroin and parcotics
- Demonstrate understanding of the societal issues associated with chemical dependency
- · Discuss HIV/AIDS, codependency, enabling and family consequences of addiction
- Describe the relationship between micropractice and macropractice issues in substance abuse treatment
- Describe the relationship between counseling and spiritual-existential traditions in recovery
- Discuss the psychotherapeutic process of change as it relates to addictive behavior
- Demonstrate the professional responsibilities required of a helper, including ethical practice

# Entrance Requirements:

This certificate is open to interested students New students are normally required to take the College's placement test at their time of entry. Students who are identified as needing developmental course work must satisfactorily complete the appropriate English and mathematics course as part of the certificate.

# **Recovery and Transformation Proficiency Certificate Course Sequence**

Course Number	Course Title	Prerequisites	Credits
BHHS 101	Introduction to Behavioral Health and Human Services		3
BHHS 111	Introduction to Helping Skills	BHHS 101, which may be taken concurrently	3
BHHS 121	Foundations of Addiction Studies		3
BHHS 131 or BHHS 222	Faith and Sprirtuality in Human Services  Assessment and Service Planning in Recovery	BHHS 121	3
			Γotal Credits: 12

# Successful Completion:

Successful completion of the program requires a "C" grade or better in each of the courses listed above. In order to achieve a "C" or better and thus demonstrate competency students must complete exams, writing assignments, projects, and presentations.

#### For More Information Contact:

The Division of Liberal Studies, Room BR-21, 1700 Spring Garden Street, Philadelphia, Pa. 19130. Telephone (215) 751-8450; or call the College Information Center (215) 751-8010.

# Social and Human Service Assistant Proficiency Certificate

# Description:

This certificate introduces students to the values, concepts, vocabulary, knowledge base and practice skills of time-sensitive approaches to helping relationships. It addresses how people change, extra-therapeutic factors and specific relationship variables that predict successful outcomes in helping individuals in need. Students learn to work with individuals of varying ages and abilities in a variety of human service settings and with groups using skills sets such as assessing readiness, identifying key challenges, establishing goals and taking specific action steps. Through this certificate students become familiar with community resources, the role of crisis intervention strategies and how to formulate and write specific goals which emphasize a continuum of care planning model.

This certificate is designed for individuals interested in employment as casework assistants, case managers, residential support staff, youth advocates, mental health assistants, peer counselor support staff, youth ministries. When completed, the courses may be applied to the associate degree program in Behavioral Health/Human Services or related Academic Certificates.

## Student Learning Outcomes:

Upon completion of the Social and Human Service Assistant Proficiency Certificate students will be able to:

- demonstrate a fundamental understanding of intentional interviewing, levels of intervention, case conceptualization and models of care that are specific to working within a
  time-sensitive framework
- · demonstrate understanding of specific assessment instruments and use these in practice.
- select intervention techniques appropriate to desired goals and incorporate these in practice.
- demonstrate basic competency in basic motivational interviewing skills (MI) and beginning helping skills that are fundamental to briefer models of working clients.
- describe what constitutes a crisis and explain several theories of crisis and models of intervention.
- describe characteristics of effective crisis workers and how to apply crisis intervention models to a variety of situations.
- demonstrate use of techniques that foster a continuum of care model of support services.
- discuss ethical practices of crisis counselors when working with clients or networking with other agencies.

#### Entrance Requirements:

This certificate is open to interested students. New students are normally required to take the College's placement test at their time of entry. Students who are identified as needing developmental course work must satisfactorily complete the appropriate English and mathematics courses as part of the certificate.

# Social and Human Service Assistant Proficiency Certificate Program Course Sequence

Course Number	Course Title	Prerequisites	Credits
BHHS 101	Introduction to Behavioral Health and Human Services		3
BHHS 111	Introduction to Helping Skills	BHHS 101, which may be taken concurrently	3
Select one of the following:  BHHS 121  BHHS 151  BHHS 171  BHHS 161	Foundations of Addiction Studies Family Violence, Abuse and Trauma Intro to Social Gerontology Intro to Disability Studies		3
BHHS 241	Crisis Intervention		3
		Т	otal Credits: 12

# Successful Completion:

Successful completion of the program requires a "C" grade or better in each of the courses listed above. In order to achieve a "C" or better and thus demonstrate competency

students must complete exams, writing assignments, and participate in class activities.

# For More Information Contact:

The Division of Liberal Studies, Room BR-21, 1700 Spring Garden Street, Philadelphia, Pa. 19130. Telephone (215) 751-8450; or call the College Information Center (215) 751-8010.

# **Technical Theater Proficiency Certificate**

# Description:

This Certificate will provide an opportunity for students to develop basic technical theater construction and design skills, preparing them to construct and paint sets and perform backstage work in the theater and film industries, such as working as lighting and audio technicians, set carpenters and stage managers. When completed, the courses can be applied to an Associate Degree in Theater. In addition to three required courses, students may select either ENGL 137: Introduction to Theater, ADC 103: CAD Basics, or MUS 115: Introduction to Music Technology. Students who are primarily interested in construction aspects might be interested in ENGL 137. Those with a set design interest may select ADC 103. Those with interest in sound technology may select MUS 115

## Student Learning Outcomes:

Upon successful completion of the Technical Theater Proficiency Certificate, students will be able to:

- Identify and utilize the basic skills required for set construction and painting;
- Demonstrate a knowledge of lighting, sound and theatrical design elements and techniques;
- Recognize and participate fully in technical aspects of a theater production.

#### **Program Entrance Requirements:**

This certificate is open to interested students. New students are normally required to take the College's placement test at their time of entry. Students who are identified as needing developmental course work must satisfactorily complete the appropriate English courses as part of the Certificate

# Technical Theater Proficiency Certificate Course Sequence

ENGL 141 Introduction to Technical Theater 4 credits  ENGL 146 Advanced Technical Theater ENGL 141 4 credits  Select one of the following: ENGL 137 ADC 103 MUS Introduction to TheaterCAD BasicsIntroduction to Music Technology 3 credits	Course Number	Course Title	Prerequisites	Credits
ENGL 146 Advanced Technical Theater ENGL 141 4 credits  Select one of the following: ENGL 137 ADC 103 MUS Introduction to TheaterCAD BasicsIntroduction to Music Technology 3 credits	ENGL 131	Acting I		3 credits
Select one of the following:  ENGL 137 ADC 103 MUS  Introduction to TheaterCAD BasicsIntroduction to Music Technology 3 credits	ENGL 141	Introduction to Technical Theater		4 credits
ENGL 137 ADC 103 MUS Introduction to TheaterCAD BasicsIntroduction to Music Technology 3 credits	ENGL 146	Advanced Technical Theater	ENGL 141	4 credits
115		Introduction to TheaterCAD BasicsIntroduction to Music Technology		3 credits

## Successful Completion:

Successful completion of the program requires a C or better grade in each of the courses listed above. In order to achieve a C or better and thus demonstrate competency, students must complete assignments and participate in class activities.

#### **For More Information Contact:**

The Division of Liberal Studies, Room BR-21, 1700 Spring Garden Street, Philadelphia, PA, 19130. Telephone (215) 751-8450; or call the College Information Center (215) 751-8010

# **English Courses**

On the basis of <u>placement tests</u> in reading and writing, students are assigned to English courses at an appropriate level. There are courses at the pre-college level, including a sequence of courses for students learning English as a Second Language, as well as a variety of transferable college courses. All courses numbered below 100 are pre-college courses.

Instructors in English department courses may in some cases expect students to meet with them individually or in small groups, in the classroom or at another appropriate location, either as a supplement or as an alternative to some regularly scheduled class meetings. The purpose of such conferences shall be to give individual instruction based upon student needs.

NOTE: English 071, 072, 073, 081, 082, 083, 091, 092, 093, 098 ESL and 099 ESL are all in the English as a Second Language program.

In all courses up through 099, students must receive a "pass" grade in order to take the next higher course in that skill. A "making progress" or "MP" grade indicates the need for an additional semester, but does not affect the grade point average.

Registration in some courses may be linked to registration in another course. Reading and writing courses in English as a Second Language and courses in several developmental English programs are linked courses. Please consult your academic advisor to register for linked courses.

## ENGL 071 Listening and Speaking for Non-Native Speakers of English

3-0-3 Credit Hours: 3

The first in a three-part series of academic speaking/listening courses. Speaking and listening practice with basic vocabulary and sentence structure. The course parallels the study of grammar in English 081 and English 091, and provides the competence in basic listening and speaking in preparation for college work. Credit will not be applied toward graduation.

Prerequisite: placement.

#### ENGL 072 Intermediate Listening and Speaking for Non-Native Speakers of English

3-0-3 Credit Hours: 3

Second in a three-part series of academic speaking/listening courses. Speaking, listening and writing practice with intermediate grammar and vocabulary. Increased emphasis on sociolinguistic and pronunciation rules. Introduction to formal speech making, class discussion techniques and college note-taking skills. Credit will not be applied toward graduation.

Prerequisite: "Pass" grade in ENGL 071 or placement.

### ENGL 073 Advanced Listening and Speaking for Non-Native Speakers of English

3-0-3 Credit Hours: 3

Last course in a three-part series of academic speaking and listening courses, it provides practice in complex communication tasks, including oral presentations, with emphasis on sentence intonation and word stress. It continues the study of grammar begun in English 071 and 072, and prepares the student for note-taking, discussion and advanced reading skills necessary for college work.

Prerequisite: ENGL 072 or ENGL 073 placement and ENGL 081/091 or ENGL 082/092 placement.

# ENGL 081 High Beginning Reading for Non-Native Speakers of English

3-0-3 Credit Hours: 3

The reading component of the first in a series of integrated courses that develop reading and writing skills in English. Development of vocabulary, study, life and cultural skills; critical thinking; reading comprehension; basic grammar; and sentence structure. Writing of narrative, descriptive and simple expository paragraphs and short essays, letters and simple response to reading. Course is paired and integrated with ENGL 091.

Prerequisite: Placement. Corequisite: ENGL 091.

## ENGL 082 Intermediate Reading for Non-Native Speakers of English

3-0-3 Credit Hours: 3

The reading component of the second of four pairs of integrated courses that develop reading and writing skills in English. Teaches reading and writing as processes, vocabulary development, study skills, critical thinking, and reading comprehension. Introduces expository essays, summaries and reading responses, compound verb forms and compound and complex sentence structures. Credit will not be applied toward graduation. Course is paired and integrated with ENGL 092.

Prerequisite: "Pass" grade in ENGL 081 and ENGL 091 or placement.

Corequisite: ENGL 092.

# ENGL 083 High Intermediate Reading for Non-Native Speakers of English

3-0-3 Credit Hours: 3

Reading component in the third of four integrated pairs of courses that develop reading and writing skills in English. Emphasizes reading and writing processes with continued vocabulary development, reading in the content areas, and the analysis of fiction and non-fiction. Development of a social, cultural, and historical context for reading. Sentence variety and advanced grammar, with writing in a variety of expository essay modes in response to reading. Credits will not be applied toward graduation.

Prerequisite: ENGL 082/092 or placement.

Corequisite: ENGL 093.

#### ENGL 091 High Beginning Writing for Non-Native Speakers of English

3-0-3 Credit Hours: 3

The writing component of the first in a series of integrated courses that develop reading and writing skills in English. Development of vocabulary, study, life and cultural skills; critical thinking; reading comprehension; basic grammar; and sentence structure. Writing of narrative, descriptive and simple expository paragraphs and short essays, letters and simple response to reading. Course is paired and integrated with English 081.

Prerequisite: Placement. Corequisite: ENGL 081.

#### ENGL 092 Intermediate Writing for Non-Native Speakers of English

3-0-3 Credit Hours: 3

The writing component of the second of four pairs of integrated courses that develop reading and writing skills in English. Teaches reading and writing as processes. Vocabulary development, study skills, critical thinking and reading comprehension. Introduces expository essays, summaries and reading responses. Compound verb forms and compound and complex sentence structures. Credit will not be applied toward graduation. Course is paired and integrated with ENGL 082.

Prerequisite: "Pass" grade in ENGL 081 and ENGL 091 or placement.

Corequisite: ENGL 082.

## ENGL 093 High Intermediate Writing for Non-Native Speakers of English

3-0-3 Credit Hours: 3

The writing component in the third of four integrated pairs of courses that develop reading and writing skills in English. Emphasizes reading and writing processes with continued vocabulary development, reading in the content areas, and the analysis of fiction and non-fiction. Development of a social, cultural and historical context for reading. Sentence variety and advanced grammar, with writing in a variety of expository essay modes in response to reading. Credits will not be applied toward graduation.

Prerequisite: ENGL 082/092 or placement.

Corequisite: ENGL 083.

# ENGL 098 Fundamentals of Writing

3-0-3 Credit Hours: 3

This course will provide instruction and intensive practice in the development of academic writing. Students will analyze a variety of texts and receive extensive practice in the writing process, leading to the multi-paragraph essay. The course includes the study of grammar. Some sections will be linked to other English courses. Credit will not be applied toward graduation.

Prerequisite: "Pass" grade in ENGL 093 or ENGL 097 or placement.

#### ENGL 098 ESL Fundamentals of Writing: Advanced Writing for Non-Native Speakers of English

3-0-3 Credit Hours: 3

The writing component of an integrated pair of courses which is the last in a series of four pairs of integrated ESL reading and writing courses. Instruction and intensive practice in the development of academic reading and writing skills. Analysis of literary and non-fiction materials. Extensive practice in the writing process leading to the five-paragraph essay. Study of advanced grammar. Course is paired and integrated with ENGL 099 ESL.

Prerequisite: "Pass" grade in <u>ENGL 083</u> and <u>ENGL 093</u> or placement.

Corequisite: ENGL 099 ESL.

## ENGL 099 Reading Improvement

3-0-3 Credit Hours: 3

This course will provide instruction and practice in developing strategies for college reading in a variety of academic disciplines. Credit will not be applied toward graduation. **Prerequisite:** "Pass" grade in <u>ENGL 083</u> or appropriate score on placement test.

ENGL 099 ESL Reading Improvement: Advanced Reading for Non-Native Speakers of English

The reading component of an integrated pair of courses which is the last in a series of four pairs of integrated ESL reading and writing courses. Instruction and intensive practice in the development of academic reading and writing skills. Analysis of literary and non-fiction materials. Extensive practice in the writing process leading to the five-paragraph essay. Study of advanced grammar. Course is paired and integrated with English 098 ESL.

**Prerequisite:** "Pass" grade in <u>ENGL 083</u> and <u>093</u> or placement.

Corequisite: ENGL 098 ESL.

## ENGL 101 English Composition I

3-0-3 Credit Hours: 3

This course is the first of a two-part sequence in English composition, in which students learn to read critically, synthesize ideas from a variety of texts, and write essays that develop significant ideas in support of a thesis. Students will write academic essays in various rhetorical modes, while improving their basic writing skills in preparation for English 102 and other higher-level courses.

#### ENGL 101H English Composition I (Honors)

3-0-3 Credit Hours: 3

The first in a two-part sequence in English composition. The course requires the writing of academic essays of about 500 words focused on the interpretation of primary texts in conjunction with seminars and writing groups.

### ENGL 102 The Research Paper

3-0-3 Credit Hours: 3

English 102 is the second half of the two-course sequence in English composition. Students continue to improve their academic reading and writing skills and critically examine issues raised by course texts. Course materials and the topics of study may vary in subject matter from one instructor to another. Course activities facilitate independent library and Web-based research. Students' work culminates in a final research paper.

Prerequisite: ENGL 101 with a "C" grade or higher.

## ENGL 102H English Composition II (Honors)

3-0-3 Credit Hours: 3

The course is designed to increase students' understanding of academic writing and to develop students' ability to write research essays. It focuses on the effective use of language and on responding to primary sources, incorporating information and ideas of others with their own thinking.

**Prerequisite:** ENGL 101 or ENGL 101H with a "C" grade or higher.

# ENGL 106 Grammar

3-0-3 Credit Hours: 3

This course focuses on the basic elements of standard English grammar, syntax and sentence structure, and emphasizes the parts of speech, syntactical relationships and coherence in writing. The course includes diagrammatic analysis of practice exercises and the student's own written work.

#### **ENGL 107 Society and Mass Communications**

3-0-3 Credit Hours: 3

This course provides an analysis of mass media. Students will examine the media's impact on the individual and society, with emphasis on how changes in technology and culture have altered the role and forms of mass media. Through readings and examples, students study the history, theories and terms relevant to the major mass media forms, as well as ethical and legal issues pertaining to them.

Prerequisite: ENGL 101, which may be taken concurrently.

Fulfills Writing Intensive requirement.

# ENGL 108 Academic Reading Across the Disciplines

3-0-3 Credit Hours: 3

English 108 is a college-level, critical thinking course that develops academic literacy through investigating the ways that texts are written and read, and how knowledge is constructed in a variety of academic disciplines. This course is designed to prepare students to independently comprehend and interpret the wide variety of readings in their general education courses as well as classes in their chosen field of study.

#### **ENGL 112 Report and Technical Writing**

3-0-3 Credit Hours: 3

This course introduces students to many typical modes of workplace communication. Topics include audience analysis, technical research and report writing, and Internet use. Report and Technical Writing provides preparation for writing assignments at the 200 level, while allowing students to continue to develop skills learned in <u>ENGL 101</u>.

Prerequisite: ENGL 101.

# ENGL 114 Introduction to Speech Communication

3-0-3 Credit Hours: 3

Provides a general background in speech communication with emphasis on communication theory, nonverbal communication, listening, interviewing, small group behavior and informative briefings.

Prerequisite: ENGL 101, which may be taken concurrently.

#### ENGL 115 Public Speaking

3-0-3 Credit Hours: 3

Emphasizes the preparation and delivery of a public speech. The focus of the course is speaking to inform, persuade and entertain. Some sections will further stress argumentation and debate.

Prerequisite: ENGL 101, which may be taken concurrently.

# **ENGL 116 Interpersonal Communication**

3-0-3 Credit Hours: 3

Provides theory and skills needed to increase communication competence in family life, social situations and professional careers. Study of human perception, nonverbal behavior, language, effective listening, relationships and conflict management.

Prerequisite: ENGL 101, which may be taken concurrently.

#### ENGL 117 Group and Team Communication

3-0-3 Credit Hours: 3

This course provides students with theory and skills specific to working in groups and teams. In this highly interactive and project-based course, students will explore ways that people think and behave in groups, the way groups make decisions, how to lead effective and efficient groups, and how to influence positive interaction and productivity. The skills and knowledge developed in this class will directly relate to group projects in other courses as well as in the workplace.

Prerequisite: ENGL 101, which may be taken concurrently.

#### **ENGL 118 Intercultural Communication**

3-0-3 Credit Hours: 3

This course explores how culture broadly defines, influences, and challenges communication, introducing theory as well as developing student competence in communicating in groups comprised of people various in race, ethnicity, nationality, gender, age, social and economic status, sexual orientation, disability and religion.

Fulfills American/Global Diversity requirement.

#### ENGL 120 Voice and Articulation

3-0-3 Credit Hours: 3

A course on speech production with an emphasis on the pronunciation and articulation of sounds. Satisfactory completion of this course will enable students to communicate articulately in both interpersonal and public situations.

#### ENGL 122 Writing for Mass Media

3-0-3 Credit Hours: 3

English 122 teaches students to write for various forms of mass media including newspapers, magazines, websites, radio and television. It also instructs students on writing techniques used in public relations and advertising. Students will also learn about the laws, ethics and professional standards associated with writing for mass media.

**Prerequisite:** ENGL 101.

Fulfills Writing Intensive requirement.

#### ENGL 124 Introduction to Mass Media Design

3-0-3 Credit Hours: 3

This course instructs students how to create their own basic print and online publications, as well as assist in the design of more complex publications. Students will learn to design newspapers, magazines and newsletters and be shown how to use the web to deliver articles, photographic images, audio and video.

Prerequisite: ENGI 107, must be taken prior, PHOT 151, may be taken concurrently.

Additional course fee: \$85.

#### ENGL 131 Acting I

A beginning acting course. Scene work, improvisation, the development of the body as an instrument and the dynamics of the person as character and actor.

Prerequisite: ENGL 073 and ENGL 083/ENGL 093 or higher placement

## ENGL 132 Acting II

3-0-3 Credit Hours: 3

Continuing the work begun in ENGL 131, this course will emphasize increased depth of performance and further work in characterization.

Prerequisite: ENGL 131 or permission of the department head.

#### ENGL 135 Movement and Dance for Actors

3-0-3 Credit Hours: 3

Basic principles, techniques and styles of body movement and dance. The focus is on body movement as a fundamental instrument of the actor.

Prerequisite: ENGL 073 and ENGL 083/ENGL 093 or higher placement

#### ENGL 136 Movement and Dance II

3-0-3 Credit Hours: 3

Study of more advanced dance techniques, development of skills in dance composition and performance experience.

Prerequisite: ENGL 135 or permission of the department head.

#### ENGL 137 Introduction to Theater

3-0-3 Credit Hours: 3

The theater experience from a spectator's point of view. All elements of making and performing a play are studied. Theater attendance at several plays is required. Students are required to pay their own admission to these plays.

Fulfills Interpretive Studies requirement.

#### ENGL 141 Introduction to Technical Theater

3-2-4

Credit Hours: 3

This introductory course explores the stage and its equipment. Students will learn to use basic tools and materials, as well as study different styles of theater architecture, the construction of two and three dimensional scenery, scene painting, the basic process of stage design, and the safety protocols of a scene shop.

Additional course fee: \$85.

#### ENGL 142 Rehearsal and Performance

3-2-4 Credit Hours: 4

This course provides students with an opportunity to participate in every aspect of the rehearsal process and presentation of a play. Each student will play a distinctive part in the rehearsal process.

**Prerequisite:** ENGL 132. *Additional course fee:* \$85.

# ENGL 146 Advance Technical Theater

2-3-4

Credit Hours: 4

In this course, students will expand the knowledge and skills introduced in ENGL 141: Introduction to Technical Theater by learning more advanced techniques for scenic design production and practice, including projection. Students will create lighting and sound designs for a theater production and will study and apply design principles and techniques for basic costume and stage properties. Students will create specific designs and models, make design presentations, and implement designs for a theater production.

**Prerequisite:** ENGL 141. Additional course fee: \$85.

# ENGL 190 Introduction to Literature

3-0-3 Credit Hours: 3

This course introduces students to the study of fiction, poetry and drama, with an emphasis on close reading and interpretation of literary structures and basic forms. **Prerequisite:** ENGL 101, may be taken concurrently.

Fulfills Interpretive Studies, Writing Intensive requirements.

# ENGL 195H Writing in the Humanities and Social Sciences I (Honors)

Academic writing with a focus on the interpretation of primary texts and intellectual debates, and special attention to revision strategies.

**Prerequisite:** ENGL 101 or ENGL 101H.

Fulfills Writing Intensive requirement.

# ENGL 196H Writing in the Humanities and Social Sciences II (Honors)

3-0-3 Credit Hours: 3

Advanced academic writing with a focus on the interpretation of primary texts and intellectual debates, and special attention to revision strategies and rhetorical analysis.

Prerequisite: ENGL 195H.

Fulfills Writing Intensive requirement.

#### **ENGL 205 Creative Writing**

3-0-3 Credit Hours: 3

Focus on student production of original work which may include fiction, poetry, memoir and dramatic writing. Students will do extensive reading, as well as writing and developing the critical vocabulary needed to discuss these genres from a writer's point of view. They will develop these skills through a number of activities including different forms of writing inside and outside of the classroom and peer evaluation in the form of writing workshops.

Prerequisite: ENGL 101.

Fulfills Writing Intensive requirement.

## ENGL 211 Survey of British Literature: From Beginnings to 1750

3-0-3 Credit Hours: 3

Survey of British literature from its beginnings in the ninth century to 1750. Study of the major literary works and authors in British history. Emphasis on themes, styles and structures of British literature in their historical context. Highly recommended for future English majors.

Prerequisite: ENGL 101.

Fulfills American/Global Diversity, Interpretive Studies and Writing Intensive requirements.

## ENGL 212 Survey of British Literature: From 1750 to the Modern Era

3-0-3 Credit Hours: 3

Survey of British literature from 1750 to the present. Study of the major literary works and authors in British history. Emphasis on themes, styles and structures of British literature in their historical context. Highly recommended for future English majors.

Prerequisite: ENGL 101.

Fulfills American/Global Diversity, Interpretive Studies and Writing Intensive requirements.

#### **ENGL 214 Communication Theory**

3-0-3 Credit Hours: 3

Provides a strong foundation in the dominant theories and approaches to research in the field of communication studies, with a focus on specific areas including interpersonal communication, group communication, public communication, and mass media. Emphasis is placed on major communication theories from across the various branches of the field and the associated quantitative and qualitative research methods used to study them.

Prerequisites: ENGL 115 with a "C" grade or higher and ENGL 107 or ENGL 116 with a "C" grade or higher.

# ENGL 221 Survey of American Literature: From the Beginnings to the Civil War

3-0-3 Credit Hours: 3

Survey of American literature from its beginnings to the Civil War. Employing cultural criticism, close reading and other approaches to literary analysis, the course is multicultural in focus.

Prerequisite: ENGL 101.

Fulfills American/Global Diversity, Interpretive Studies and Writing Intensive requirements.

## ENGL 222 Survey of American Literature: From the Civil War to the Present

3-0-3 Credit Hours: 3

Survey of American literature from the Civil War to the present. Employing cultural criticism, close reading and other approaches to literary analysis, the course is multicultural in focus.

Prerequisite: ENGL 101.

Fulfills American/Global Diversity, Interpretive Studies and Writing Intensive requirements.

# ENGL 230 Asian Literature

This is an introductory course in Asian literature written in English or in translation. Students read, discuss and write about major works from a variety of periods and social contexts. The emphasis is on literary interpretation and analysis of poetry, drama and fiction.

Prerequisite: ENGL 101.

Fulfills American/Global Diversity, Interpretive Studies and Writing Intensive requirements.

#### ENGL 232 Introduction to Drama

3-0-3 Credit Hours: 3

Analysis of significant American and foreign plays with emphasis on an understanding and appreciation of both theatrical and literary techniques.

Prerequisite: ENGL 101.

Fulfills Writing Intensive requirement.

## ENGL 241 Introduction to Shakespeare

Credit Hours: 3

This course will introduce students to some of the major works by William Shakespeare. Students will read, view, discuss and analyze plays in a variety of genres including comedies, histories and tragedies.

Prerequisite: ENGL 101.

Fulfills American/Global Diversity, Interpretive Studies and Writing Intensive requirements.

## ENGL 245 World Literature: From Antiquity to 1500

3-0-3 Credit Hours: 3

Selections from world literature representing the cultural heritage of various peoples of the world. Works of various literary genres from antiquity to the 1500s will be studied in a cross-cultural context.

Prerequisite: ENGL 101

Fulfills American/Global Diversity, Interpretive Studies and Writing Intensive requirements.

#### ENGL 246 World Literature: From 1500 to the Present

3-0-3 Credit Hours: 3

Selections from world literature representing the cultural heritage of various peoples of the world. Works of various literary genres from after 1500 to the present will be studied in a cross-cultural context.

Prerequisite: ENGL 101.

Fulfills American/Global Diversity, Interpretive Studies and Writing Intensive requirements.

## ENGL 250 African-American Literature I

3-0-3 Credit Hours: 3

This course is an introduction to African-American literature from its vernacular tradition to the Harlem Renaissance. Close study of major African-American authors and literary movements.

Prerequisite: ENGL 101.

Fulfills American/Global Diversity, Interpretive Studies and Writing Intensive requirements.

# ENGL 251 African-American Literature II

3-0-3 Credit Hours: 3

An introduction to African-American literature from the Harlem Renaissance to the present. Close study of major African-American authors and literary movements.

Prerequisite: ENGL 101.

Fulfills American/Global Diversity, Interpretive Studies and Writing Intensive requirements.

## ENGL 256 African Literature

3-0-3 Credit Hours: 3

English 256 is a survey of literature by African authors. In addition to the conventional literary genres of fiction, drama and poetry, the course includes study of oral traditions of the continent. Readings include texts originally written in English as well as works in translation.

Prerequisite: ENGL 101.

 $Fulfills\ American/Global\ Diversity, Interpretive\ Studies\ and\ Writing\ Intensive\ requirements.$ 

#### ENGL 260 Women in Literature

3-0-3 Credit Hours: 3

This course examines literature written by women in various genres, which may include short stories, novels, essays, poetry and drama. Through discussion and writing activities, students analyze literature by women from different cultures and periods to illuminate how contrasting societies define women's roles. The course explores how writing from a woman's perspective values women's lives and raises questions about women's role in nature, family and society.

Prerequisite: ENGL 101.

Fulfills American/Global Diversity, Interpretive Studies and Writing Intensive requirements.

#### **ENGL 265 Science Fiction**

3-0-3 Credit Hours: 3

This course examines the history of science fiction from its origins in the nineteenth century to the present. Students read works of science fiction, study the history and development of the genre, and examine its major themes, as well as its social and historical context.

Prerequisite: ENGL 101.

Fulfills Interpretive Studies and Writing Intensive requirements.

## ENGL 271 The Language of Film

3-0-3 Credit Hours: 3

Outstanding examples of many different kinds of films. The class dissects, analyzes and discusses the expressive components of visual communications. Basic knowledge of techniques of cinema to enhance perceptions and insights and to develop a knowledgeable critical judgment.

Prerequisite: ENGL 101.

Fulfills Interpretive Studies, Writing Intensive requirements.

#### ENGL 272 Topics in Film Study

3-0-0-3 Credit Hours: 3

This course conducts a thorough examination of either work by a single director or a particular film genre. It includes the study of technique (uses of light, sound, color and editing), as well as images, themes, motifs, plot, character, dramatic situations or conflicts, and the application of acting talent.

Prerequisite: ENGL 101.

Fulfills Interpretive Studies requirement.

#### ENGL 280 Poetry Writing

3-0-3 Credit Hours: 3

This course will focus on poetry, enabling students to create new works and continue projects begun in English 205 or elsewhere. Students will further develop a critical vocabulary and study contemporary poetry from the perspectives of writers rather than readers. They will participate in specialized, intensive workshops and learn skills needed by serious poets, including editing, revising and manuscript placement.

Prerequisite: ENGL 205.

#### **ENGL 281 Fiction Writing**

3-0-3 Credit Hours: 3

This course will allow students to continue longer fiction projects begun in English 205 or elsewhere. Students will further develop a critical vocabulary for the genre and study contemporary literature from the perspectives of fiction writers rather than readers. They will participate in specialized, intensive workshops and learn skills needed by the professional fiction writer, especially editing and revising. Manuscript placement will also be discussed. Prerequisite: ENGL 205.

#### ENGL 282 Scriptwriting

Credit Hours: 3

This course will focus on scriptwriting and enable students to continue longer projects begun in English 205 or elsewhere. Students will develop a critical vocabulary for scriptwriting and study contemporary dramatic literature from the perspectives of writers rather than readers. They will participate in specialized, intensive workshops and learn skills needed by the professional script writer, especially editing, revising and manuscript placement. Prerequisite: ENGL 205.

# ENGL 283 Nonfiction Writing: Memoir and Literary Journalism

3-0-3 Credit Hours: 3

This course will allow students who have already been introduced to expository writing to concentrate on nonfiction writing projects, research, and workshops with a community of writers. Students will complete a variety of non-fiction writing projects, including memoir and literary journalism, and will engage in research, editing, revision, and textual analysis. Students will develop a critical vocabulary relevant to nonfiction and study models in nonfiction from the perspectives of writers rather than readers. Prerequisites: ENGL 102 or ENGL 205.

 $Fulfills \ Writing \ Intensive \ requirement.$ 

This course is designed for students enrolled in the certificate program in Creative Writing and is one of the last requirements for completion of the program. Students complete a portfolio of creative works and practice advanced editing and revision skills as well as textual analysis. The class consists of brief lectures, writing workshops and seminars on practical matters of interest to working writers. Individual conferences between students and the instructor may be used to complement group activities; special projects and activities may take place outside the classroom in an effort to connect the students to resources and writing communities beyond the College.

Prerequisites: Enrollment in the certificate program in Creative Writing and ENGL 280, ENGL 281, ENGL 282 or ENGL 283.

Corequisite: One additional advanced creative writing course, ENGL 280, ENGL 281, ENGL 282 or ENGL 283.

Fulfills Writing Intensive requirement.

#### ENGL 297H Literature in the Context of Intellectual History: Ancient and Medieval (Honors)

3-0-3 Credit Hours: 3

Ancient and Medieval literature with special attention to intellectual history and literary theory.

Prerequisite: ENGL 101 or ENGL 101H.

# ENGL 298H Literature in the Context of Intellectual History: Modern (Honors)

3-0-3 Credit Hours: 3

Modern literature, chiefly European, from the 17th century to the present, with special attention to intellectual history and literary theory.

Prerequisite: ENGL 101 or ENGL 101H.

Fulfills American/Global Diversity requirement.

## ENGL 299 Special Topics in Literature

3-0-3 Credit Hours: 3

Special Topics in Literature will examine a body of literature that addresses a common topic, represents a particular subgenre, or represents a cultural identity. Readings will include a range of time periods, authors and perspectives on the topic and will be examined in their cultural contexts as well as through close reading. The course will be cross-cultural in scope and, whenever possible, pay attention to works by women and non-Anglo/American writers.

Fulfills American/Global Diversity, Interpretive Studies and Writing Intensive requirements.

# **Mathematics Courses**

NOTE: On the basis of placement tests in mathematics, students are assigned to math courses at an appropriate level. There are courses at the pre-college level, as well as a variety of transferable college courses. All courses numbered below 100 are pre-college courses.

#### MATH 121 Computer Mathematics and Logic

3-0-3 Credit Hours: 3

Introduction to mathematical topics pertinent to Computer Information Systems: number bases, computer coding, logic, set theory, Boolean algebra and logic gates. **Prerequisite:** MATH 017 or FNMT017 or MATH 118 or FNMT 118 (or higher) placement.

# MATH 123 Mathematical Principles I

3-0-3 Credit Hours: 3

This course provides an introduction to the foundations of mathematics. Topics include: logic and sets, construction of, representation of, estimation of, algebraic, geometric, ordering and metric structures on natural numbers and whole numbers. This course is open to all students but designed primarily for future teachers. This course will be open to students who are in or have placed into ENGL 098 or higher.

**Prerequisite:** MATH 017 or FNMT 017 or MATH 118 or FNMT 118 (or higher) placement.

#### MATH 133 Mathematical Principles II

3-0-3 Credit Hours: 3

This course is a continuation of Mathematical Principles I. Topics include: construction of, representation of, algebraic, geometric, ordering and metric structures on rational and real numbers, approximation and estimation, elementary combinatorics, probability and statistics, notions of size, mensuration, geometric structures and symmetry. **Prerequisite:** MATH 123 with a "C" or better.

#### MATH 137 Geometry for Design

3-0-3 Credit Hours: 3

Introduction to two- and three-dimensional geometry for students in visual design curricula. Traditional and computer-based geometrical construction; inductive and deductive reasoning; properties of triangles, polygons and circles; transformations and tessellations; area; the Pythagorean theorem; volume; similarity and the golden mean.

Prerequisite: MATH 017 or FNMT 017 or MATH 118 or FNMT 118 (or higher) placement.

# MATH 150 Introductory Data Analysis

3-0-3 Credit Hours: 3

Introduction to statistical thinking. Visual presentation of data, summarizing of data, probability, sampling and simulation. Evaluation of inferences drawn from a variety of statistical material and generation of reports summarizing and communicating statistical results. Students whose curriculum requires ECON 112/114 may not substitute MATH 150.

Prerequisite: MATH 118 or FNMT 118 with a grade of "C" or better or MATH 161 (or higher) placement.

#### MATH 151 Linear Mathematics

3-0-3 Credit Hours: 3

Cartesian coordinates, linear equations in two variables, graphing lines, systems of linear equations and inequalities, Gauss-Jordan elimination, matrices, matrix addition and multiplication, matrix inversion, geometric solution of linear programming problems, the Simplex method, duality.

Prerequisite: MATH 118 or FNMT 118 with a grade of "C" or better or MATH 161 (or higher) placement.

### MATH 152 Probability

3-0-3 Credit Hours: 3

Elementary set theory, counting, inclusion-exclusion, permutations and combinations, the binomial theorem, probability, sample space, events, a priori and a posteriori probability models, conditional probability, independence, discrete random variables, mean, variance, standard deviation, normal approximation to the binomial distribution.

Prerequisite: MATH 118 or FNMT 118 with a grade of "C" or better or MATH 161 (or higher) placement.

Practical introduction to basic mathematical concepts applied in the context of consumer decision making. Application of ratios, percents, powers, roots and other mathematical techniques and formulas in calculations of markup, markdown, discounts, interest compounding (earned and paid), mortgage, declining balances, depreciation, taxes payroll deductions, automobile financing, utility bills, credit card accounts, investments and savings.

Prerequisite: MATH 118 or FNMT 118 with a grade of "C" or better or MATH 161 (or higher) placement.

#### MATH 161 Precalculus I

3-0-3 Credit Hours: 3

Functions and relations and their graphs, transformations and symmetries; composition of functions; one-to-one functions and their inverses; polynomial functions; complex numbers; rational functions; conic sections.

Prerequisite: MATH 118 or FNMT 118 with a grade of "C" or better.

#### MATH 162 Precalculus II

3-0-3 Credit Hours: 3

Exponential and logarithmic functions, trigonometric functions, identities, inverse trigonometric functions, law of sines, law of cosines, trigonometric form of complex numbers, applications.

Prerequisite: MATH 161 with a grade of "C" or better.

#### MATH 163 Discrete Mathematics I

4-0-4 Credit Hours: 4

The study of discrete structures. Discussion centers on the following: set theory; functions and relations; counting and discrete probability; introduction to graphs and trees; elements of logic; introduction to proofs, proofs by induction, direct proofs and reductio ad absurdum; recursive equations; Boolean algebra and logic circuits; and applications in computer science. Number theory may also be discussion.

Prerequisite: MATH 161 (C or better) or MATH 162 or higher placement.

#### MATH 171 Calculus I

4-0-4 Credit Hours: 4

Functions, graphs, limits, continuity, derivatives and antiderivatives of algebraic and transcendental functions; techniques of differentiation; applications of derivatives, polynomial approximation; indeterminate forms; maxima and minima and applications; curve sketching; the definite integral; the fundamental theorem of calculus; integration by substitution.

Prerequisite: MATH 162 with a grade of "C" or better.

#### MATH 172 Calculus II

4-0-4 Credit Hours: 4

Fundamental theorem of calculus, integration by substitution, areas and volumes, techniques of integration, arc length, improper integrals, polar coordinates and parametric equations, conic sections, sequences, infinite series, power series, convergence tests, alternating series, Taylor and Maclaurin series.

Prerequisite: MATH 166 with a grade of "C" or better or MATH 171 with a grade of "C" or better.

# MATH 251 Statistics for Science

4-0-4 Credit Hours: 4

Algebra-based statistics for science. Statistical topics include descriptive measures, graphical methods, discrete and continuous probability distributions, estimation, one- and two-tailed hypothesis testing and categorical data.

Prerequisite: MATH 118 or FNMT 118 with a grade of "C" or better or MATH 161 (or higher) placement.

#### MATH 263 Discrete Mathematics II

4-0-4 Credit Hours: 4

Algorithms and algorithm efficiency; big-O, big-O, big-O and little-o notation; average and worst-case speed; sorting algorithms; graphs, adjacency and incidence matrices; paths; connectedness; bipartite graphs; isomorphism; Euler and Hamilton paths; shortest paths; Dijkstra's algorithm; planarity; Euler's formula; graph coloring; trees; tree traversal; prefix, infix and postfix notation; spanning trees and minimum spanning trees (Prim, Kruskal). Formal languages, finite state machines and automata may also be discussed. Only offered in spring semester and summer II session.

**Prerequisite:** MATH 163 with a grade of "C" or better.

# MATH 270 Linear Algebra

4-0-4 Credit Hours: 4

Matrices, determinants, vector spaces, inner product spaces, eigenvalues, eigenvectors, linear transformations and applications.

Prerequisites: MATH 171 with a grade of "C" or better and MATH 172 with a grade of "C" or better. (MATH 172 may be taken concurrently.)

## MATH 271 Calculus III

4-0-4 Credit Hours: 4

Calculus of vector-valued functions and multivariate functions; vectors in multi-dimensional space; cylindrical, spherical and other coordinate systems; partial derivatives; multiple integrals; Green's Theorem; the Divergence Theorem; Stokes Theorem.

**Prerequisites:** MATH 172 with a grade of "C" or better and MATH 270 with a grade of "C" or better.

# MATH 272 Differential Equations

4-0-4 Credit Hours: 4

First order equations; higher order linear differential equations; systems of linear differential equations; series solutions of linear differential equations; the Laplace transform; applications; first order partial differential equations; Fourier Series. Only offered in spring semester and summer II session.

Prerequisites: MATH 172 with a grade of "C" or better and MATH 270 with a grade of "C" or better.

# Computer Information Systems Courses

# CIS 103 Applied Computer Technology

2-2-3 Credit Hours: 3

This course is an exploration of modern computer technology used for communication, collaboration, problem solving, decision making, and increasing personal productivity. Topics covered include word processing, electronic spreadsheet and presentation software; library information systems; collaboration and social networking software; data communications and networking; and ethical issues related to technology. CIS 103 is a Windows-based course.

\*\*Additional course fee: \$85.\*\*

## CIS 105 Computer Systems Maintenance

3-2-4 Credit Hours: 4

This course provides students with basic knowledge, practical skills, and experience in installing and supporting computer operating systems. It also prepares students for CompTIA A+220-802 and Microsoft MCTS Exam 70-680 certification exams.

\*\*Additional course fee: \$85.\*\*

#### CIS 106 Introduction to Computer Programming

3-2-4 Credit Hours: 4

This course is an introduction to the fundamentals of object-oriented computer programming using the Python programming language. The course covers the logical design of computer programs, simple input and output, data checking, formatting reports, and simple mathematical processing, such as counting, summing and finding minima and maxima. This is the first programming course taken by CIS majors and is a good introductory course for anyone interested in exploring computer programming.

\*\*Additional course fee: \$85.\*\*

# CIS 114 JavaScript

3-2-4 Credit Hours: 4

This course provides students the knowledge and skills necessary to design and develop client-side scripts used to build dynamic websites and applications. JavaScript models such as data types, control structures, functions and objects are studied. Students will learn basic HTML and CSS and how to write beginner and intermediate scripts. Additionally, students are presented with advanced JavaScript topics, incorporating module development, distributed computing and security. Students are exposed to real-world examples of JavaScript and will construct interactive and dynamic client-side applications. Additional course fee: \$85.

#### CIS 130 Web Page Design I

2-2-3 Credit Hours: 3

This course will provide students with a solid foundation for building dynamic web pages. It introduces students to Hypertext Markup Language (HTML) for structuring and Cascading Style Sheets (CSS) for styling, defining, and formatting web pages.

**Prerequisite:** CIS 103. Additional course fee: \$85.

# CIS 140 Principles of Desktop and Electronic Publishing

2-2-3 Credit Hours: 3

This course is an introduction to the hardware, software and terminology involved in using computer technology to improve the visual impact and effectiveness of communication materials. The course includes discussion of typography, color theory and basic design principles. It provides hands-on computer experience with page composition software from the entry through intermediate levels. This course can be beneficial for anyone desiring to produce professional quality materials to communicate in a variety of media, encompassing both digital and print.

Additional course fee: \$85.

## CIS 150 Network Technology

3-2-4 Credit Hours: 4

This course in networking and data communications covers fundamental concepts and skills in computer network technology, including installation and configuration of network hardware and software, network topologies, network managementand and security. This course is designed to help students prepare for the for the CompTIA Network + (Net+)

certification exam.

Additional course fee: \$85.

## CIS 152 Introduction to Cybersecurity

2-2-3 Credit Hours: 3

This course introduces students to the field of cybersecurity. Students are introduced to various security topics, including Internet security, malware, vulnerability, cyber terrorism, cyber fraud, cyber detectives, firewalls, privacy, policies/procedures, mitigation strategies to potential cyber threats, and legal and regulatory aspects of cybersecurity. Lectures and projects promote understanding of cyber threats and security.

**Prerequisite:** CIS 150, which may be taken concurrently.

Additional course fee: \$85.

#### CIS 155 Principles of Operating Systems

2-2-3 Credit Hours: 3

This course introduces students to the basics of modern operating systems. Students learn concepts, commands and operations in popular operating systems (OS), such as Microsoft Windows and Linux/Unix operating systems. This course emphasizes basic hands-on skills in the following areas: OS hardening, operations and commands, accessing and installing application software, managing files and folders, troubleshooting, controlling and configuring the user environment, security configuration and disaster recovery. *Additional course fee:* \$85.

## CIS 202 Advanced Word Processing

2-2-3 Credit Hours: 3

This is a course in the development and application of advanced word processing skills through classroom exercises and simulations. Topics include object linking and embedding and other advanced word processing features that will increase productivity. Students will demonstrate an understanding of interpersonal skills and ethical issues important for modern office professionals.

**Prerequisite:** CIS 103 or OA 106. *Additional course fee:* \$85.

# CIS 203 Microsoft Excel with Macro Programming

2-2-3 Credit Hours: 3

Thorough study of the world's most popular numerical processing software, the electronic spreadsheet. Includes basic, intermediate and advanced techniques that can be utilized to solve a wide range of financial and scientific problems without the need for customized programming. The course includes extensive use of macro programming to increase productivity by automating repetitive operations. It also covers the use of macros to provide customized solutions for specific problems.

Prerequisites: CIS 103 or departmental approval.

Additional course fee: \$85.

#### CIS 204 Fundamentals of Linux and Unix

2-2-3 Credit Hours: 3

This course teaches the foundations of using Linux and Unix operating systems. In practice we will be using Linux systems in this class. Linux is very similar in underlying structure to Unix and is based on Unix, so many of same ideas translate directly from Linux to Unix systems. This course introduces students to the fundamental concepts and operations needed to use common Linux distributions such as Fedora and Debian. Course topics include file and directory management, user account management, using the bash shell, shell scripting, working with desktop environments, and Linux/Unix networking basics. Students will also be briefly introduced to application software, such as e-mail, Web browser and word processing software.

**Prerequisite:** CIS 105 or CIS 155. *Additional course fee:* \$85.

### CIS 205 Database Management Systems

3-2-4 Credit Hours: 4

An introduction to relational database management systems and database programming for personal computers using Microsoft Access. The course covers fundamental database design and programming techniques and provides hands-on exercises for applying the techniques to real-world problems.

**Prerequisite:** CIS 103 or (CSCI 111 and CSCI 112).

Additional course fee: \$85.

# CIS 230 Web Page Design II

2-2-3 Credit Hours: 3

This course provides beginning to intermediate level instruction in Dreamweaver, the current industry standard HTML generator software. Macromedia Dreamweaver is a WYSIWYG (What You See Is What You Get) HTML generator that contains a powerful collection of tools for creating and managing Web content. Through lecture and hands-on exercises, the student develops the skills necessary to create functional and well-designed Web pages and Web sites. Instruction is provided in features of the Dreamweaver

interface, the basics of page creation as well as advanced skills such as the use of layers, behaviors, cascading style sheets and templates. Instruction is provided on using Dreamweaver to create advanced Web pages such as frame pages and Web pages with forms. Instruction is also provided in using Dreamweaver features to publish Web pages and Web sites to a Web server. Throughout the semester, emphasis is placed on using Dreamweaver to implement the Web design concepts taught in CIS 130.

**Prerequisite:** <u>CIS 130</u>. Additional course fee: \$85.

#### CIS 231 Adobe Flash

2-2-3 Credit Hours: 3

This course is designed to develop skills necessary to create Rich Internet Applications. Students will learn the terminology, concepts and development process involved in creating web-based multimedia applications using Adobe Flash. Flash is a development tool used to incorporate graphics, animation, sound, video and text into interactive experiences such as websites, games and product demonstrations that are used to inform, educate and to entertain. This course covers the objectives specified by Adobe for their Flash associate professional certification.

**Prerequisite:** CIS 130 with a grade of C or better.

Additional course fee: \$85.

#### CIS 252 Windows Server Configuration

3-2-4 Credit Hours: 4

Through lecture and hands-on experience, this course develops the skills students need to configure the current Microsoft Windows Server Operating System. Topics covered include user accounts, domains, security, print and file services, DHCP, network shares, login scripts and remote access. This course combined with CIS 253 provides the foundation for pursuing the Microsoft Server Certification.

**Prerequisite:** <u>CIS 150</u>. Additional course fee: \$85.

#### CIS 253 Windows Server Administration

3-2-4 Credit Hours: 4

Through lecture and hands-on experience, this course helps students develop the skills needed to configure the current Microsoft Windows Server Operating System. Topics covered include Active Directory, group policies, roaming profiles, distributed file system, powershell, FSMO and other server topics. This course combined with CIS 252 provides the foundation for pursuing the Microsoft Server Certification.

**Prerequisite:** <u>CIS 252</u>. *Additional course fee:* \$85.

# CIS 256 Cisco Routing Technology

3-2-4 Credit Hours: 4

This course in networking and data communications explains fundamental concepts and engages students in practical projects that develop skills in computer Cisco Routing Technology, including installation and configuration of network hardware and software, network topologies, network management, and security. This course is designed to help students prepare for the Cisco CCENT and CCNA certification exams.

**Prerequisite:** CIS 150
Additional course fee: \$85.

# CIS 257 Advanced Cisco Routing and Switch Technology

3-2-4 Credit Hours: 4

This course in networking and data communications includes advanced concepts and engages students in practical projects that enhance skills in Cisco Routing Technology as augmented by equipment called "Switches." Cisco routing and VLAN security and advanced routing protocols are evaluated and implemented. This course is designed to help students prepare for the Cisco CCENT and CCNA certification exam(s).

**Prerequisite:** <u>CIS 256</u>. *Additional course fee:* \$85.

# CIS 259 Computing and Network Security

3-2-4 Credit Hours: 4

This course provides an introduction to computing and network security. It is intended to meet the needs of students and professionals who want to master practical network and computer security. Those seeking to pass the Computing Technology Industry Association's (CompTIAs) Security+ certification exam will find the course's approach and content especially helpful because the Security+ objectives will be covered in the course, and if mastered, will prepare the student to pass the certification exam.

Prerequisite: CIS 150 with a C or better.

Additional course fee: \$85.

2-4-4 Credit Hours: 4

This course focuses on the principles and hands-on technical skills to provide students with a solid foundation in the field of cyber investigation. Students will learn how to collect, preserve, examine and analyze cyber evidence for possible use in civil or criminal cases. Students will also learn the role of evidence in detecting and prosecuting cyber crimes, cyber terrorism, traditional and violent crimes, civil cases, fraud and other related offenses. Discussions and hands-on activities familiarize students with relevant cyber investigative techniques.

**Prerequisite:** CIS 155. *Additional course fee:* \$85.

## CIS 270 Systems Analysis and Design

3-2-4 Credit Hours: 4

This course provides an introduction to the analysis and design of modern computer-based information systems, including analysis of the need for computer-based information systems in particular organizational situations, the design of those systems and the design of the processes used to create and implement such systems. Students will receive instruction in conducting feasibility studies, managing projects and presenting proposals and reports.

**Prerequisite:** <u>CIS 205</u>. Additional course fee: \$85.

#### CIS 274: Ethical Hacking & Penetration Testing

2-4-4 Credit Hours: 4

This course continues and expands students' understanding of issues related to cybersecurity. Students learn more advanced skills, such as ethical hacking/penetration testing, security testing and systems/network defense and countermeasures. Students learn how to protect networks by utilizing the techniques that attackers use to compromise network and systems security. Students learn how to protect network/systems through hands-on lab activities utilizing the same tools and methods that intruders use to break into networks/systems. Topics include: hacker methodology and tools, how hackers operate, and setting up strong countermeasures to protect networks/systems.

Prerequisite: CIS 152 and CIS 259.

Additional course fee: \$85.

#### CIS 297 Network Technology and Management Capstone

3-2-4 Credit Hours: 4

Students engage in a group project in which they respond to a Request for Proposal (RFP) engaged by a fictitious company. The RFP will encompass a multifaceted process involving the management of implementation processes required to address the needs of the RFP. The results of the RFP will include including needs analysis, equipment and software identification, budget expenditures, staffing requirements, technical reports, timelines, project assignments within groups and network design schematics and diagrams. At the conclusion of the accumulation of required elements, students will behave as if the fictional company has selected and accepted their proposal response and bid, resulting in the creation of a miniature network infrastructure addressing the needs of the fictitious company. Throughout the project, practical implementation and application of management principles and network technologies required in business and other corporate environments will be evaluated and assessed. Elements of the finished network infrastructure and documentation will include functioning servers of various types (i.e., video, e-mail, web and database servers) combined with wired and wireless Wide Area Network (WAN) technologies. The course is highly advantageous for those who desire gaining employment at the network administrator or mid-management level in a technical department or enterprise.

**Prerequisites:** CIS 253, CIS 257, ENGL 117, which may be taken concurrently, and MNGT 142, which may be taken concurrently. *Additional course fee:* \$85.

# Degree Requirements Chart

Liberal Arts students should use this guide to choose Writing Intensive and Interpretive Studies courses. For American and Global Diversity courses, they should use the Liberal Arts Course Selection Guide in the College Catalog

Note: Dates in parentheses indicate that the course fulfills the indicated requirement only if taken during or after the semester listed. Courses without dates fulfill the indicated requirement regardless of when the course was taken.

Course	Fullfills Writing Intensive	Fullfills Interpretive Studies	Fullfills American/Global Diversity	Also Fulfills the Following Major Areas of Learning Requirements
Architcture, Design & Construction 176	X	X	X	Humanities or Soc Sci
Allied Health 101			X (FL 16)	
Allied Health 116			X	
American Sign Language 101			X	Humanities
American Sign Language 102			X	Humanities
American Sign Language 201			X	Humanities
American Sign Language 202			X	Humanities
Anthropology 101			X	Soc Sci
Anthropology 112	X (SP 12)	X (SP 12)	X	Soc Sci
Anthropology 124		X	X	Soc Sci
Anthropology 202		X	X	Soc Sci
Anthropology 211		X	X	Soc Sci
Anthropology 215		X	X	Soc Sci
Arabic 101			X	Humanities
Arabic 102			X	Humanities
Arabic 201			X	Humanities
Art101		X		Humanities
Art 101H		X (FL 16)	X (FL 16)	Humanities
Art 103		X	X	Humanities
Art 103H		X	X	Humanities
Art 104		X	X	Humanities

Art 104H		X		Humanities
Art 120		X	X	Humanities
Art 205		X (FL16)	X (FL 16)	Humanities
Behavioral Health and Human Services 103	X (FL 17)		X	
Chemistry 105	X			Natural Science
Chinese 101			X	Humanities
Chinese 102			X	Humanities
Chinese 201			X	Humanities
Chinese 202			X	Humanities
Dietetics 111		X (FL 17)		
Diagnostic Medical Imaging 132			X	
Engineering 202	X			
English 107	X (SP 11)			Humanities
English 118			X	Humanities
English 122	X			
English 137		X		Humanities
English 190	X	X		Humanities
English 195H (formerly 295H)	X			Humanities
English 196H (formerly 296H)	X			Humanities
English 205	X			Humanities
English 211	X (FL 11)	X	X	Humanities
English 212	X (FL 11)	X	X	Humanities
English 221	X (FL 11)	X	X	Humanities
English 222	X (FL 11)	X	X	Humanities
English 230	X (FL 11)	X	X	Humanities
English 232	X (FL 11)			Humanities
English 241	X (FL 11)	X	X	Humanities
English 245	X (FL 11)	X	X	Humanities
English 246	X (FL 11)	X	X	Humanities
English 250	X (FL 11)	X	X	Humanities

English 251	X (FL 11)	X	X	Humanities
English 256	X (FL 11)	X	X	Humanities
English 260	X (FL 11)	X	X	Humanities
English 265	X (FL 11)	X		Humanities
English 271	X	X		Humanities
English 272		X		Humanities
English 283	X			Humanities
English 285	X			Humanities
English 299	X	X	X	Humanities
English 298H			X	Humanities
Foreign Language courses			X	Humanities
French 101			X	Humanities
French 102			X	Humanities
French 201			X	Humanities
French 202			X	Humanities
Geography 103	X (SP 15)	X (SP 15)	X (SP 15)	Soc Sci
Geography 180			X	Soc Sci
Geography 222			X	Soc Sci
Hebrew 101			X	Humanities
Hebrew 102			X	Humanities
History 101	X (SP 11)	X	X (SP 11)	Soc Sci or Humanities
History 102	X (SP 11)	X	X (SP 11)	Soc Sci or Humanities
History 103	X (SP 11)	X	X (SP 11)	Soc Sci or Humanities
History 103H (Honors)		X		Soc Sci or Humanities
History 121	X (FL 12)	X	X	Soc Sci or Humanities
History 122	X (FL 12)	X	X	Soc Sci or Humanities
History 142	X	X	X	Soc Sci or Humanities
History 146	X	X	X	Soc Sci or Humanities
History 150	X	X	X (SP 11)	Soc Sci or Humanities
History 170/Religious Studies 170		х	X	Soc Sci or Humanities
History 176	X	X	X	Soc Sci or Humanities

History 180		X	X	Soc Sci or Humanities
History 220		X	X	Soc Sci or Humanities
History 221		X	X	Soc Sci or Humanities
History 297H (Honors)			X	Soc Sci or Humanities
Humanities 101		X	X	Humanities
Humanities 101H (Honors)		X	X	Humanities
Humanities 102		X	X	Humanities
Humanities 120		X	X	Humanities
Humanities 130		X	X	Humanities
Humanities 150		X	X	Humanities
Humanities 170		X	X	Humanities
Humanities 180		X	X	Humanities
Humanities 190		X	X	Humanities
Interdisciplinary Studies 297H (Honors)		Х		Soc Sci or Humanities
Interdisciplinary Studies 298H (Honors)		Х		Soc Sci or Humanities
Italian 101			X	Humanities
Italian 102			X	Humanities
Italian 201			X	Humanities
Italian 202			X	Humanities
Japanese 101			X	Humanities
Japanese 102			X	Humanities
Japanese 201			X	Humanities
Japanese 202			X	Humanities
Justice 251			X	
Medical Assisting 299			X	
Music 103		X	X (FL 10)	Humanities
Music 105		X (SP 12)		Humanities
Music 120		X (SP 12)	X (SP 12)	Humanities
Nursing 132	X			
Paralegal Studies 111	X	X		

Paralegal Studies 211	X			
Philosophy 101		X		Humanities
Philosophy 151/Religious Studies 151			X	Soc Sci or Humanities
Philosophy 152/Religious Studies 152		X		Humanities
Philosophy 202		X		Humanities
Philosophy 211		X		Humanities
Philosophy 215		X		Humanities
Photographic Imaging 105		X		
Photographic Imaging 111		X (FL 2017)	X (FL 2017)	Humanities
Photographic Imaging 113		X	X	Humanities
Psychology 101H (Honors)		X		Soc Sci
Psychology 201		X (FL 2016)	X (FL 2016)	Soc Sci
Psychology 202			X	Soc Sci
Psychology 205	X (SP 10)			Soc Sci
Psychology 210	X	X		Soc Sci
Psychology 211	X (FL 12)			Soc Sci
Psychology 215	X		X	Soc Sci
Psychology 215H	X	X		Soc Sci
Religious Studies 101		X		Soc Sci or Humanities
Religious Studies 151/Philosophy 151			X	Soc Sci or Humanities
Religious Studies 152/Philosophy 152		X		Humanities
Religious Studies 170/History 170		X	X	Soc Sci or Humanities
Religious Studies 175		X	X	Soc Sci or Humanities
Religious Studies 180		X	X	Humanities
Sociology 101	X	X	X	Soc Sci
Sociology 101H	X	X	X	Soc Sci
Sociology 115	X	X	X	Soc Sci
Sociology 212			X	Soc Sci
Sociology 231	X	X		Soc Sci

Sociology 233	X	X	X	Soc Sci
Spanish 101			X	Humanities
Spanish 102			X	Humanities
Spanish 105			X	Humanities
Spanish 106			X	Humanities
Spanish 111			X	Humanities
Spanish 112			X	Humanities
Spanish 201			X	Humanities
Spanish 202			X	Humanities
Spanish 205			X	Humanities
Swahili 101			X	Humanities
Swahili 102			X	Humanities
Swahili 201			X	Humanities
Swahili 202			X	Humanities
Women's Studies 101			X	Soc Sci

# Art Courses

#### ART 101 Visual Communication

3-0-3 Credit Hours: 3

The Visual Communication course is designed to introduce students to the fundamental issues involved in the production and understanding of works of art within the broad context of human interaction and communication. The course introduces the student to the concepts, ideas, forms and qualities of art and art appreciation, while simultaneously connecting the images that appear in everyday life to history, culture and visual aesthetics. Themes include ethical issues and censorship of art. This course will be open to students who are in or have placed into ENGL 098.

Fulfills Interpretive Studies requirement.

#### ART 101H Visual Communication (Honors)

3-0-3 Credit Hours: 3

This course considers art as a significant form of visual communication across multiple times and cultures. Through the study of available methods for looking and interacting with works of art, students learn to write and speak critically about the visual tools that artists use to communicate to the audience, with emphasis on art historical theory and interpretation, as well as relationships between art history and other academic disciplines. Prerequisite: ENGL 101, may be taken concurrently. Fulfills Interpretive Studies requirement.

## ART 103 History of Art: Ancient to Renaissance

3-0-3 Credit Hours: 3

Survey of the basic art forms - architecture, sculpture and painting - from ancient civilizations (including some non-Western cultures) through the Renaissance. The course explores concepts and media, as well as the political, social and religious developments which induced important artistic changes. Field trips to museums. Fulfills Interpretive Studies requirement.

#### ART 103H History of Art: Ancient to Renaissance (Honors)

3-0-3 Credit Hours: 3

This course is a survey of the history of art from

prehistory through the 15th century with emphasis on art historical theory and interpretation as well as relationships between art history and other academic disciplines Fulfills American/Global Diversity and Interpretive Studies requirements.

# ART 104 History of Art: Renaissance to Modern

3-0-3 Credit Hours: 3

Survey of the basic art forms- architecture, sculpture and painting-from the Renaissance through the 20th century, including some non-Western cultures. The course explores concepts and media, as well as the political, social and religious developments which induced important artistic changes. Field trips to museums. Fulfills Interpretive Studies requirement.

#### ART 104H History of Art: Renaissance to Modern (Honors)

3-0-3 Credit Hours: 3

This course is a survey of the history of art from approximately the 15th through the 20th century with emphasis on art historical theory and interpretation as well as relationships between art history and other academic disciplines.

Fulfills the Interpretive Studies requirement.

## ART 105 Drawing I

0-6-3 Credit Hours: 3

Drawing I focuses on the basic principles of drawing. Through working from direct observation, students learn about the elements (concepts) and mechanics of drawing. Students will be taught how to control the placement of objects on the page, and the use of sight measuring—sighting along a pencil to compare distances and angles and to compare height vs. width. Students will also be taught how to construct geometric forms using sight measuring, perspective (convergence), transparent construction (drawing every object as though you can see through it) and tone (value). Students will learn about the materials and supplies of drawing through demonstrations given by the instructor and through the drawing process. Throughout the course, art history will be referenced to illustrate concepts discussed in the course.

Prerequisite: ENGL 071 and ENGL 081/ENGL 091 or higher placement

#### ART 106 Drawing II

0-6-3 Credit Hours: 3

Drawing II builds upon the concepts covered in Drawing I. The students will use basic geometric forms as a means of analyzing the structure and volume of progressively more complex geometric as well as organic forms including an introduction to the human form. Students will also be required to articulate spatial relationships using both line and tone. Weekly homework assignments will be given in conjunction with classroom assignments. Students will learn about the materials and process of drawing through demonstrations given by the instructor. Throughout the semester, art history will be referenced to illustrate concepts discussed in the course. Relevant examples of art history will be shown through digital images, books and museum trips. Students will also learn basic vocabulary and concepts that they will put into practice during classroom critiques and discussions. Prerequisite: Art 105; ENGL 071 and ENGL 081/ENGL 091 or higher placement

Additional course fee: \$135.

#### ART 109 Ceramics I

0-6-3 Credit Hours: 3

Introduction to the basic techniques of working in clay: coiling, slab construction, pinching, wheel throwing and glazing. Both functional and sculptural works are created as an understanding of form and surface is gained. The use of slides and visits to museums and art galleries will introduce students to historical and contemporary ceramics. Prerequisite: ENGL 071 and ENGL 081/ENGL 091 or higher placement

Additional course fee: \$135.

ART 111 Three-Dimensional Design I

# ART 111 Three-Dimensional Design I

0-6-3 Credit Hours: 3

Explores the organization of objects in space through the visual elements of design--texture, line, pattern, form, shape, balance, proportion, light and shadow, weight, mass and volume. Simple materials such as bristol paper, foam core, balsa wood, chipboard and screening will be used to develop basic building techniques and skills. Using these materials in combination with conceptual problem solving assignments, students will develop a visual literacy where they will be able to analyze and discuss the compositional design elements which comprise a strong three-dimensional design.

Additional course fee: \$135.

## ART 112 Three-Dimensional Design II

0-6-3 Credit Hours: 3

This course is a continuation of basic three-dimensional design concepts, as introduced in ART 111. These concepts are strengthened and reinforced in ART 112 through further development of technical and design issues as they apply to working sculpturally. ART 112 emphasizes two aspects of working sculpturally not covered in ART 111: content and mass. The incorporation of the element of content, both conceptual and perceptual, stresses the importance of message and meaning in art. Students will confront traditional methods of sculpting mass, including both the additive and subtractive processes of modeling and carving. Projects are designed to encourage development of a personal artistic aesthetic.

Prerequisite: <u>ART 111</u>. Additional course fee: \$135.

#### ART 115 Painting I

0-6-3 Credit Hours: 3

Painting I is designed to introduce students to the basics of painting through the study of art history, materials, the painting process and the elements of painting. Through direct observation of the subject, students will learn to evaluate color and tonal relationships. In addition to working hands on, they will learn about materials, the painting process, and will reference art history through images, talks, and museum visits. (Approximate supply cost: \$150.)

Additional course fee: \$135.

# ART 120 Art in Africa

3-0-3 Credit Hours: 3

An art history course that surveys the sculpture, architecture and painting of Africa. The students learn about nations and cultures through their art and artistic productions. Traditional art, such as sculpture, and traditional crafts are studied. The students view the art of various African nations in light of their social and political structures. Various art styles and pragmatic uses of the art works are also emphasized.

Fulfills Interpretive Studies, American/Global Diversity requirements.

#### ART 125 Design I

0-6-3 Credit Hours: 3

Design I focuses on two-dimensional, black and white work, which is organized to create an awareness of basic design principles. It serves as the visual foundation for all design career-related areas of study including Graphic Design and Interior Design, as well as for traditional fine art study in drawing, painting, printmaking, photography, sculpture and

ceramics. Perceptual and abstract approaches to design using the major elements of line, shape and tone will be presented and explored through a progressive evolution of projects. (Approximate supply cost: \$250-\$300.)

Additional course fee: \$135.

#### ART 126 Design II

0-6-3 Credit Hours: 3

Continuation of concepts studied in Design I, as color theory and its applications are presented. Amplification of issues in design such as arrangement of line, shape and tone with colors as the focus. Geometric and organic forms, as well as observation from nature are explored. Design concepts are developed from idea to finished production. (Approximate supply cost: \$200-\$225.)

Prerequisite: <u>ART 125</u>. Additional course fee: \$135.

#### ART 150 Introduction to Computer Art/Graphics

0-6-3 Credit Hours: 3

Basic introduction to the language, technology and artistic medium of computer graphics. Course format is essentially studio/lab in nature, with instruction and demonstration preceding hands-on equipment use.

Additional course fee: \$135.

## ART 151 Graphic Design I

0-6-3 Credit Hours: 3

Introduction to graphic design through visual problem-solving for the purpose of communication. Studio projects emphasize the development of visual ideas and include the study of letter forms (typography), basic design techniques and graphic design principles. The use of the computer is introduced along with graphic design software. This technology is combined with more traditional (hands-on) studio experience for the initial stages of design and conceptual development. Studio and computer lab work are integral to this course. **Prerequisites:** ART 150.

Additional course fee: \$135.

# ART 171 Topics in Art

1-0-1 Credit Hours: 3

## ART 172 Topics in Art

2-0-2 Credit Hours: 3

# ART 173 Topics in Art

3-0-3 Credit Hours: 3

Thematic lecture course, using a particular topic to develop visual vocabulary, an understanding of the uses of art and critical evaluative skills. Emphasis on innovative teaching techniques and flexibility of course content. The specific topics will be announced prior to registration. Students may earn up to 3 credits for each special-topics lecture course satisfactorily completed.

#### ART 180 Topics in Art Studio

0-2-1 Credit Hours: 1

# ART 182 Topics in Art Studio

0-4-2 Credit Hours: 2

# ART 183 Topics in Art Studio

0-6-3 Credit Hours: 3

Special projects course to develop basic studio skills in a specialized area. Emphasis is on innovative teaching techniques and flexibility of course content. The specific topics will be announced prior to registration. Students may earn up to 3 credits for each special-topics studio course satisfactorily completed.

Additional course fee (ART 183): \$135.

# ART 205 Modern American Art

3-0-3 Credit Hours: 3

This course is a survey of American art, including painting, sculpture, architecture, photography, film and mixed media. Students examine influences from both 19th-century America and 20th-century Europe. The course includes various contexts, such as modern psychology and sociology, as they affect trends in American art and culture. The course also includes excursions to art galleries and museums, as well as guest lecturers.

Prerequisites: ART 103 or ART 104.

Fulfills Interpretive Studies, American/Global Diversity requirements.

#### ART 207 Drawing III

0-6-3 Credit Hours: 3

The human figure is the focus of this class. Working from the model, the class will consider the gesture and proportions of the figure. Students will be encouraged to conceive of the figure as a series of volumes in space. Basic anatomy will be introduced. The dynamic and expressive content of drawing will be encouraged. Media will be primarily pencil and charcoal.

Prerequisite: <u>ART 106</u>. Additional course fee: \$135.

### ART 208 Drawing IV

0-6-3 Credit Hours: 3

At this level of drawing, all students should be fundamentally sound and competent with the figure. The figure will be integrated into more complex spaces and compositions. However, the figure will not be the only subject. There will be more room for exploring personal themes and expressions. A wider variety of drawing materials will be used. Prerequisite: <u>ART 207</u>.

Additional course fee: \$135.

#### ART 209 Ceramics II

0-6-3 Credit Hours: 3

This course is the second level of ceramics, designed to develop technical and conceptual skills for the purpose of more advanced visual communication using clay as a medium. Basic technical skills introduced in ART 109 will be enhanced through the refined study of wheel-thrown forms, sculptural hand- built forms and glaze application. The ceramic studio classroom is integral to this advanced course.

Prerequisite: <u>ART 109</u>. Additional course fee: \$135.

# ART 215 Painting II

O-6-3 Credit Hours: 3

Painting with oil paints, students work from direct observation. The class will work from studio subjects and the landscape to further develop the skills learned in Painting I. There will be more emphasis placed on light, space and composition.

Prerequisite: <u>ART 115</u>. Additional course fee: \$135.

# ART 251 Graphic Design II

0-6-3 Credit Hours: 3

This course emphasizes the further development and exploration of visual design concepts. It utilizes the computer and software programs to generate successful visual problem-solving designs (from original concepts). Assignments will move toward the more practical application of graphic design. Three-dimensional projects such as package and bag design are introduced, along with more sophisticated design problems.

Prerequisite: <u>ART 151</u>.

Additional course fee: \$135.

# Art 290: Portfolio Preparation

3-3-3 Credit Hours: 3

This course aids the student in transferring with advanced standing into an art school or university art department. Advising and consultation about transfer procedures; financial aid, scholarship opportunities, specific career programs and choices of schools are all components of the course. Exit criteria include digital images of artwork to serve as portfolio, an essay, three completed applications and written summaries of field trips to art schools. Special presentations by area and national art schools as well as former graduates are incorporated. Individual studio projects are assigned to strengthen the portfolio.

Additional Course Fee: \$135

# **Music Courses**

# MUS 100 Music Reading

3-0-3 Credit Hours: 3

Introduction to music reading and elementary music theory: notation, terminology, key and time signatures, rhythm, meter, major scales, diatonic and chromatic intervals and triads and inversions.

#### MUS 101 Piano I

1-4-1 Credit Hours: 1

This course is designed to help the student acquire the basic skills needed for piano playing proficiency. Notation, fingerings, keyboard awareness, treble and bass clef reading, major scales, root position triads, rhythms and time signatures will be studied and incorporated in classroom performance. Self-disciplined daily practice is also needed to achieve the course goals.

Prerequisites: ENGL 071 and ENGL 081/ENGL 091 or higher placement.

#### MUS 102 Piano II

1-4-1 Credit Hours: 1

This course is designed as a continuation of studies begun in Music 101 to further develop skills needed for reading and performing piano music. Five minor scales will be studied. Chords based on major and minor scales will be learned and used to accompany simple melodies. Self-disciplined daily practice is needed to achieve the course goals.

Prerequisites: MUS 101, ENGL 071 and ENGL 081/ENGL 091 or higher placement.

#### MUS 103 Introduction to Music

3-0-3 Credit Hours: 3

This course introduces students to the art and science of listening to music with engagement and understanding, presuming no prior musical knowledge or experience. Students will learn how to listen to music actively and critically, with emphasis on instrumentation, musical form, function, performance practices, cultural influences, and aesthetics. Examples from Western and world music will be used to engage students in discussion and study.

Fulfills the American/Global Diversity, Interpretive Studies requirements.

### MUS 105 Music of the Baroque and Classical Eras

3-0-3 Credit Hours: 3

A survey of music in western civilization focusing on Western music written between 1600-1825, including works by Monteverdi, Purcell, Handel, Vivaldi, J.S. Bach, Haydn, Mozart and Beethoven.

Fulfills Interpretive Studies requirement.

# MUS 106 Great Romantic Music

3-0-3 Credit Hours: 3

A survey of music in Western civilization during the nineteenth and early twentieth centuries: Schubert, Chopin, Liszt, Brahms, Tchaikovsky, Debussy, Ravel and others. Songs, tone poems, symphonies, sonatas, operas, ballets, concerti, nationalism and impressionism.

# MUS 107 Music Composition

3-0-3 Credit Hours: 3

Introduction to the basics of music composition and songwriting, stressing techniques and procedures for developing original musical ideas. Students learn skills for writing melody, harmony, and formal structures through score analysis, listening and composing.

Prerequisite:  $\underline{MUS\ 100}$  and  $\underline{MUS\ 115}$ 

NOTE: Music majors will supply their own instruments for all applied music courses.

# MUS 108 Guitar I

1-4-1 Credit Hours: 1

Guitar I covers the basics of guitar playing: free stroke, rest stroke, note reading, left and right fingering on the strings, arpeggios, strumming patterns and chord progressions. Weekly performance assignments include right and left hand fingering development, note and tablature reading, strumming patterns, arpeggios, chords in major and minor keys, counting and rhythms. Student must provide their own instruments.

Prerequisites: ENGL 071 and ENGL 081/ENGL 091 or higher placement.

#### MUS 109 Guitar II

1-4-1 Credit Hours: 1

Guitar II continues basic guitar technique, building on the techniques learned in Guitar I. Weekly performance assignments include more advanced right and left hand fingering, note and tablature reading, strumming patterns, arpeggios, chords in major and minor keys, counting and rhythms. Students must provide their own instruments.

Prerequisites: MUS 108, ENGL 071 and ENGL 081/ENGL 091 or higher placement.

# MUS 111 Aural Theory I

3-0-3 Credit Hours: 3

A practical course which develops initial skills in sight-singing and dictation: diatonic major mode melodies, simple and compound meters, intervals up to the sixth (excluding tritones), simple rhythms down to quadruple divisions of the beat, treble and bass clefs.

Prerequisite: MUS 100 or placement examination.

# MUS 113 Aural Theory II

3-0-3 Credit Hours: 3

A continuation of Music 111 emphasizing sight-singing and dictation utilizing more complex musical materials: minor keys, intervals up to sevenths including tritones, alto and tenor clefs, advanced quadruple and sextuple divisions of the beat, and triplets.

**Prerequisite:** MUS 111 or placement examination.

# MUS 114 Harmony I

3-0-3 Credit Hours: 3

An introduction to harmonic principles of classical music, jazz and popular music through analysis and composition: chord structure and relationship in major and minor keys, triads, seventh chords, figured bass and chord symbols.

Prerequisite: MUS 100.

### MUS 115 Introduction to Music Technology - Revised Effective Fall 2017

2-2-3 Credit Hours: 3

This hands-on course teaches students how to create, edit, and manipulate MIDI files in order to layer various tracks to create finished MIDI sequences. Students will learn compositional and editing skills using industry-standard computers and digital audio hardware and software. They will learn how to properly connect various pieces of audio and MIDI hardware and how to set up music applications. In addition to the hands-on curriculum, students will learn about the history of analog and digital synthesis and the evolution of the technology, focusing on the relationships between past and present technologies.

\*\*Additional course fee: \$85.\*\*

### MUS 120 Music of African-Americans

3-0-3 Credit Hours: 3

This course consists of a survey of music that evolved from the African-American experience in America: folk music, blues, gospel, jazz, rhythm and blues, and concert music. This course also discusses the instruments, singing style and performance practice of traditional West African music.

Fulfills the American/Global Diversity and Interpretive Studies requirements.

#### MUS 121 Modern American Music

3-0-3 Credit Hours: 3

A survey of music in 20th and 21st century America including examples from both popular and concert traditions: jazz, musical theater, opera, ballet and popular music.

NOTE: Music majors will supply their own instruments for all applied music courses.

# MUS 141, 142, 143, 144, 241, 242, 243, 244 - Applied Music I, II, III, IV, V, VI, VII, VIII

.5-0-9-2 Credit Hours: 2

Fifteen weekly, half-hour, private music lessons: technique, repertoire and professional performing skills.

Prerequisite: performance major status. Student must see department chair prior to enrolling. Students may not audit Applied Music courses.

3-0-3 Credit Hours: 3

An introduction to the business of music including career opportunities, promotion and marketing procedures. This course is designed to help prepare music students to interact with the many facets of the music industry. Students will explore various professions in the music field and learn essential skills in music law, publishing, concert production, management, merchandising and recording. Students will work to build a portfolio throughout the course to aid in preparation for a career within the industry.

Prerequisite: ENGL 101.

MUS 196, 197, 296, 297

#### Ensemble I - IV

0-2-4-1 Credit Hours: 1

Music 196, 197, 296 and 297 teach music majors skills needed to play with vocal, jazz, guitar, percussion, orchestra and chamber groups: sight-reading, ensemble performance skills, rehearsal techniques, performance etiquette and recital production.

Additional course fee (MUS 196, 197, 296 and 297): \$85.

# MUS 201 Piano III

1-4-1 Credit Hours: 1

This course is a continuation of piano studies beyond <u>Music 101</u> and <u>102</u>, with additional major, harmonic minor and melodic minor scales. Chord progressions combining a sequencing of I, IV, V, I harmonies will be applied to compositions of both popular and traditional music.

Prerequisite: MUS 102.

#### MUS 202 Piano IV

1-4-1 Credit Hours: 1

Students completing this fourth semester of piano study will be well-versed in techniques needed to improve performance skills. Chord progressions combining a sequencing of I, IV, V, I harmonies will be applied to compositions of both popular and traditional music. Additional major, harmonic minor and melodic minor scales will be studied to complete the entire cycle of major and relative minor scales; students also learn arpeggios and expanded harmonies.

Prerequisite: MUS 201.

# MUS 211 Aural Theory III

3-0-3 Credit Hours: 3

Continuation of <u>MUS 113</u>: chromatic melodies, mixed meters, syncopation, melodic and rhythmic dictation. Prerequisites: <u>MUS 102</u>, <u>MUS 113</u>, <u>MUS 114</u> or placement examination.

#### MUS 214 Harmony II

3-0-3 Credit Hours: 3

The structures and relationships of chromatic chords in classical music, jazz and popular music: secondary dominants, full-and half-diminished seventh chords, Neapolitan chords, augmented sixth chords, and modulation.

Prerequisite: MUS 114.

# MUS 215 Advanced Music Technology and Multimedia - Revised Effective Fall 2017

2-2-3 Credit Hours: 3

A continuation of studies begun in MUS 115, this course focuses on advanced concepts in music technology and their application to multimedia. Students learn how to score for film and synchronize multimedia with advanced sound design, sampling, and production techniques.

Additional course fee: \$85.

# MUS 220 ProTools - Digital Audio Editing

2-2-3 Credit Hours: 3

A thorough, hands-on study of Digidesign ProTools, the industry standard in digital audio editing and recording. This course teaches recording and mastering techniques using the Digidesign Pro Tools software and hardware.

**Prerequisite:** <u>MUS 215</u>. *Additional course fee:* \$85.

# MUS 260 Sound Reinforcement and Recording Session

2-2-3 Credit Hours: 3

This course prepares students for the techniques and practices used in a professional recording studio. It includes learning various studio hardware, signal processing, mixing board console navigation, signal flow, microphone designs and how they are used for recording sound, and where they are typically placed. Students learn how to run a live recording session and the best way to record, edit and master that session.

**Prerequisite:** MUS 215. *Additional course fee:* \$85.

# MUS 290 Music Internship

1-10-2 Credit Hours: 2

The Music Internship provides 120 hours of work experience for the student. In addition, students attend a weekly seminar to discuss topics including the latest software and hardware tools, ProTools certification, final resume preparation, and management of issues or problems that may arise on the job. Students will work in local music businesses or other venues appropriate to the individual student's goals.

Prerequisite: MUS 180 and MUS 260, which may be taken concurrently.

# Photographic Imaging Courses

NOTE: Photography students in some production courses are required to supply at their own expense a 35mm film camera and accessories, a digital SLR camera, reflected light meter and tripod. Video cameras, 4x5 view cameras and professional studio and darkroom equipment are available for training purposes at the department's option. Values in parentheses reflect the expected cost to students of materials for the course.

# PHOT 100 Practical Photography for the Beginning Photographer

3-0-3 Credit Hours: 3

Through a series of practical camera-based exercises, this course provides beginning-level camera owners with (a) an overview of equipment available, (b) creative project ideas to explore with their camera, (c) compositional and technical skills beyond novice levels, and (d) a vision of useful and career-enhancing projects and possibilities beyond the class.

Prerequisite: ENGL 072 and ENGL 082/ENGL 092 or higher placement

# PHOT 101: Introduction to 35mm Film Camera and Darkroom Techniques

2-4-4 Credit Hours: 4

Introduction to black and white photography using 35mm film and printing in a traditional B&W darkroom. Students will learn the use of the 35mm film camera, film and print processing in the B&W darkroom and gain an aesthetic sense of the photograph while producing a high quality B&W print portfolio. (\$300)

**Prerequisite:** ENGL 073 and ENGL 083/ENGL 093 or higher placement

Additional course fee: \$85.

#### PHOT 103: Architectural and Landscape Photography

2-4-4 Credit Hours: 4

Use of the 4X5 large format traditional film camera and specialized digital camera and lenses for architectural and landscape photography. Introduction to the zone system of exposure control and fine printing. Location photography. Printing in the darkroom and computer lab. (\$300) (camera supplied by Department)

Prerequisite: PHOT 101 or PHOT 105 with a grade of "C" or better or permission of the department head.

#### PHOT 104 Introduction to Video Production

2-2-3 Credit Hours: 3

Development of basic location video skills including pre-production, camera, lighting, and editing on computer. Introduction to techniques and equipment through lecture and demonstrations, exercises, individual and small group production. Emphasis on non-fiction film format with some opportunity for narrative filmmaking. Non-linear computer-based editing with Adobe Premiere. (\$100.) (all equipment is supplied by Department)

Additional course fee: \$85.

#### PHOT 105: Introduction to Digital Photography

2-4-4 Credit Hours: 4

This course is an introduction to digital photographic technique and the aesthetics of photography. Through a series of practical demonstrations and shooting assignments, the course provides students with an overview of digital camera operation, digital imaging principles, techniques in composition and aesthetics, and a foundation in photography that will prepare students for more advanced courses and career opportunities in photography.

\*\*Additional course fee: \$85

Fulfills Interpretive Studies requirements.

# PHOT 111 History of Photography

3-0-3 Credit Hours: 3

This course will cover historical photographic movements and the technical development of photography from the inception of photography to the present and examine the impact the invention of photography has on our society, culture, and art. Students will investigate the historical events and cultural circumstances that have shaped the evolution of photographic expression and analyze significant photographic work.

# PHOT 113: Digital Technology, Art, and Culture

3-0-3 Credit Hours: 3

This is a lecture course in art and cultural history that examines the impact of digital technology on art and on the way society interacts with culture. Survey topics include the

history of digital visual art, digital moving images, and digital music/sound art. Students will also examine critical theory that addresses the relationship between technology and art. Fulfills the American/Global Diversity and Interpretive Studies requirements.

### PHOT 151 Digital Imaging

2-2-3 Credit Hours: 3

Use of Adobe Photoshop. Introduction to digital imaging, image enhancement and manipulation and archival print restoration. This course does not require a camera. (\$100) Additional course fee: \$85.

#### PHOT 152 Introduction to Color Photography and Digital Printing

2-2-3 Credit Hours: 3

An exploration of color photography, its materials and processes. The major components of the course are: color theory, techniques of color photography, color management systems, output devices, and archival issues and techniques. Practical experience will be gained in digital color printing and color management including monitor calibration and printer profiling. Assignments will be shot digitally, enhanced and corrected with Adobe Photoshop and digitally printed. A high quality digital camera is required for the course. Archival concepts and presentation topics will also be included.(\$225)

**Prerequisite:** PHOT 151, which may be taken concurrently.

Additional course fee: \$85.

# PHOT 201 Commercial Photography - Studio

2-4-4 Credit Hours: 4

Advanced use of the Digital SLR camera with continuing application of the zone system. Particular emphasis on studio lighting techniques used when photographing subjects of diffused reflectance, transparent and highly reflective objects, extreme high and low key situations, photo macro-graphs and location simulations. Introduction to advertising concepts and electronic flash. Assignments to be completed in B&W print. (\$300)

Prerequisite: PHOT 103, which may be taken concurrently.

Additional course fee: \$85.

# PHOT 202 Commercial Photography - Portraiture

2-4-4 Credit Hours: 4

Portraiture lighting techniques including use of single and multiple light sources, lighting patterns and ratios, outdoor subtractive lighting, interior lighting techniques for environmental portraiture and flash fill. Business practices, subject posing and use of medium format cameras are explored. (\$300)

Prerequisite: PHOT 152, which may be taken concurrently.

Additional course fee: \$85.

### PHOT 205 Commercial Photography - Advanced Studio

2-4-4 Credit Hours: 4

Advanced materials and techniques. Investigation of specialized areas of photography that exist primarily in the studio. Incorporation of digital imaging in studio photography. Portfolio preparation. (\$300)

Prerequisites: PHOT 152 and PHOT 201.

Additional course fee: \$85.

#### PHOT 211 Event and Corporate Videography

2-2-3 Credit Hours: 3

This course provides study beyond the introductory level of the techniques, skills and processes used for video production in corporate and organizational settings, including non-profit organizations, cable TV and the web. It features hands-on applications of advanced techniques for creating professional video projects including use of the DSLR camera for video. The course refines students' skills in the pre-production process, the gathering of audio and video content through field production, and computer-based editing. (\$100) (all equipment is supplied by Department)

**Prerequisite:** <u>PHOT 104</u>. *Additional course fee:* \$85.

#### PHOT 217 Digital Photojournalism

2-4-4 Credit Hours: 4

In this course, students will learn about the special role of photojournalism in modern society. This course provides advanced level photography students with an overview of photojournalism as a career, and instruction in expanded techniques of modern photojournalism. Using professional digital cameras, recorders, computers, and a variety of software, students will produce still and moving images for photojournalist storytelling while developing compositional and technical skills. (\$50)

Prerequisites: PHOT 104, PHOT 151, Phot 152, which may be taken concurrently.

Additional course fee: \$85.

# PHOT 291 Internship

1-10-1 Credit Hours: 1

Students are placed in a professional studio or other photo/video employment for at least 5 hours per week to get firsthand experience in the industry. Supervision is by faculty in conjunction with employer.

**Prerequisites:** PHOT 152 and PHOT 201 or PHOT 202, with a GPA of at least 3.0 in Photographic Imaging courses or DVP 150 and DVP 210 with a GPA of at least 3.0 in Digital Video Production courses.

# PHOT 299 Professional Practices in Photographic Imaging and Digital Video Production

2-2-3 Credit Hours: 3

This course is the capstone experience for the Photographic Imaging and Digital Video Production Program. It teaches critical skills for the graduate who intends to seek employment in the field of photographic imaging or digital video production or transfer to a baccalaureate institution. Portfolio preparation will consolidate imagery or digital video produced in previous courses into a unified body of work. Other components of the course include business aspects of the profession, legal issues, résumé preparation and development of interview skills. Restricted to DVP and Photographic Imaging students only.(\$200)

**Prerequisites:** <u>DVP 120</u>, <u>130</u>, <u>140</u>, <u>150</u> must be taken prior to this course, <u>DVP 210</u> and <u>DVP 240</u> may be taken concurrently with this course OR <u>PHOT 202</u> must be taken prior to this course and Photo 205 may be taken concurrently.

Additional course fee: \$85.

# **Education Courses**

# ED 105 - Foundations of Early Childhood Education

3-0-3 Credit Hours: 3

This course provides an introduction to the history, theories and philosophies affecting early childhood education in the 21st century. Curriculum models and inclusionary practices infancy through fourth grade are investigated. The importance of social, economic and cultural diversity is explored for its implications on learning and teaching. Current trends and the future of early childhood education are discussed. Ethical and professional responsibilities of educators are addressed.

# ED 135: Family and Community Relationships

3-0-3 Credit Hours: 3

Students learn the significance of the family-child-school relationship, the role of parents and other caregivers, and how to work effectively with diverse families and within diverse communities. Particular emphasis will be paid to cultural, ethnic, linguistic and economic diversity; nontraditional families; and families and communities faced with special challenges such as poverty. Involvement of parents and/or other primary caregivers in children's schooling is discussed at length, including various types of informal and formal home-school communications, home visits, home-school meetings and conferences. Students learn how to develop partnerships with families, including those with children who have special developmental needs, and study the legal rights of the child, special housing concerns and social service agency support.

# ED 151: Health, Safety and Nutrition of Young Children

3-0-3 Credit Hours: 3

This course provides an overview of information and procedures related to the health, safety and nutrition of young children, birth to fourth grade. Students will learn techniques for maintaining a safe and healthy classroom environment; for providing health, safety, and nutrition education for young children and their families; for working with children with special needs; for advocating for children and families; and for responding to a range of childhood illnesses and emergencies. In addition, students will be provided with information about the ways that specific health or social problems, including HIV/AIDS, homelessness and family violence affect child health and development.

# \*\*Note - ED 151 REPLACES ECE 151

# ED 201 Foundations of Education for Middle and Secondary Years

3-0-3 Credit Hours: 3

Foundations of education in the middle and secondary years are examined from socio-cultural, historical and philosophical perspectives. Current trends and contemporary issues in education are discussed and adolescent development is explored. A 20-hour field experience is embedded in the course. Therefore, students enrolled in this course must have up-to-date child abuse, criminal and FBI clearances, as detailed under the Pennsylvania Child Protective Services Law. Clearances must be less than one year old at the start of the semester when the student is enrolled in this course. ENGL 101, may be taken concurrently.

# ED 204 Curriculum and Instruction: Engaging Young Children in the Learning Process

3-0-1-3 Credit Hours: 3

In this course, students will study and develop strategies for engaging the young child in the learning process. They will recognize effective strategies for developing positive relationships and for promoting active participation in meaningful, relevant experiences that support concept and content development. They will develop instructional strategies to scaffold learning experiences across content areas and identify ways to create positive and stimulating environments that support the learning process. This course will include 10 hours observation/exploration in an early childhood education setting. Eligibility for enrollment in this course is based upon student acquisition of Pennsylvania criminal and child abuse clearances, a health clearance, and a Federal Bureau of Investigation (FBI) check showing eligibility to work with children. Clearances must be less than one year old at the start of the semester when the student is enrolled in this course.

### Prerequisite: ED 105.

#### ED 214 Cognition and Learning in the Classroom

3-0-1-3 Credit Hours: 3

This course will explore cognition and learning in children and adolescents. Factors that affect learning such as: motivation, culture, gender, family and community will be studied. Students will also examine current research that is linked to best teaching practices. A 10-hour field experience is embedded in this course. Therefore, students enrolled in this course must have up-to-date child abuse, criminal and FBI clearances, as detailed under the Pennsylvania Child Protective Services Law.

Prerequisites: ENGL 101 and ED 105 or ED 201.

ED 222 Language and Literacy Development in Early Childhood

3-0-3 Credit Hours: 3

The course provides an examination of the processes of language and literacy development from birth through first grade. Students will demonstrate skill in a range of individually and culturally responsive instructional approaches and materials. Students will develop an understanding of emergent language and reading development, as well as an understanding of learning theory and motivation in order to effectively ground their instructional decision making.

Prerequisites: PSYC 201 and ED 204 or ED 214.

# ED 230: Integrating the Arts into Early Childhood Education

3-0-3 Credit Hours: 3

The course provides students with an overview of information and strategies for integrating the creative arts into the early childhood curriculum. It includes experiences to help prospective teachers understand the role the creative arts play both in supporting children's development and informing learning in other disciplines. Students explore drama, movement, music and visual arts for children, birth through fourth grade, from the perspective of child development theories. Connections between the arts, individual development and curricular subjects guide the course. This integrationist approach views the arts as meaningful sources of expression, culture, learning and joy.

Prerequisite: ED 105.

### ED 245 Assessment of Young Children

3-0-1.5-3 Credit Hours: 3

Students in this course develop skills for child observation and the use of developmentally appropriate methods and instruments for assessment of children birth through fourth grade. Students will learn to collect and interpret information about children in the context of classroom routines, and to use this data to assess development and achievement of essential skills. This course will include 20 hours observing and assessing young children in an educational setting. Therefore, students enrolled in this course must have up-to-date child abuse, criminal and FBI clearances as detailed under the Pennsylvania Child Protective Services Law.

**Prerequisites:** ED 204 or ED 214.

#### ED 250 Infant and Toddler Development and Curriculum

3-0-1-3 Credit Hours: 3

In this course students will study the social, emotional, cognitive, physical and language development of children birth through age three. Students will implement theories and research to design programming that supports healthy adult-child relationships and provides infants and toddlers with developmentally appropriate curriculum. This course includes 10 hours of observation/exploration in infant/toddler classrooms. Therefore, students enrolled in this course must have up-to-date child abuse, criminal and FBI clearances as detailed under the Pennsylvania Child Protective Services Law.

Prerequisites: ED 204 or ED 214.

#### ED 255: Teaching English Language Learners

3-0-3 Credit Hours: 3

ED 255 introduces prospective teachers to theories of language and second language acquisition and equips them with the linguistic, pedagogical and professional knowledge and skills they need to instruct and assess linguistically and culturally diverse students. Legal requirements related to ELLs are also studied.

**Prerequisites:** ED 105 or ED 201 and ED 204 or ED 214.

# ED 265: Introduction to Special Education and Inclusive Practices

3-0-1-3 Credit Hours: 3

This course provides an introduction to the field of special education and the legal mandates guiding inclusive classroom practices. Students will be introduced to the characteristics of children with specific disabilities or atypical development and to the specialized instruction and services designed to meet individualized student needs. A strong emphasis will be placed on evidenced-based practices and multi-disciplinary and collaborative approaches to special education. Multicultural and diversity issues will also be discussed. 10 hours of observation in an inclusive learning environment will be required. Therefore, students enrolled in this course must have up-to-date child abuse, criminal and FBI clearances as detailed under the Pennsylvania Child Protective Services Law.

Prerequisites: ED 105 or ED 201, and PSYC 201 or PSYC 209, or PSYC 215.

# ED 275 Early Childhood Professional Leadership

3-0-3 Credit Hours: 3

This course provides an overview of the roles and responsibilities of leaders in the early childhood profession. Topics discussed will include advocacy, organizational structure, team building, transformational leadership, visionary skills, and a systems building approach to leadership using emotional intelligence. This course is open only to early childhood professionals in the Pennsylvania Director's Credential Program.

# ED 290 Early Childhood Education Practicum

2-0-7-4 Credit Hours: 4

This course provides a supervised field experience. Students participate in a weekly seminar along with eight hours of field work over 12 weeks for a total of 96 hours of field experiences with infants, toddlers or preschoolers. Students are placed at school or program sites selected by College faculty. Students will reflect on their experiences through written assignments and weekly entries in practicum logs. During seminar, students will discuss issues related to on-site learning. Eligibility for enrollment in this course is based

upon student acquisition of Pennsylvania criminal and child abuse clearances, a health clearance, and a Federal Bureau of Investigation (FBI) check showing eligibility to work with children. Clearances must be less than one year old at the start of the semester when the student is enrolled in the practicum. This course is restricted to students in the Education: Early Childhood (Birth to 4th Grade) option.

**Prerequisites:** ED 222 and ED 245.

# **Justice Courses**

# JUS 101 Survey of Justice

3-0-3 Credit Hours: 3

History, development and philosophy of criminal justice in a democratic society. Introduction to agencies involved in the administration of criminal justice; career orientation; constitutional limitations of criminal justice.

Placement Levels: ENGL 098/099 or ENGL 098/099 ESL.

# JUS 105 Introduction to Corporate and Homeland Security

3-0-3 Credit Hours: 3

Focuses on the needs, operations and administration of corporate and Homeland Security. The course stresses not only the past and current developments of security in the United States, but also the general functions of security operations, including asset protection, access control, investigations and management of emergency situations. The functions of security administration are also studied, including management, training and human resource management. The issues of Homeland Security will be emphasized in light of the 2001 terrorist attacks on the World Trade Center and the Pentagon, which have dramatically altered the focus of security operations.

Prerequisite: JUS 101.

### JUS 121 Legal Issues in Justice and Human Services

3-0-3 Credit Hours: 3

The purpose of the course is to familiarize students with the full range of legal issues emanating from the interaction of justice with human services. These issues may include mental health laws, commitment procedures, correctional law, and rights and liabilities of justice professionals and clients.

Prerequisite: JUS 101.

# **JUS 151 Police Operations**

3-0-3 Credit Hours: 3

The study of line activities of criminal justice agencies. Topics studied include patrol functions, crime prevention, traffic, criminal investigations and specialized units such as juvenile and vice.

Prerequisite: JUS 101.

#### JUS 171 Juvenile Justice

3-0-3 Credit Hours: 3

Problems of delinquency, interdisciplinary communication and diversion of selected juvenile offenders from the formal justice system. Each component of the system—police, courts, probation and community corrections—is analyzed and recommendations for improvement are considered. The community and the schools and their role in delinquency prevention.

# JUS 181 Community Relations

3-0-3 Credit Hours: 3

The numerous and complex factors in human relations and their effects on the justice system. Prejudice and discrimination and their effects and implications for police, courts and corrections in a changing and interactive society. History and development of civil rights and liberties.

Prerequisite: JUS 101.

# JUS 201 Introduction to Terrorism

3-0-3 Credit Hours: 3

This course considers the history of terrorism, the evolution of the definition of terrorism and the nature of both international and domestic terrorist groups, including the effect of modern technology on the activities of such groups.

Prerequisite: <u>JUS 101</u>.

# JUS 221 Criminal Investigation

3-0-3 Credit Hours: 3

The principles and methods of investigating criminal offenses will be discussed, to include: history, theories and problems of criminal investigations; crime scene searches; collection, preservation and the recording of physical evidence; impartial gathering of information; interview and interrogation methods; identification of modus operandi and sources of information; scientific and technological aids to investigating; and the development and handling of confidential informants.

Prerequisite: JUS 101.

#### JUS 235 American Correctional Institutions

3-0-3 Credit Hours: 3

The focus of the course is on the institutionally-based aspect of the correctional system. The historical responses to crime and delinquency, theories underlying those responses, the impact of imprisonment, and measures used to evaluate the effectiveness of incarceration are highlighted. The degree to which the variables of sex, race and social class influence correctional policy is also addressed.

Prerequisite: JUS 101.

# JUS 237 Community-Based Corrections

3-0-3 Credit Hours: 3

The focus of the course is on the community-based aspect of the correctional system. Strategies of supervision used in probation and parole, theories underlying these strategies and evaluative methods of assessing the impact of these strategies are highlighted. Particular emphasis will be given to the role of the helping relationship in the probation/parole agency setting.

Prerequisite: JUS 101.

#### JUS 241 Criminal Law

3-0-3 Credit Hours: 3

Local, state and federal laws; their development, application and enforcement.

Prerequisite: JUS 101 or PLS 101.

# JUS 251 Comparative Police Systems

3-0-3 Credit Hours: 3

Police systems throughout the world; attention to the applications of particular techniques to American systems of criminal justice.

Prerequisite: <u>JUS 101</u>.

Fulfills American/Global Diversity requirement.

#### JUS 261 Criminal Evidence and Procedure

3-0-3 Credit Hours: 3

Criminal evidence for police; types of evidence; criminal procedure and various courts; arrest, search and seizure; collection of evidence; discretion and related topics.

Prerequisite: JUS 101.

# JUS 281 Organized Crime

3-0-3 Credit Hours: 3

A foundation course in systematic criminality which examines those criminal organizations whose method of operation includes fear, violence and corruption to achieve strategic and tactical goals. The course investigates these highly-structured, perpetual organizations as well as law enforcement responses to them.

**Prerequisite:** <u>JUS 101</u> or permission of the department head.

# JUS 291 Contemporary Issues in Justice

3-0-3 Credit Hours: 3

In this course students examine contemporary issues in justice. Areas of focus include ethics in justice, technology and justice, the influence of the media and politics on the justice system, and the myths in justice. The specific topics discussed within each area will vary, based in part on current trends and official court rulings in our judicial system.

Prerequisites: JUS 101, JUS 171 and JUS 241.

# Philosophy Courses

NOTE: All Philosophy courses except PHIL 111 emphasize the ability to write short essays. There are no formal prerequisites for any Philosophy course.

# PHIL 101 Introduction to Philosophy

3-0-3 Credit Hours: 3

Systematic critical examination of some fundamental problems of philosophy. Focus on the nature of philosophy and philosophical analysis. Examples from the major areas of philosophy: metaphysics, epistemology, political philosophy, philosophy of religion and ethics.

Fulfills Interpretive Studies requirement.

# PHIL 111 Critical Thinking

3-0-3 Credit Hours: 3

Principles of thinking and problem solving, deductive and inductive logic and fallacies. Includes the analysis of formal and informal arguments.

### PHIL 151/RS 151 World Religions

3-0-3 Credit Hours: 3

Introduction to many of the world s major religious traditions (including Hinduism, Buddhism, Confucianism, Taoism, Judaism, Christianity and Islam) as well as other selected ancient and modern religious traditions. The course will also consider the nature and significance of religious experience, the impact of religion on culture, basic approaches to the study of religion, and different theories used to interpret religious beliefs and practices.

Fulfills American/Global Diversity requirement.

#### PHIL 152/RS 152 Philosophy of Religion

3-0-3 Credit Hours: 3

Systematic and historical analysis of philosophical problems of religion, such as the problem of evil and theodicy, the conflict between religion and science, the relationship between faith and reason, the nature of religious language, and arguments about the nature and existence of God. *Fulfills Interpretive Studies requirement*.

### PHIL 202 Philosophy of Love and Sexuality

3-0-3 Credit Hours: 3

Analysis of concepts of love from Plato to Freud and to contemporary feminism. Discussion of selected problems in sexual ethics related to topics such as marriage, monogamy, promiscuity, adultery, perversion, rape and homosexuality.

Fulfills Interpretive Studies requirement.

# PHIL 211 Ethical Problems

3-0-3 Credit Hours: 3

A study of theories of morality and values and their application to selected topics in personal and social ethics such as euthanasia, abortion, capital punishment, sex and marriage, human and animal rights, the environment, hate speech, world hunger and poverty and censorship.

Fulfills Interpretive Studies requirement.

# PHIL 215 Social and Political Philosophy

3-0-3 Credit Hours: 3

Examination of some classical and contemporary social and political theories. Analysis of key concepts, e.g., justice, freedom, political obligation, socialism and democracy. Fulfills Interpretive Studies requirement.

# PHIL 297H Philosophy in the Context of Intellectual History: Ancient and Medieval (Honors)

3-0-3 Credit Hours: 3

Ancient and medieval philosophy from the pre-Socratics to the Reformation with special attention to its relationship to intellectual history and contemporary intellectual problems.

**Prerequisite:** ENGL 101 or ENGL 101H.

PHIL 298H Philosophy in the Context of Intellectual History: Modern (Honors)

3-0-3 Credit Hours: 3

Modern philosophy from Descartes and Hobbes to the 21st century with special attention to its relationship to intellectual history and contemporary intellectual problems. **Prerequisite:** ENGL 101 or ENGL 101H.

# Religious Studies Courses

# RS 101 Introduction to Religion

3-0-3 Credit Hours: 3

An introduction to the study of religion as cultural, social and intellectual phenomena. The course teaches students how to interpret influential philosophical, social scientific and theological theories.

Fulfills Interpretive Studies requirement.

# RS 151/PHIL 151 World Religions

3-0-3 Credit Hours: 3

Introduction to many of the world's major religious traditions (including Hinduism, Buddhism, Confucianism, Taoism, Judaism, Christianity and Islam) as well as other selected ancient and modern religious traditions. The course will also consider the nature and significance of religious experience, the impact of religion on culture, basic approaches to the study of religion, and different theories used to interpret religious beliefs and practices.

Fulfills American/Global Diversity requirement.

# RS 152/PHIL 152 Philosophy of Religion

3-0-3 Credit Hours: 3

Systematic and historical analysis of philosophical problems of religion, such as the problem of evil and theodicy, the conflict between religion and science, the relationship between faith and reason, the nature of religious language, and arguments about the nature and existence of God. *Fulfills Interpretive Studies requirement*.

#### RS 170/HIST 170 Religion in American History

3-0-3 Credit Hours: 3

This course covers the origins, beliefs, practices and cultural significance of the major religious traditions and movements in American history. Close reading and interpretive analysis of primary texts constitute the major course activities.

FulfillsAmerican/Global Diversity and Interpretive Studies requirements.

### RS 175 Religions of the Middle East

3-0-3 Credit Hours: 3

This course examines the major religious traditions that developed in the Middle East (Judaism, Christianity, Islam and Zoroastrianism) from their origins through their rise and development into the modern period, including their current roles in the region. The course familiarizes students with the beliefs, practices, institutions and historical significance of these traditions. Attention is paid to sacred scriptures; historical developments; political, cultural and social impacts of the religious traditions on the region and the world; relations between the traditions; and the influence of these traditions upon issues and movements in the contemporary Middle East.

Prerequisite: ENGL 101.

Fulfills American/Global Diversity and Interpretive Studies requirements.

# RS 180 Asian Religions

3-0-3 Credit Hours: 3

This course explores the similarities and differences among the various Asian religions (including Hinduism, Buddhism, Confucianism, Daoism, Sikhism and Jainism), with comparison to Western religious traditions, and references to the cultural traditions in which the religions arose.

Fulfills American/Global Diversity and Interpretive Studies requirements.

# Accounting Courses

# ACCT 101 Financial Accounting

4-0-4 Credit Hours: 4

Introduction to the theory of accounts and generally accepted accounting principles as applied to a corporation. Emphasis is placed on completing the accounting cycle, inventory and asset valuation, and stockholder's equity.

# ACCT 102 Managerial Accounting

3-0-3 Credit Hours: 3

Emphasis is placed on the evaluation of financial statements and the development of decision-making techniques. Specialized topics include: statements of cash flows, analysis of financial statements, cost-volume analysis, time-value of money, capital budgeting and introduction to cost accounting.

Prerequisite: ACCT 101 with grade of "C" or better.

# ACCT 103 Microcomputers in Accounting

2-2-3 Credit Hours: 3

Introduction to microcomputer applications which focus on financial accounting problems and their solutions adapted to microcomputers. Students will utilize a spreadsheet program and commercial general ledger software.

Prerequisite: ACCT 101 with a grade of "C" or better.

Additional course fee: \$85.

#### ACCT 201 Intermediate Accounting I

3-0-3 Credit Hours: 3

Intermediate Accounting I continues the investigation of the current accounting concepts and standards underlying the financial statements of business enterprises that was begun in ACCT 101. Alternative valuation concepts and standards are introduced as they apply to reporting in the financial statements. Intermediate Accounting I will focus on the measurement and reporting of corporate assets and liabilities, and the related impact on revenues, expenses, gains and losses.

Prerequisite: ACCT 101.

### ACCT 202 Intermediate Accounting II

3-0-3 Credit Hours: 3

Intermediate Accounting II completes the investigation of the current accounting concepts and standards underlying the financial statements of business enterprises that was begun in ACCT 101 and continued in ACCT 201. Intermediate Accounting II will focus on the measurement and reporting of stockholders' equity and specialized areas including investments, leases, income taxes, revenue recognition issues, pensions and post-retirement benefits, the statement of cash flows, and accounting for changes and error analysis.

Prerequisite: ACCT 201.

### ACCT 203 Cost Accounting

3-0-3 Credit Hours: 3

Scope, concepts and terminology of cost accounting. Cycles of cost accounting and costing techniques. Control of materials and labor. Nature of factory overhead departmentalization and predetermined rates, process cost.

Prerequisite: ACCT 102.

# ACCT 206 Auditing

3-0-3 Credit Hours: 3

This course will review contemporary auditing and assurance services and related concepts of evaluation of controls, statistical sampling and substantive testing. Students will learn about Generally Accepted Auditing Standards (GAAS) as well as professional responsibility, legal liability and standards of ethics.

Prerequisite: ACCT 201.

# ACCT 208 Tax Accounting

3-0-3 Credit Hours: 3

This course will introduce the student to the taxation of individuals as set forth in the Internal Revenue Code. Emphasis is placed on the determination of gross income, adjustments to gross income, standard and allowable itemized deductions, the determination of personal exemptions, the calculation of the total tax liability, available tax credits and estimated tax payments.

# ACCT 209 Advanced Taxation

3-0-3 Credit Hours: 3

This course will introduce students to tax research and the tax treatment of entities, other than individuals, as prescribed by the Internal Revenue Code (IRC). They will apply the fundamentals learned in these two areas to problem situations likely to be encountered in tax practice.

Prerequisite: ACCT 208.

# ACCT 215 Nonprofit Accounting

3-0-3 Credit Hours: 3

Introduction to the principles of accounting for nonprofit organizations with emphasis on fund accounting and the accounting standards for various types of nonprofit organizations. **Prerequisite:** <u>ACCT 102</u> or <u>ACCT 101</u> and departmental approval.

# ACCT 250 Advanced Accounting

3-0-3 Credit Hours: 3

This course in financial accounting introduces students to accounting for partnerships, accounting for mergers and acquisitions, and accounting in the international marketplace. **Prerequisite:** <u>ACCT 202</u>.

# Allied Health Courses

#### AH 101 Introduction to the Health Care Professions

3-0-3

Credit Hours: 3

This course introduces students to various aspects of the health care field. Students will explore a variety of health-related disciplines, create an academic and career plan for their chosen profession, and develop a health care e-portfolio. Students will study health implications for several cultural groups, including belief systems, communication styles and the role of the family. Professional behavior and essential qualities for health care professionals will also be addressed.

Fulfills American/Global Diversity requirement.

# AH 103 Medical Terminology

3-0-0-3

Credit Hours: 3

The course introduces students to the language of medicine according to body systems. Students define, build and analyze terms as well as develop a vocabulary of combining forms, prefixes and suffixes. They develop the ability to pronounce and spell terms correctly and to use them in an appropriate context. Students learn medical terms (and their abbreviations where appropriate) for organs, diseases, symptoms, and for diagnostic, treatment and surgical procedures.

#### AH 112 Medical Administrative Procedures

3-0-0-3

Credit Hours: 3

This course introduces students to the entry-level managerial skills performed in a health care facility. Functions of management, the financial and reimbursement components, information management, customer service, and legal issues confronting today's medical facilities will be addressed.

#### AH 113 Exam Room Procedures I

2-3-0-3

Credit Hours: 3

This course introduces students to the theory, practice and techniques basic to the clinical aspects of working in a medical office. Students learn about disease prevention, disease processes, and the cycle of infection. They learn how to obtain patients' vital signs, weight, and height. The purpose of, the patient preparation for, and the diagnostic tests performed for a general physical, pediatric, and gynecologic exam are taught. Students are also introduced to the field of orthopedics, requiring them to simulate treatment modalities used in this medical specialty.

Corequisites: AH 103 which may be taken concurrently, with a C or better.

# AH 115 Exam Room Procedures II

2-4-0-3

Credit Hours: 3

This course is designed to introduce students to advanced clinical assisting skills. Clinical topics addressed include; pharmacology; drug administration; dosage calculations; electrocardiography; spirometry; and performing diagnostic eye and ear procedures. Laboratory topics include lab safety, quality control, collecting and processing specimens, performing selective tests, and screening test results.

Corequisites: AH 103, AH 113, and BIOL 108 (or BIOL 109 and BIOL 110), which may be taken concurrently, all with a grade of "C" or better.

# AH 116 Interpersonal and Professional Skills in the Health Care Setting

3-0-0-3

Credit Hours: 3

This course introduces students to communication theories, modes of communication and factors that influence communication when interacting with patients, coworkers and other health care personnel. Therapeutic techniques, such as active listening and conflict resolution, as well as core professional attributes and values will be discussed through the use of case studies and role playing. The legal and ethical components associated with interpersonal communication in the health care setting will also be addressed. Strategies for job search and retention in the health care environment as well as for professional and personal growth will be explored.

Fulfills American/Global Diversity requirement.

# AH 120 Reimbursement Methodologies in Health Care

3-0-0-3

Credit Hours: 3

This course addresses health care plans and providers and how they impact financial management, decision making and the information requirements of the health care system. Reimbursement methodologies for both inpatient and ambulatory care delivery systems will be covered.

#### AH 190 Human Disease and Treatment

3-0-0-3

Credit Hours: 3

This course addresses disease processes and the general classification of the causes of disease, as well as the common signs and symptoms of diseases, the body systems affected by disease, the diagnostic measures and the types of treatments available.

Prerequisites: AH 103 and BIOL 108 or BIOL 109 all with a grade of "C" or better.

# AH 201 Basic ICD and CPT Coding

4-0-4

Credit Hours: 4

Students will be introduced to and learn to utilize not only the Current Procedural Terminology (CPT) coding system used for reimbursement, but the detailed, comprehensive diagnostic coding system, International Classification of Diseases (ICD) coding. Students will engage in hands-on practice.

Prerequisites: AH 103 with a grade of "C" or better, AH 120 with a grade of "C" or better, BIOL 108 with a grade of "C" or better or BIOL 109 and 110 both with a grade of "C" or better and AH 190 with a grade of "C" or better.

#### AH 204 Medical Law and Ethics

3-0-0-3

Credit Hours: 3

Legal theories and responsibilities related to confidentiality, negligence and fraud affecting health care practitioners will be addressed. Ethical issues will be explored within the context of current laws and cases which structure medical practice for both the inpatient and outpatient environments.

Prerequisite: ENGL 101.

# AH 220 Information Management Systems in Health Care

3-0-0-3

Credit Hours: 3

In this course, students learn to use current software to input patient data and to bill patients, file insurance claims, record data, print reports and schedule appointments. They apply their knowledge by performing a series of tasks using sample source documents. Students are given a ten-day medical office simulation requiring them to use critical thinking and problem solving skills to complete billing and accounting assignments that are reflective of the types of activities encountered in a medical practice.

Prerequisites: CIS 103 with a grade of "C" or better.

#### AH 222 Health Care Policy and Administration

3-0-0-3

Credit Hours: 3

In this course, students will analyze various health care policies and discuss the impact each policy has had on identified stakeholders. Students will also analyze policies in relation to their role as health service managers. By understanding the process through which policies are developed, including the economic, political and legal factors, students will learn how to influence policy as a health service manager.

Prerequisites: MATH 150 or MATH 251 with a grade of "C" or better; AH 120 and AH 204 with a grade of "C" or better.

### AH 224 Current Issues and Trends in Health Care

3-0-0-3

Credit Hours: 3

This course explores significant trends in health care and the major political, social and economic problems affecting the United States' health care system and its stakeholders. Topics such as access to health care, health disparities and health-related social injustices will be studied in depth. Issues of quality, coordination, and cost of health care will also be analyzed.

Prerequisites: MATH 150 or MATH 251 with a grade of "C" or better;  $\underline{AH\ 204}$  with a grade of "C" or better.

# AH 260 Supervisory Management in Health Care

3-0-0-3

Credit Hours: 3

This course introduces students to the roles and responsibilities of a medical office manager. Students learn about organizational structures within health care facilities and management responsibilities including recruiting, training, decision-making, evaluating and planning. Leadership, employee morale and the dynamics of change are also addressed. Prerequisite: AH 204.

# American Sign Language/English Interpreting Courses

# ASL 101 Elementary American Sign Language I

3-0-3 Credit Hours: 3

Introductory course in American Sign Language (ASL) as used by the majority of deaf people in the U.S. and Canada. A functional-notional approach is utilized which encourages natural conversational interaction. Students are introduced to the American deaf community through outside field observations.

Fulfills American/Global Diversity requirement.

# ASL 102 Elementary American Sign Language II

3-0-3 Credit Hours: 3

Continuation of Elementary American Sign Language I, utilizing a functional-notional approach to developing natural conversation skills. Continuation of field experiences in the deaf community.

Prerequisite: ASL 101.

Fulfills American/Global Diversity requirement.

# ASL 201 Intermediate American Sign Language I

3-0-3 Credit Hours: 3

Continuation of the study of American Sign Language, focusing on conversational skills using topics which naturally occur within the deaf community. Students connect with members of the deaf community through outside interaction.

Prerequisite: ASL 102.

Fulfills American/Global Diversity requirement.

# ASL 202 Intermediate American Sign Language II

3-0-3 Credit Hours: 3

Further development of ASL conversational skill through a functional-notional approach and outside interaction with the deaf community.

Prerequisite: ASL 201.

Fulfills American/Global Diversity requirement.

#### ASL 215 ASL Fingerspelling

3-0-3 Credit Hours: 3

Students develop increased facility in recognizing and producing fingerspelled words and numbers in context. Students view and study careful, rapid, and lexicalized forms of fingerspelled words, acronyms and number systems through developmentally sequenced exercises and develop the skills necessary to produce these linguistic items in their expressive signing.

Prerequisite: ASL 202 with a "B" grade or higher.

# ASL 230 Structure of American Sign Language

3-0-3 Credit Hours: 3

Introduction to basic concepts in linguistics and the grammatical structures and rules of American Sign Language (ASL). Focus is given to those features that are unique to ASL, particularly non-manual (facial) behaviors, spatial mapping and sign modulations. Students identify and analyze specific structures in American Sign Language utterances and narrations presented live and through technology. Transcription and translation activities enhance language analysis skills. The language of instruction in this course is ASL. The course is intended to be complemented and reinforced by ASL 231 -- Advanced ASL I.

Prerequisites: ASL 202 a "B" grade or higher and ENGL 101, which may be taken concurrently

# ASL 231 Advanced American Sign Language I

2-2-3 Credit Hours: 3

This course is the first of a two-part advanced ASL sequence, moving students beyond the language requirements of ASL 101, 102, 201 and 202 by continuing to develop conversational fluency at a beginning advanced level. The focus is on interactive experiences with language structures, functions and vocabulary necessary for building narrative and conversational skills that enable efficient communication in ASL and deaf cultural contexts. Particular attention is given to development of visualization skills necessary for effective use of a visual-gestural language. The course also aims to expand students' range of cultural and personal topics of discussion and to use the target language in meaningful

and creative ways.

Prerequisite: ASL 202 with a "B" grade or higher.

Additional course fee: \$85.

#### ASL 232 Advanced American Sign Language II

2-2-1-3 Credit Hours: 3

This is the second of a two-part advanced ASL course sequence. Focus continues on interactive experiences with language structures, functions and vocabulary necessary for efficient communication in ASL and deaf cultural contexts. Particular attention is given to enhanced fluency in the use of ASL classifiers, non-manuals, role shift and spatial mapping within both conversational and more formal situations. Attention is also given to expanding the range of cultural and personal topics of discussion in meaningful and creative ways. Students apply ASL language skills in a field experience in the deaf community.

**Prerequisite:** ASL 231 with a "C" grade or higher.

Additional course fee: \$85.

# INT 105 Introduction to the American Deaf Community

3-0-3 Credit Hours: 3

This course provides a framework for understanding cultural and historical perspectives of the deaf community in America. Students will gain a deeper appreciation of in-group attitudes, values and beliefs of deaf people. They will study the American deaf community as a minority group with distinct social, linguistic and political norms. Topics covered include misconceptions in the hearing world about deaf people, in-group perspectives, organizations of and by deaf people, and history of the deaf community from ancient to modern times.

#### INT 106 American Deaf Culture

3-0-3 Credit Hours: 3

The study of the American deaf community and its culture from a sociological and intercultural point of view. Students will explore the meaning of culture, intercultural communication, American deaf and American hearing cultures, attitudes and prejudices toward the deaf community, diversity in deaf culture, communication access, as well as deaf art. literature and folklore.

Prerequisite: INT 105 with a "C" grade or higher.

# INT 240 Introduction to the Field of ASL/English Interpreting

3-0-1-3 Credit Hours: 3

Overview of both traditional and contemporary perspectives on interpretation and interpreters. Topics include history of interpreting, cognitive models of the interpreting process, factors influencing the interpreted interaction, settings for employment, professional ethics and the business of interpreting. Interpretation is studied as an intercultural, as well as an inter-lingual, process. Field observation to observe working interpreters on the job is a required part of this course.

Prerequisites: ASL 215, 230, 231, and INT 240 (pre- or corequisite) with a "C"grade or higher.

#### INT 242 Introduction to Interpreting Processes

2-2-3 Credit Hours: 3

An introduction to the cognitive processing skills that are components of the complex process of interpretation. Students perform exercises and activities that help develop the ability to translate and consecutively interpret texts in both ASL and English. Students are first introduced to individual processing skills which are later combined in the complex act of interpretation. Major skill areas developed include: visualization, shadowing, listening and comprehension, abstracting, structuring, paraphrasing, dual task, cloze and sight translation.

Prerequisites: ASL 215, 230, 231 with a "C" grade or higher and INT 240 (pre- or corequisite).

Additional course fee: \$85.

### INT 251 ASL/English Interpreting I

2-2-1-3 Credit Hours: 3

Prepares students for the processing skills needed to interpret between American Sign Language and English. Students learn discourse mapping, a systematic approach for analyzing texts to produce successful, effective interpretations. Students progress from working with familiar to unfamiliar texts, and from translation to consecutive interpreting to simultaneous interpreting. Students also learn to evaluate both their work and the work of others. A field experience in which students shadow working interpreters on the job is a required feature of this course.

Prerequisites: ASL 230, ASL 232, INT 240, INT 242 with a "C" grade or higher.

Additional course fee: \$85.

# INT 252 ASL/English Interpreting II

2-2-3 Credit Hours: 3

This second interpreting skills course builds upon information and skills learned in INT 251, with a focus on interactive interpretation and application of professional decision-

making. Students practice activities that are dialogic and interactive, in which deaf and hearing people interact and communicate with each other. Situational analysis, identification of features of conversational style, application of interpreting coping strategies and analysis of message equivalency will be applied to simulated practices and role plays.

Prerequisite: INT 251 with a "C" grade or higher.

Additional course fee: \$85.

#### **INT 255 Transliterating**

2-2-3 Credit Hours: 3

Transliteration between spoken and signed English messages, focusing on secondary and postsecondary educational settings. Course work includes analysis and interpretation of the macrostructure and microstructure of academic texts, translating frozen texts and the application of interpreter management strategies frequently used in educational settings. Students work with rehearsed and unrehearsed texts.

Prerequisite: INT 251 with a "C" grade or higher

Additional course fee: \$85.

# INT 260 Interpreting in Specialized Settings

3-0-1-3 Credit Hours: 3

This course allows students to learn best practices for interpreting in a variety of settings, including, but not limited to, legal, medical, mental health, deaf-blind, Deaf interpreting, performing arts, and vocational rehabilitation. Students will learn the requisite skills, knowledge and ethical considerations critical to working effectively in these unique situations. Field observation to observe working interpreters on the job is a required part of this course.

Prerequisite: INT 240 with a "C" grade or higher

# INT 297 Internship in Interpreting

3-0-10-4 Credit Hours: 4

This course offers students supervised practice in ASL/English interpretation in actual work situations. It is the final, integrative course of the ASL/English Interpreting program. Students are placed at a minimum of two different work situations during the semester and must complete a minimum of 120 hours of successful internship experience. At weekly seminars and individual meetings with the instructor, students address topics related to the profession of interpreting, discuss progress and skill development and explore career options.

Prerequisites: INT 252 and INT 255 with a "C" grade or higher.

# **Anthropology Courses**

# ANTH 101 Introduction to Anthropology

3-0-3 Credit Hours: 3

Survey of the four sub-fields of anthropology; cultural, physical and linguistic anthropology; and archaeology. Topics include ancient civilizations, evolution, "primitive" peoples, "talking" apes, how our early ancestors lived, language, races and how people in other societies are both different and similar.

Fulfills American/Global Diversity requirement.

# ANTH 112 Cultural Anthropology

3-0-3 Credit Hours: 3

Cultural Anthropology examines the nature of culture from the perspective of anthropology. The course is a survey of language, kinship, social structure, political organization, technology, economic systems, culture change, art and religion. It uses a cross-cultural approach, with examples from literate and non-literate societies of the world. Both economic and cultural globalization processes are examined.

Fulfills American/Global Diversity, Interpretive Studies, and Writing Intensive requirements.

# ANTH 124 Fundamentals of Archaeology

3-0-3 Credit Hours: 3

Fundamentals of Archaeology presents the study of archaeology as one of the major subfields of anthropology. Archaeology is the study of humans through the materials that they create and use. In this course, students will learn the theories and methods that archaeologists use to study the material culture remains of some ancient and some not so ancient societies, and they will study how archaeologists use these methods to interpret human behavior. Students will use a variety of strategies to investigate past societies from various parts of the world.

Fulfills American/Global Diversity and Interpretive Studies requirements.

#### ANTH 125 Physical Anthropology

3-0-3 Credit Hours: 3

Covers the biological side of human existence. Topics include race, the relationship between human biology and behavior, evolution, the evidence linking us to the "cavemen" or "ape-men," primates and their relationship to us, and the similarities and differences among modern peoples.

#### ANTH 202 Gender Roles in Cross-Cultural Perspective

3-0-3 Credit Hours: 3

This course examines perspectives on women, men and gender roles using the theories and methods of anthropology as a guide. It explores women's and men's roles in a variety of social institutions, including those of marriage and the family, education and socialization, the sexual division of labor, politics, religion and health care delivery. It also focuses on the ways that the categories of race, class, gender and sexual preference affect our view of the world and help to create our self perceptions. Examples are drawn from both American society and non-Western cultures.

Prerequisites: ENGL 101, plus one of the following: ANTH 101, ANTH 112 or SOC 101.

Fulfills American/Global Diversity and Interpretive Studies requirements.

# ANTH 211 African Peoples and Cultures

3-0-3 Credit Hours: 3

This course presents an anthropological approach to the societies of Africa that recognizes both the diversity of Africa and the unifying themes common to African cultures. Students will explore the African past, the impact of colonization, and the variety of family, economic, and political arrangements in contemporary African societies. African music, dance, oral literature and art will be investigated in both traditional and modern contexts. These varied course experiences will provide students with an integrated view of Africa today.

Prerequisite: Any social or behavioral science course.

Fulfills American/Global Diversity and Interpretive Studies requirements.

# ANTH 215 Peoples and Cultures of Asia

3-0-3 Credit Hours: 3

This course examines societies of Asia from the point of view of people who have lived there. Students will read firsthand accounts of life in three regions of Asia and study family

life and the working world in each society. They will also study art and politics as mediums of change in Asian societies. The course will include information on the archeology of early civilizations, readings in the classics of Chinese religion and attention to the influences of China on other regions of Asia. Students will examine the forces of change that affect the lives of Asian people today and the influences of Asian society and culture on the West.

Prerequisite: Any social or behavioral science course.

Fulfills American/Global Diversity and Interpretive Studies requirements.

# Applied Science and Engineering Technology Courses

# ASET 101: Science Technology and Public Policy

3-0-3 Credit Hours: 3

The purpose of ASET 101 is to provide scientific background at an introductory level in a range of areas where scientific and technological advancements have had a significant influence on society. The course will also explore how advances in science have fueled debates in society, and how debates in society have influenced the direction of scientific research and technological development. Students will explore current trends in various fields of science and technology, and consider how these fields may evolve in the future. **Prerequisites:** ENGL 098, ENGL 098 ESL, ENGL 098/108, ENGL 101/109 (CLC) or higher placement. Open to students at FNMT 017 level or higher, however, if students are at FNMT 017 level they must take FNMT 017 concurrently.

# ASET 110: Safety, Health and the Environment

3-0-3 Credit Hours: 3

This course provides students with an overview of safety, health and environmental regulations, and the potential hazards that can arise in the workplace. Major topics include the types of hazards, engineering and administrative controls, personal protective equipment, regulatory requirements and voluntary standards.

# ASET 130: Quality Control/Quality Assurance

3-0-3 Credit Hours: 3

Students become familiar with the role that quality plays in all aspects of both the manufacturing and service industries. Emphasis is on understanding how quality control is used in different manufacturing industries such as chemical technology, biotechnology, food processing and others. Discussions center on the application of globally recognized and industry wide standards including ISO 9001. Topics covered include an analysis of a Quality Assurance Manual, its relation to the Quality Management System (QMS) of an organization, and the statistical tools necessary for effective quality control/quality assurance. Specific illustrations in applied science are provided.

**Prerequisite:** FNMT 118 or MATH 118.

# Architecture, Design and Construction Courses

# ADC 101 Introduction to Design and Construction

3-0-3 Credit Hours: 3

This course introduces students to the fields of architecture, interior design, construction and related disciplines. Students learn basic terminology, and documentation standards and techniques. Significant factors influencing design and construction are explored, including historical precedents and design theory, interrelationships between working professionals, the financing of projects, ethical and social concerns, and physical and legal constraints. Selected current topics, such as sustainability, modular design and computer interface are discussed. This overview course provides students with a broad understanding of the design and construction fields. Students will learn contemporary methods for accessing and processing information about the design professions.

# ADC 103 CAD Basics

2-4-3 Credit Hours: 3

A general introduction to computer-assisted design. Students gain proficiency in the use of CAD software through creating architectural drawings. Students will learn the terminology, functions and principles of CAD operations as well as building documentation. Additionally, students will be introduced to advanced software for three-dimensional modeling, rendering and animation.

\*\*Additional course fee: \$135.\*\*

# ADC 109 Design Studio I

3-5-4 Credit Hours: 4

This studio course introduces students to basic design principles and the manual drawing techniques which are used to graphically convey visual/architectural ideas. Delineation is the means by which students will develop an understanding of the design process. Students will learn to work in both two- and three- dimensional media. *Additional course fee:* \$135.

#### ADC 112 Construction Materials and Detailing: Properties

3-0-3 Credit Hours: 3

This course introduces students to commonly employed construction materials, from those used in excavation and foundations through framing and roofing. Materials are studied in terms of their historical uses, composition, physical properties, manufacture and assembly, applications, regulatory constraints and sustainability. Basic terminology, principles and processes in design and construction, and factors that influence material selection and material assemblies are discussed. Construction details are examined and developed. Students learn about key issues including sustainable design, new technologies and materials and the importance of effective team collaboration.

**Prerequisites:** <u>ADC 103</u> or <u>ADC 109</u>

# ADC 136 Construction Safety and Building Codes

3-0-3 Credit Hours: 3

Students will learn about common construction worker safety procedures contained in OSHA regulations, lead safety procedures regulated by the EPA, and the national model building and energy conservation codes produced by the International Codes Council. The focus will be on the International Building Code (IBC), and the International Energy Conservation Code (IECC), as well as state and local adaptations of these. Requirements of the Americans with Disabilities Act (ADA) are also studied.

# ADC 146 Construction Supervision and Business Practices

3-0-3 Credit Hours: 3

In this course, students will study the organization and operations of a small construction firm, a unit within a larger construction firm, and a facility management department. Topics will include business organization and operations, finance and administration, marketing, code compliance, contract bidding, and construction risk management. Supervision and human relations skills needed by those in supervisory and leadership roles are also studied. Leadership skills and problem solving are emphasized.

Prerequisite: ADC 101.

# ADC 156 Alternative and Renewable Energy Systems

3-0-3 Credit Hours: 3

This course is an introduction to current research in and practical application of alternative and renewable energy technologies focusing on practical energy conversion to meet the constantly evolving demand for sustainable development. Established energy systems investigated in the course include wind turbines, solar thermal and photovoltaic (PV) systems, geothermal heat transfer, renewable biofuels and Building Automation Systems (BAS). Students learn to differentiate among alternative solutions that can replace conventional

energy systems and perform trials to explore the practical applications of alternative energy. Students use building energy modeling software and spreadsheets to analyze proposed alternative energy systems.

#### ADC 159 Design Studio II

3-5-4 Credit Hours: 4

This studio design course helps students master techniques used to develop and graphically convey architectural ideas, primarily using computer modeling. Students develop an understanding of the design process related to space through digital and manual delineation.

**Prerequisites:** ADC 103 and ADC 109.

Additional course fee: \$135.

#### ADC 160 Presentation Techniques

2-4-3 Credit Hours: 3

Introduction to materials and methods in the preparation of architectural presentations, drawings and models. Computer modeling and composition software will be introduced, and students will produce a portfolio with digital and manual pieces. Emphasis is placed on using technique and craftsmanship to make design intent clear and compelling.

**Prerequisites:** <u>ADC 103</u>, <u>ADC 109</u> Additional course fee: \$135.

# ADC 161 Introduction to Building Science

2-2-3 Credit Hours: 3

Students learn to perform traditional energy audits on buildings as well as comprehensive, whole-home assessments with diagnostic equipment. Students will learn to diagnose critical performance factors in buildings and increase the energy efficiency of the building and the comfort, health and safety of the building's occupants. Students learn to identify major energy related problems and prioritize solutions based on building science principles and cost-benefit analysis. Successful students will be prepared to sit for the Building Performance Institute's (BPI) Building Analyst (BA) Certification examination.

Prerequisite: ADC 101

### ADC 163 Digital Documentation in Architecture and Construction

2-4-3 Credit Hours: 3

An introduction to architectural construction documents, the process by which they are developed, and their use and function in the progression of design through construction. Students learn to use parametric software (such as Architectural Desktop) and industry-standard symbols, terminology and graphics in the development of a complete set of construction documents. Additionally, students learn to utilize and apply advanced software features to increase productivity and accuracy.

**Prerequisite:** <u>ADC 103</u>. *Additional course fee:* \$135.

# ADC 176 / HIST 176 Philadelphia History: Architecture and Planning

3-0-3 Credit Hours: 3

Students in this course will study Philadelphia's physical and social development from William Penn's initial founding through the 21st Century. The course will focus on interpretation of the city's physical design as an expression of social, demographic and political contexts, technological advances and new materials, and evolving construction techniques of each significant historical period. Students participate in field trips and other onsite experiences that take place in various sections of the city.

Fulfills American/Global Diversity, Interpretive Studies and Writing Intensive requirements

# ADC 186 Surveying

2-2-3 Credit Hours: 3

Basic course in site surveying as it applies to building construction. Emphasis is placed on skill development using the builder's level and transit and on computer-based applications for site design. Course work includes fieldwork exercises in measurement, differential leveling and topographic surveying.

Prerequisite: ADC 101.

Additional course fee: \$85.

# ADC 192: Color and Lighting

2-2-3 Credit Hours: 3

This course introduces students to the principles of color and light as they apply to interior design. Students will explore the theories of the physical aspects of color, using pigment, light and its application in spaces, as well as in controlling the interaction of colors. They will also examine the theories and concepts of light and lighting through technical measurement, visual observation, and lighting design technologies for fixtures and for rooms. Knowledge, thus acquired, will be applied to the selection and integration of color and lighting in interior design projects.

**Prerequisite:** <u>ADC 101</u>. *Additional course fee:* \$85.

3-5-4 Credit Hours: 4

Studio course devoted to the design of housing. Issues related to building context, urbanism and site and appropriate use of materials will be realized through a specific building/interiors program. Values of non-Western cultures relating to habitat will be incorporated into design work. Development of alternatives culminates in selection and detailed realization of a specific design and ends with a juried presentation.

Prerequisites: ADC 159 and ADC 160.

Additional course fee: \$135.

#### ADC 212 Construction Materials and Detailing: Methods

3-0-3 Credit Hours: 3

This course introduces students to a comprehensive range of construction materials, techniques and systems commonly employed in the construction and finishing of buildings and spaces, from interior finishes and treatments (including lighting, color and acoustics) through exterior cladding or enclosures. Materials are studied in terms of their composition, physical properties, manufacture and assembly, applications, regulatory constraints and sustainability.

Prerequisite: ADC 103 or ADC 109.

### ADC 221 History of Architecture and Interiors I

3-0-3 Credit Hours: 3

The course concentrates on the major historical movements and theoretical concepts which describe each period from pre-history through Baroque. Lectures will explore ways of interpreting built forms, sculpture and painting so that specific building projects can be understood in the context of the major issues that are central to each period. Extensive reading is required for the purpose of engaging in class discussions that will interpret both the concepts presented and the specific built forms discussed. Interior spaces and their connection to the concepts discussed will attempt to illuminate the relationship between the container and the contained.

Prerequisite: ENGL 101.

#### ADC 222 History of Architecture and Interiors II

3-0-3 Credit Hours: 3

This course follows the same format as ADC 221, but will concentrate on the modern world from the late 17th century through the present. Interior design will be explored in greater depth in order to respond to its emergence as an independent discipline. In addition to an expanded discussion of interior design, students will read original texts and treatises pertaining to the major theories presented. At this point students will be expected to demonstrate an ability to interpret both written and visual information presented in the course.

Prerequisites: ADC 221 and ENGL 102, which may be taken concurrently.

# ADC 226 Structures I — Analysis

3-0-3 Credit Hours: 3

Study of the principles of statics and strength of materials as they pertain to the design of statically determinant structures. Course work includes the concepts of unit stress, strain, deformation and moment of inertia. End reactions, shear and moment diagrams are developed for simple beams. Prerequisites: <u>ADC 101</u> and <u>FNMT 118</u> or MATH 118 or higher.

### ADC 227 Structures II — Design

3-0-3 Credit Hours: 3

Introduction to the means and methods employed in the design of structural members, including beams, columns, trusses and connections. Course work consists of structural applications for timber, steel and concrete.

Prerequisite: ADC 226.

# ADC 236 Construction Cost Estimating I

2-2-3 Credit Hours: 3

Introduction to quantification of building components including blueprint reading, take-offs and application of unit costs.

**Prerequisite:** <u>ADC 101</u>. *Additional course fee:* \$85.

# ADC 237 Construction Cost Estimating II — Computer Methods & Cost-Benefit Analysis

2-2-3 Credit Hours: 3

This is the second of two courses that cover the principles and practice of construction cost estimating. It builds on the first course (ADC 236), using computerized methods to produce the detailed cost estimates that contractors use to determine the cost of construction for commercial and residential projects. The course covers the role of estimating and bidding in the construction industry. It also introduces cost-benefit analysis, which encourages sustainability by determining the true cost and value of a building throughout its life. **Prerequisite:** ADC 236.

Additional course fee: \$85.

3-0-3 Credit Hours: 3

Study of the purposes, structure and provisions of contemporary construction industry contracts. Relationships among owners, architects and other design professionals, general and subcontractors, and vendors and suppliers are reviewed in detail. Students learn to adjust standard contract formats and specifications to tailor them for individual projects, according to C.S.I. procedure.

Prerequisite: ADC 101.

#### ADC 253 Environmental Systems I

3-0-3 Credit Hours: 3

An overview of environmental control systems used in modern buildings, focusing on mechanical, electrical, and plumbing systems. Students will gain a basic understanding of and foundation in these systems and their design. Through application and practice, students will learn the interrelationships between systems and approaches to integrating them into building design and construction.

Prerequisite: ADC 101 and ADC 103 or ADC 109.

# ADC 254 Environmental Systems II

3-0-3 Credit Hours: 3

Components and systems used to control the environment of modern buildings are studied, expanding student's knowledge of Mechanical, Electrical, and Plumbing (MEP) systems. Specialized building systems are also studied, including fire protection, vertical systems, signaling, and communication. Additionally, students will gain an understanding of specialized topics related to sustainability, including alternatives to traditional MEP systems. Students will become prepared for the LEED Green Associate Examination.

Prerequisite: ADC 101 and ADC 103 or ADC 109.

# ADC 259 Design Studio IV

3-5-4 Credit Hours: 4

Studio course devoted to the design of commercial and institutional projects. This studio introduces students to increased programmatic and contextual complexity. The socio-cultural, environmental and behavioral aspects of architectural and interior design are emphasized through an examination of public buildings, how they are used and how they are perceived. This design studio continues the development of the student sability to understand, interpret and represent architectural spaces. Projects will culminate in a formal juried presentation.

**Prerequisite:** <u>ADC 209</u>. *Additional course fee:* \$135.

# ADC 260 Advanced Presentation Techniques

2-2-3 Credit Hours: 3

This course assists students in preparing effective presentations of design and documentation work, both for transfer to baccalaureate programs and for career placement. Student portfolio needs will be individually evaluated and assessed with regard to professional and career goals. Students will learn skills necessary for the design, development and dissemination of digital portfolio presentations. Students will create professional development plans and job search materials and strategies.

Prerequisite: ADC 160

Pre- or corequisite: ADC 209 or ADC 163.

Additional course fee: \$85.

# ADC 261 Construction Management and Scheduling

3-0-3 Credit Hours: 3

This course is a thorough survey of the construction project management process from initial conception to completion. Topics include feasibility analysis, siting/staging issues, software application, personnel management, contractual procedures and job-site safety. Students will be introduced to basic contractor operations, project administration, job planning and Critical Path Method scheduling. After building a conceptual base, students will apply their scheduling knowledge to simulated projects. In this latter phase of the course students will use the most current and prevalent project planning software.

Prerequisite: ADC 246.

# ADC 263 Digital Animation and Rendering

2-4-3 Credit Hours: 3

Introduction of use of the microcomputer to create realistic three-dimensional presentations. Students will construct computerized models, apply materials, backgrounds and lighting, then apply animation techniques to create convincing depictions.

Prerequisite: ADC 103 or ART 150.

Additional course fee: \$135.

# ADC 273 Advanced CAD Applications

2-2-3 Credit Hours: 3

Students are introduced to contemporary innovations in Computer Assisted Design (CAD) software and apply the newest technological features in a comprehensive, faculty supervised CAD project that documents a building or an individual building system. Project components include: two- and three-dimensional drawings, a written and oral report, and a Web site.

**Prerequisite:** <u>ADC 163</u>. *Additional course fee:* \$85.

# ADC 286 Building Rehabilitation and Energy Retrofit

3-0-3 Credit Hours: 3

This course will examine three integrally related topics: 1) the re-development process by which existing building stock is rehabilitated, 2) construction issues specific to the rehabilitation of existing buildings and 3) energy retrofit, which includes sustainability and related strategies. ADC 286 will introduce students to a broad array of tools, including construction management techniques and methods, energy audits and retrofits as well as public and private financing options and project management relative to building rehabilitation for both small and large scale projects, especially in urban neighborhoods.

Prerequisite: <u>ADC 101</u>

# **Automotive Technology Courses**

# AT 100 Introduction to Automotive Technology

2-4-2 Credit Hours: 2

This course is an introduction to the field of automotive technology. It is designed to provide students with the skills and knowledge for success in the Automotive Technology program and the automotive industry. Topics include an overview of the current automotive field, as well as practice in modern automotive systems and shop procedures. *Additional course fee:* \$310.\*

# AT 111 Automotive Suspension and Steering Systems

3-4-4 Credit Hours: 4

Study of the fundamental theory, maintenance and repair of automobile steering and suspension systems. Emphasis is placed upon subject matter recommended by industry through the National Automotive Technicians Education Foundation (NATEF). This course is designed to help prepare students for the Automotive Service Excellence (ASE) certification exam in group 4: Steering and Suspension. It incorporates substantial hands-on training with both demonstrator units and customer vehicles in the Automotive Technology Center. **Prerequisite:** AT 100, which may be taken concurrently.

Fall only.

Additional course fee: \$155.\*

# AT 121 Principles of Automotive Electricity and Electronics

2-4-3 Credit Hours: 3

This course is a study of the fundamental theory and applications of electrical and electronic principles in the automotive industry. Emphasis is placed on subject matter recommended by the industry through the National Automotive Technicians Educational Foundation (NATEF). This course, in conjunction with AT 221 is designed to help prepare students for the Automotive Service Excellence (ASE) exam in group 6: Electrical and Electronic Systems, and incorporates substantial hands-on training with both demonstrator units and customer vehicles utilizing state-of-the-art electronic text equipment in the Automotive Technology Center.

**Prerequisite:** AT 100, which may be taken concurrently.

Additional course fee: \$155.\*

# AT 131 Automotive Manual Transmissions and Drivelines

3-4-4 Credit Hours: 4

Study of the fundamental design, theory, maintenance and repair of manual transmissions, manual transaxles, driveline couplings and differentials. Emphasis is placed upon subject matter recommended by industry through the National Automotive Technicians Education Foundation (NATEF). This course is designed to help prepare students for the Automotive Service Excellence (ASE) certification exam in group 3: Manual Drive Train and Axles. This course is a prerequisite for AT 241: Automatic Transmissions and Transaxles, and incorporates substantial hands- on training with both demonstrator units and customer vehicles utilizing state-of-the-art equipment in the Automotive Technology Center. **Prerequisite:** AT 100, which may be taken concurrently.

Fall only.

Additional course fee: \$155.\*

### AT 150 Automotive Braking Systems

1-4-2 Credit Hours: 2

Study of the fundamental design, theory, maintenance and repair of the hydraulic braking system. Emphasis is placed upon subject matter recommended by industry through the National Automotive Technicians Education Foundation (NATEF). This course (along with AT 250) is designed to help prepare students for the Automotive Service Excellence (ASE) certification exam in group 5: Brakes. This course is a prerequisite for AT 250: Advanced Braking Systems and Controls. It incorporates substantial hands-on training with both demonstrator units and customer vehicles utilizing state-of-the-art equipment in the Automotive Technology Center.

**Prerequisite:** AT 100, which may be taken concurrently.

Additional course fee: \$155.\*

# AT 181 Automotive Engine Mechanical Repair

3-4-4 Credit Hours: 4

Study of the fundamental theory and repair of automotive gasoline engines. Emphasis is placed upon subject matter recommended by industry through the National Automotive Technicians Education Foundation (NATEF). This course is designed to help prepare students for the Automotive Service Excellence (ASE) certification exam in group 1: Engine

Repair. Course incorporates disassembly, inspection, machining and rebuilding of an actual engine in the Automotive Technology Center.

**Prerequisite:** AT 100, which may be taken concurrently.

Additional course fee: \$155.\*

## AT 210 Customer Service Techniques

3-0-3 Credit Hours: 3

This course is designed for individuals who want to work in the automotive field. It examines the complexities of customer service in the automotive repair industry, whether in an independent repair facility, an automotive manufacturer, a franchise, or a private or public fleet.

Prerequisites: AT 121

#### AT 221 Advanced Automotive Electrical Systems

3-4-4 Credit Hours: 4

Study of the advanced theory, diagnostics and repair of automotive electrical and electronic systems, emphasizing computerized controls, hybrid, alternative fuels, electric vehicles and industry-specific vehicles that have these advanced technologies. Emphasis is placed upon subject matter recommended by industry through the National Automotive Technicians Education Foundation (NATEF). This course is designed to help prepare students for the Automotive Service Excellence (ASE) certification exam in group 6: Electrical and Electronic Systems.

Prerequisite: AT 121.

Corequisite: FNMT 118 or higher (may be taken concurrently.)

Summer II only.

Additional course fee: \$155.\*

#### AT 241 Automotive Transmissions and Transaxles

2-8-4 Credit Hours: 4

Study of the fundamental theory, maintenance and repair of the automatic transmissions and transaxles, including electronic controls. Emphasis is placed upon subject matter recommended by industry through the National Automotive Technicians Education Foundation (NATEF). This course is designed to help prepare students for the Automotive Service Excellence (ASE) certification exam in group 2: Automatic Transmission and Transaxles. This course incorporates substantial hands-on training. Students will disassemble, inspect, repair and reassemble an automatic transmission. Diagnostic testing will include usage of a state-of-the-art dynamometer in the Automotive Technology Center.

Prerequisites: AT 121 and AT 131.

Spring only.

Additional course fee: \$175.\*

## AT 250 Advanced Braking Systems and Controls

1-4-2 Credit Hours: 2

Advanced, continuing study of the automotive braking system, concentrating on system controls such as anti-lock braking systems (ABS). Emphasis is placed upon subject matter recommended by industry through the National Automotive Technicians Education Foundation (NATEF). This course (along with AT 150) is designed to help prepare students for the Automotive Service Excellence (ASE) certification exam in group 5: Brakes. This course incorporates substantial hands-on training with both demonstrator units and customer vehicles utilizing state-of-the-art equipment in the Automotive Technology Center.

Prerequisites: AT 121 and AT 150.

Spring only.

Additional course fee: \$155.\*

#### AT 261 Engine Performance and Diagnosis

2-8-4 Credit Hours: 4

Study of the fundamental theory, maintenance and repair of automotive fuel, ignition and emission control systems. Emphasis is placed upon subject matter recommended by industry through the National Automotive Technicians Education Foundation (NATEF). This course is designed in conjunction with AT 281 to help prepare students for the Automotive Service Excellence (ASE) certification exam in group 8: Engine Performance. This course incorporates substantial hands-on training utilizing state-of-the-art diagnostic equipment in the Automotive Technology Center.

Prerequisites: AT 221 (may be taken concurrently) and FNMT 118 or MATH 118, which may be taken concurrently.

Spring only.

Additional course fee: \$175.\*

#### AT 271 Air Conditioning and Heating Systems

2-4-3 Credit Hours: 3

Study of the fundamental theory, maintenance and repair of automobile air conditioning and heating systems. Emphasis is placed upon subject matter recommended by industry through the National Automotive Technicians Education Foundation (NATEF). This course is designed to prepare students for the Automotive Service Excellence (ASE) certification exam in group 7: Heating and Air Conditioning. This course incorporates substantial hands-on training with both demonstrator units and customer vehicles in the Automotive Technology Center. Topical coverage includes both R12 and R134a systems.

Prerequisite: AT 121.

Spring only.

Additional course fee: \$155.\*

## AT 281 Advanced Automotive Engine Performance

2-8-4 Credit Hours: 4

Advanced study of the fundamental theory, maintenance and repair of basic automotive fuel, ignition, emission control systems and alternative fuel vehicle systems. Emphasis is placed upon subject matter recommended by industry through the National Automotive Technicians Education Foundation (NATEF). This course is designed in conjunction with AT 261 to help prepare students for the Automotive Service Excellence (ASE) certification exam in group 8: Engine Performance.

**Prerequisites:** <u>AT 221</u> and <u>AT 261</u> *Additional course fee:* \$175.\*

## AT 289 Automotive Technology Internship

0-20-2 Credit Hours: 2

This elective course provides students with an opportunity to apply what they have learned in the classroom to a real world situation. Under the direction of an experienced automotive technician, the student will gain a greater appreciation of the material previously learned in the classroom. The internship additionally serves the purpose of bridging the school and work world. Students complete a minimum of 280 hours at an assigned work placement over 14 weeks.

Prerequisites: AT 111, AT 121, AT 181, AT 250, AT 261, AT 271 and department head approval.

## Behavioral Health/Human Services Courses

NOTE: Courses marked with an asterisk (\*) are open only to BHHS students.

#### BHHS 101 Introduction to Behavioral Health and Human Services

3-0-3 Credit Hours: 3

This course introduces students to the field of Behavioral Health and Human Services. In this course, students gain an understanding of the historical underpinnings of the field. Students are also introduced to the work of the human service provider and the milieu in which client services are provided. An exploration of ethics, values and self-understanding as these apply to the human services worker also comprises an important element of the course. An overview of research methods is included as well.

#### BHHS 103 Human Development and Behavior in the Social Environment

3-0-3 Credit Hours: 3

The purpose of this course is to provide students with a perspective on human behavior and development that deepens an understanding of their own behavior and that of the clients with whom they interact. Behavior will be examined through the Life Course Perspective by looking at how life stages, life events, and cultural differences operate within a biological, psychological, and social framework, shaping people's lives from conception to death. Students will also become familiar with assessment approaches used by Human Service workers when helping clients within their developmental contexts.

Prerequisite: ENGL 101.

Fulfills American/Global Diversity and Writing Intensive requirements.

#### BHHS 105 Introduction to Group Dynamics

3-0-3 Credit Hours: 3

Course presents different theories on the functioning of small face-to-face groups. Concepts such as norms, goals, leadership, cohesion, membership and decision-making will be explained. Students will practice observation skills so that they can diagnose a group. Each student also will have an opportunity to lead a group, exercising these observation skills. Open to all students.

#### BHHS 106 Analysis of Group Participation\*

3-0-3 Credit Hours: 3

Students will participate as members of a small ongoing group. They will use the theory and concepts from Introduction to Group Dynamics and apply them to their own interactions. The emphasis will be on how groups influence the individual and how the individual, in turn, influences the group. Personal communication skills should be enhanced. **Prerequisite:** "C" grade or better in BHHS 105.

## BHHS 111 Introduction to Helping Skills

3-0-3 Credit Hours: 3

Learning and application of basic and advanced interpersonal skills, as well as the ability to establish working relationships with individuals that help clients identify, explore and develop action plans. BHHS students must satisfactorily complete this course with a "C" grade or higher before taking practica and other higher level courses.

Prerequisite: BHHS 101, which may be taken concurrently.

#### BHHS 121 Foundations of Addiction Studies

3-0-3 Credit Hours: 3

The biopsychosocial aspects of various addictive behavior will be examined. This will include the pharmacology of addictive substances, the physiological effects on the user, the psychological consequences of use, and the sociological conditions that cause and result from substance abuse. A brief history of drug and alcohol abuse will be introduced, along with various treatment approaches to addictions.

#### BHHS 131 Faith and Spirituality in Human Services

3-0-3 Credit Hours: 3

This course integrates secular helping skills with faith-based healing practices in human services. Students will gain an understanding of community empowerment models of recovery and their interaction with faith and spiritual beliefs. The course explores issues of cultural competence, ethical practice and helping/healing relationships. Human services practices are discussed in the context of systems that promote recovery and resilience. The course concludes with a description of alternative healing resources that support optimal living.

3-0-3 Credit Hours: 3

This course will explore the causes and effects of family violence and appropriate professional response.

#### BHHS 161 Introduction to Disability Studies

3-0-3 Credit Hours: 3

This course is designed for students who are preparing to or currently work in the field of disability services, which includes services to those with developmental, intellectual and physical disabilities. It provides students with the opportunity to develop an understanding and knowledge of disability services that takes into consideration the individual with a disability, societal influences, the environmental setting and disability law. Students will learn to employ recovery-centered planning and life skills training to support self-advocacy, productivity and inclusion of persons with disabilities in family, community and vocational settings. The role of the disability support provider, types of services and the manner in which services are delivered are also examined in this course.

## BHHS 171 Introduction to Social Gerontology

3-0-3 Credit Hours: 3

Survey course on issues affecting older adults. Among the topics are myths and realities, family, physical and mental health and health care, dying and death, minority status and retirement.

Open to all students.

#### BHHS 194 Case Management Practice\*

3-0-3 Credit Hours: 3

Students are introduced to the concept of case management within the context of human service delivery. They develop observation, problem-solving, recording and relationship building skills through the exploration of the case management process which includes client engagement and assessment, interview techniques and collection of client information. Students learn how to plan and develop a case file, refer clients for services, monitor the service coordination process and terminate a case. They also explore professional responsibility and cultural diversity in the context of case management practice.

Prerequisite: BHHS 111 with a "C" grade or better.

#### BHHS 195 Practicum in Behavioral Health/Human Services I\*

3-12-3 Credit Hours: 3

This is the first of two practicum courses in which students work directly with clients. Students spend 12 hours per week (156 hours per semester) in a field placement related to their area of interest. In addition, during class time they discuss field experiences and present a case related to a client and/or agency.

**Prerequisite:** BHHS 111 with a "C" grade or better.

#### BHHS 212 Resolution-Focused Helping Skills\*

3-0-3 Credit Hours: 3

BHHS 212 introduces students to the values, concepts, vocabulary, knowledge base and practice skills of time-sensitive approaches to helping relationships. The cultural and historical factors that have shaped time-limited approaches to treatment are emphasized. The course addresses how people change, extra-therapeutic factors and clinician-specific variables that predict successful outcomes in helping relationships. Motivational interviewing and resolution-focused models of helping are introduced and specific skill sets are practiced through role-plays, supervision, and audio and video recording. Students learn to work with individuals of varying ages and abilities in a variety of behavioral health settings and with groups using skills sets such as assessing readiness, identifying key challenges, establishing goals and taking specific action steps. This course is a continuation of BHHS 111, Introduction to Helping Skills.

Prerequisite: BHHS 111 with a "C" grade or better.

Corequisite: BHHS 213, which must be taken concurrently.

#### BHHS 213 Practicum in Behavioral Health/Human Services II\*

3-12-3 Credit Hours: 3

This is the second of two practicum courses in which students work directly with clients. Students spend 12 hours per week (156 hours per semester) in a field placement. During class time, students develop the ability to make meaningful connections between direct practice experience and classroom knowledge especially as it relates to utilizing resolution-focused helping skills, increasing competence at managing personal responses to client issues and developing skills related to professional identity.

Prerequisite: BHHS 195 with a "C" grade or better.

Corequisite: BHHS 212.

## BHHS 222 Assessment and Service Planning in Recovery

3-0-3 Credit Hours: 3

counseling techniques, case management, extended recovery and a person first approach to assessment issues, professional responsibility and proper ethical practice. Special populations such as dually diagnosed (co-occurring disorders) individuals and HIV substance abusers will be discussed. The course compares the traditional medical model and the community based social model of recovery.

Prerequisite: BHHS 121.

#### **BHHS 241 Crisis Intervention**

3-0-3 Credit Hours: 3

Prepares students to give immediate help to people experiencing crises. Applies a short-term crisis intervention model for assessing and helping persons regain equilibrium during these crisis experiences. Simulations and role-playing activities are used to model crisis intervention with situations such as: post-traumatic stress disorder, suicide, sexual assault, partner battering, addictions and personal loss.

#### BHHS 293 Family and Relationship Counseling\*

3-0-3 Credit Hours: 3

This course focuses on counseling skills necessary to work with families and couples from a systems approach. Students will have an opportunity to practice the skills they learned in BHHS 111. They will apply those skills to relationships, including families and couples. In addition, class time will be devoted to learning about multicultural and diversity issues involved in working with families.

Prerequisite: BHHS 111 with a "C" grade or better.

## **Biology Courses**

**NOTE:** Prerequisites and transfer courses must be no older than 10 years and must have been passed with a grade of "C" or better. All biology courses require ENGL 101 placement.

#### **BIOL 104 Forensic Biology**

3-2-4 Credit Hours: 4

This is an introductory course in the field of forensic science with a focus on forensic biology. Little or no prior knowledge of science is required; lectures and assigned readings will supply enough background information to enable the student to understand topics and techniques used in forensic science. This course will cover several disciplines within forensic biology and expose the student to the breadth of the field of forensic science. In doing so, students will gain a basic understanding of the capabilities and limitations of the forensic sciences as they are presently practiced in the field.

**Prerequisites:** FNMT 118 or MATH 118 (or higher) placement.

Additional course fee: \$175.

#### BIOL 106 General Biology I

3-2-4 Credit Hours: 4

Introduction to the general principles of biology using the human organism as the model for study. Topics include structural organization, metabolism and energy, reproduction and inheritance, and evolution and ecology. This course is designed for non-majors, health career and transfer students.

\*\*Additional course fee: \$175.\*\*

#### BIOL 107 General Biology II

3-2-4 Credit Hours: 4

This course is designed to provide students with an understanding of the diversity of plant and animal life, and animal behavior. This is the second of two courses in the General Biology series. These courses are designed for the non-biology major.

**Prerequisite:** BIOL 106 with a "C" or better.

Additional course fee: \$175.

#### BIOL 108 Essentials of Human Anatomy and Physiology

3-2-4 Credit Hours: 4

The purpose of this course is to provide students with a comprehensive one semester course on the structure and function of the human body. Basic anatomy and physiology of all major organ systems will be covered in lecture and laboratory settings. Lab includes dissection demonstrations by course instructor.

Prerequisite: FNMT 118 or MATH 118 (or higher) placement.

Additional course fee: \$175.

#### BIOL 109-110 Anatomy and Physiology I & II

3-2-4 Credit Hours: 4

Human physiology and biochemistry are studied systematically in lectures while anatomy is stressed in laboratory experiences requiring extensive dissection. This two semester sequence follows the recommendations of the Human Anatomy and Physiology Society. BIOL 109 is designed for students who have had high school biology and chemistry within 10 years or who have passed BIOL 106. BIOL 109 with a "C" or better is a prerequisite for BIOL 110. Additional course fee (BIOL 109 and BIOL 110): \$175.

#### BIOL 123 Principles of Biology I

3-2-4 Credit Hours: 4

Designed for majors in the sciences and students interested in careers in science and technology, this course is an introduction to the fundamentals of modern cellular and molecular biology.

Prerequisites: CHEM 121 or CHEM 110 with a "C" or better and high school biology or permission of the department head.

Additional course fee: \$175.

#### **BIOL 124 Principles of Biology II**

3-2-4 Credit Hours: 4

This course explores the major groups of organisms with an emphasis on plant and animal structural, functional, ecological and evolutionary themes. Dissection required. **Prerequisite:**BIOL 123 with a "C" or better.

Additional course fee: \$175.

#### **BIOL 211 Genetics**

3-2-4 Credit Hours: 4

Basic principles of genetics using biochemical and molecular models are presented in lecture and laboratory experience. Collection and statistical analysis of data are an integral part of laboratory.

Prerequisite: BIOL 106 or BIOL 108 or BIOL 109 or BIOL 123 with a "C" or better or permission of the department head.

Additional course fee: \$175.

#### **BIOL 241 Principles of Microbiology**

3-2-4 Credit Hours: 4

Bacteria and viruses are studied. An emphasis is placed on the identification, metabolism, physiology and genetics of bacteria and viruses in lecture and laboratory experiences. Clinical aspects of selected microbes are discussed.

Prerequisite: BIOL 106 or BIOL 108 or BIOL 109 or BIOL 123 with a "C" or better.

Additional course fee: \$175.

### BIOL 255 Biotechnology I: Basic Laboratory Techniques in Biotechnology

2-4-4 Credit Hours: 4

This course focuses on foundation knowledge and lab competencies that are critical to success in the biotechnology industry. Learning to perform lab functions, such as making solutions, performing serial dilutions, making buffers, balancing pH, performing gel electrophoresis, and packing liquid chromatography columns, requires that students develop an understanding of the concepts and mathematics involved, practice the procedures, and demonstrate the competency to execute them.

**Prerequisites:** FNMT 118 or MATH 118 or higher with a "C" or better, or MATH 161 placement; CHEM 110 or CHEM 121; BIOL 123 or BIOL 241 with a "C" or better. Additional course fee: \$175.

#### BIOL 256 Fermentation, Bioprocessing and Biomanufacturing

2-4-4 Credit Hours: 4

This course is primarily project-based. Working in teams, students use fermentation and bioprocessing technologies to produce recombinant proteins in a biomanufacturing industry setting. They are expected to follow standard operating procedures (SOPs), utilize aseptic technique, properly document their activities and apply current good manufacturing practice (cGMP). They need to work effectively in their teams and demonstrate good time management. Students draw upon essential knowledge and skills developed in <u>BIOL 255</u> to complete projects.

Prerequisite: BIOL 255 with a grade of "C" or better.

Additional course fee: \$175.

## BIOL 271 Pathophysiology I

4-0-0-4 Credit Hours: 4

Pathophysiology I offers an overview of abnormal physiological processes leading to human disease. Particular emphasis is placed on the etiology, pathogenesis, diagnostic findings, and clinical manifestations of specified illnesses. Also included are general overviews of risk factors, disease incidences and therapeutic managements as they apply to each pathophysiological condition discussed.

**Prerequisites:** BIOL 110 and BIOL 241 with a "C" or better.

#### BIOL 272 Pathophysiology II

4-0-0-4 Credit Hours: 4

This course provides an overview of abnormal physiological processes leading to human disease. Particular emphasis is placed on the etiology, pathogenesis, diagnostic findings and clinical manifestations of specified illnesses. Also included are general overviews of risk factors, disease incidences and therapeutic managements as they apply to each pathophysiological condition discussed. Topics covered in this course include alterations in hematology, and diseases of the cardio-vascular, respiratory, digestive, urinary and reproductive systems.

Prerequisites: BIOL 271 with a "C" or better.

## BIOL 281 Biochemistry I

3-2-4 Credit Hours: 3

Biochemistry I introduces students to the concepts of modern biochemistry. It focuses primarily on the structure and function of proteins and nucleic acids. Emphasis is placed on enzyme mechanics, kinetics and regulation and concludes with a study of gene expression. The course is designed for students interested in pursuing further study in a science, medical or pharmacology field.

**Prerequisites:** CHEM 221, which may be taken concurrently, and BIOL 123 with a "C" or better. Additional course fee: \$175.

## Biomedical Equipment Technology Courses

## BMET 101 Biomedical Equipment Technology I

3-2-4 Credit Hours: 4

This course will provide students with an overview of the role of the Biomedical Equipment Technician and the role of Biomedical Engineering departments in hospitals and the hospital environment in general. Students will learn basic theory of operation, function and clinical application of a range of medical devices, such as infusion pumps, heart monitors, blood pressure monitors, pulse oximeters, suction devices, and centrifuges and how to test these devices for proper operation.

**Prerequisite:** BIOL 108 or BIOL 110 (either may be taken concurrently.)

Additional course fee: \$105.

## BMET 102 Biomedical Equipment Technology II

3-2-4 Credit Hours: 4

This course builds on BMET 101 and further explores healthcare technology management. In addition, the course introduces students to computerized equipment control and record keeping. Safety issues will be covered in relation to both patient safety and the safety of Biomedical Equipment Technicians (BMETs). The course will build on basic theory of operation, function, clinical application and operation testing of a range of medical devices started in BMET 101, providing greater depth in equipment already covered and expanding the range of devices students will learn about.

Prerequisites: BMET 101 with a 'C' or better and ELEC 120, may be taken concurrently.

Additional course fee: \$105.

## BMET 103 Biomedical Equipment Technology Internship I

0-0-14-1

Credit Hours: 1

This course consists of 200 hours of supervised field experience with a hospital Biomedical or Clinical Engineering Department or hospital-based Independent Service Organization. Students will carry out inspections of basic medical devices and maintain records as required by the work site, under the supervision of an experienced Biomedical Equipment Technician or Clinical Engineer. The course provides students the opportunity to learn about professionalism in the workplace. Internship sites may have specific requirements for participation, such as vaccinations, background checks, drug screening, and so on. Students who do not meet these requirements may not be able to participate in an internship

Prerequisites: BMET 102 with a "'C" or better and FNMT 118 or higher.

Additional course fee: \$85.

## **BMET 201 Medical Devices**

3-2-4 Credit Hours: 4

This course provides an in-depth look at the theory and operation of patient monitoring equipment and introduces other more complex medical devices, such as ventilators and dialysis machines. Upon completion of the course students, will be prepared to carry out basic troubleshooting procedures on a variety of medical devices.

**Prerequisite:** BMET 103 with a "C" or better.

Additional course fee: \$105.

#### BMET 202 Medical Devices in a Networked Environment

3-2-4 Credit Hours: 4

This course will emphasize the use of medical devices on wired and wireless networks. Upon completion of the course, students will be able to connect medical devices to a network, update medical device software, and communicate effectively with IT specialists regarding network problems.

Prerequisites: BMET 201, ELEC 130, CIS 105 and CIS 150 (with a "C" or better in all four courses).

Additional course fee: \$105.

## BMET 203 Biomedical Equipment Technology Internship II

0-2-14-3

Credit Hours: 3

This course consists of 200 hours of supervised field experience with a hospital Biomedical or Clinical Engineering Department or hospital-based Independent Service Organization. Students will be expected to demonstrate competency in the inspection and repair of medical equipment, proficiency in the use of medical device inventory software, and the ability to communicate professionally with clinical staff. Internship sites may have specific requirements for participation, such as vaccinations, background checks, drug screening, and so on. Students who do not meet these requirements may not be able to participate in an internship.

Prerequisites: BMET 202 with a grade "C" or better.

Additional course fee: \$85.

## **Biomedical Technician Training Courses**

BTT 101 Biomedical Technician Training Practicum

0-0-35-3

Credit Hours: 3

Hands-on experience with data record keeping, laboratory tasks and routines, and the use and maintenance of lab equipment and reagents. Includes 35 hours per week of in-depth skills training in various resource laboratories at The Wistar Institute or a comparable research laboratory.

Prerequisite: Permission of the Biomedical Training academic coordinator and completion of the Orientation to Biomedical Technology.

## **Business Courses**

## **BUSL 101 Navigating Leadership and Business Professions**

3-0-3 Credit Hours: 3

This course introduces first-year students in business and professional programs and related fields to success strategies for self-leadership and college-level academic inquiry, including career planning, problem solving, critical thinking, communication, cultural competence, working within teams, and institutional knowledge. Students create a comprehensive personal leadership plan, including academic, financial, and career/transfer components. Business students are required to enroll in BUSL 101 within the first twelve credits.

## **Chemistry Courses**

## CHEM 101 General Chemistry I

3-3-4 Credit Hours: 4

A fundamental course for non-science majors requiring a laboratory science. Does not satisfy the requirements for Biology, Chemistry or Engineering program students who should take CHEM 121-122. Topics covered include measurement; elements and compounds; properties of matter; early atomic theory and structure; nomenclature of inorganic compounds; quantitative composition of compounds; chemical equations and calculations; modern atomic theory and the periodic table; chemical bonds; the gaseous state of matter; liquids; chemical equilibrium; oxidation-reduction. Laboratory covers basic techniques and illustrates principles presented in class.

\*\*Additional course fee: \$260.

#### CHEM 102 General Chemistry II

3-3-4 Credit Hours: 4

A continuation of CHEM 101. A fundamental course for non-science majors requiring a laboratory science. Does not satisfy the requirements for Biology, Chemistry or Engineering program students who should take CHEM 121-122. Topics covered include water and solutions; acids & bases; introduction to organic chemistry; alkanes; unsaturated hydrocarbons; lipids; carbohydrates; amino acids; nucleic acids. Laboratory covers basic techniques and illustrates principles presented in class.

Additional course fee: \$260.

### CHEM 103 General Chemistry I

**Prerequisite:** CHEM 101 or CHEM 110 with a grade of "C" or better.

3-0-3 Credit Hours: 3

A fundamental course for non-science majors without a laboratory component. Lecture content is the same as CHEM 101 (see the course description under CHEM 101). This is offered only as a distance education course. Students who require a laboratory should take CHEM 101.

#### CHEM 104 General Chemistry II

3-0-3 Credit Hours: 3

A continuation of CHEM 103. A fundamental course for non-science majors without a laboratory component. Lecture content is the same as CHEM 102 (see the course description under CHEM 102). This is offered only as a distance education course. Students who require a laboratory should take CHEM 102.

Prerequisite for CHEM 104: CHEM 103 or CHEM 101 or CHEM 110, with a grade of "C" or better.

## CHEM 105 Inquiry into Chemistry

3-3-4 Credit Hours: 4

This is a one semester introductory chemistry course with laboratory. The topics will include the history of chemistry, the periodic table, bonding, the mole, energy, gases, acid-base-salt and water. The course will emphasize a discovery approach in which the student will learn to interpret laboratory observations in the manner of a real world scientist. The experiments will be less prescribed and more open to interpretation with the goal of appreciating chemistry more as a rational field of inquiry than as a fixed set of rules. The course is particularly appropriate for Liberal Arts and Education majors. Offered only in the fall and spring semesters.

Prerequisite: ENGL 101 ready.

Fulfills Writing Intensive requirement.

Additional course fee: \$260.

## CHEM 110 Introductory Chemistry

3-3-4 Credit Hours: 4

Fundamental laws and theories of chemistry. Metric system, introduction to matter, atomic structure, chemical bonding, periodic table, chemical reactions and equations, gases, solutions, pH and introductory organic chemistry. Scientific notation, the use of conversion factors and problem-solving are stressed. A laboratory science course for Allied Health students and Fire Science students, as well as students who need additional preparation prior to taking CHEM 121-122.

Prerequisites: FNMT 118 or MATH 118 placement and ENGL 101 ready.

Additional course fee: \$260.

### CHEM 118 Introduction to Biochemistry

3-3-4 Credit Hours: 4

Introduction to the chemistry of biological systems. Emphasis is placed on biologically important chemical compounds, such as proteins, carbohydrates, lipids, enzymes, hormones, vitamins and their reaction mechanisms in living organisms. Energy transformations in the cell, the structure and function of nucleic acids, drugs, radiation in human life and an introduction to nutrition and food additives are also included. Laboratory experiments cover important reactions of biochemical compounds. Designed for Allied Health students.

Prerequisites: CHEM 101, CHEM 110 or CHEM 121 with a grade of "C" or better.

Additional course fee: \$260.

### CHEM 120 Chemistry Laboratory

0-3-1 Credit Hours: 1

This course is intended to provide a laboratory experience for those students who have successfully completed a Chemistry lecture course (as verified by transcript) without a simultaneous laboratory experience. The course consists of laboratory experiments designed to supplement and enhance the content of the associated three credit hour Chemistry lecture course.

**Prerequisite:** CHEM 103 or CHEM 104 with a grade of "C" or better, or a CHEM lecture course from a transfer institution with a grade of "C" or better; permission of the department head.

Additional course fee: \$115.

#### CHEM 121 College Chemistry I

3-3-4 Credit Hours: 4

A transfer level chemistry course for Biology, Chemistry, Engineering and pre-professional program students requiring a laboratory science. Topics covered include matter, measurement, and problem solving; atoms and elements; molecules, compounds, and chemical reactions; chemical quantities and aqueous reactions; gases; thermochemistry; the quantum-mechanical model of the atom; periodic properties of the elements; chemical bonding (the Lewis model & molecular shapes), valence bond theory, and molecular orbital theory; liquids, solids, and intermolecular forces. Laboratory experiments demonstrate many of the principles presented in lecture and allow students to practice basic laboratory techniques, careful observation and the rigorous treatment of experimental data.

Prerequisites: CHEM 110 with a "C" or better and FNMT 118 or MATH 118.

Additional course fee: \$260.

#### CHEM 122 College Chemistry II

3-3-4 Credit Hours: 4

A continuation of CHEM 121. A transfer level chemistry course for Science, Engineering, pre-professional and Chemical Technology program students requiring a laboratory science. Topics covered include solutions; thermodynamics; kinetics; equilibrium in gaseous systems; acid-base equilibrium; solubility equilibrium; redox reactions; electrochemistry. Laboratory experiments demonstrate many of the principles presented in lecture and allow students to continue to practice basic laboratory techniques, careful observation and the rigorous treatment of experimental data.

Prerequisites: CHEM 121 with grade of "C" or better.

Additional course fee: \$260.

## CHEM 203 Basic Pharmacology

3-0-3 Credit Hours: 3

Introduces students to the science of pharmacology. Emphasis is placed on the mechanisms of action for selected drugs from each pharmacological class, their therapeutic value, adverse reactions, pharmacodynamics, routes of administration, metabolism and excretion as they are related to specific disease processes. Provisions of U.S. drug law and enforcement agencies are reviewed.

Prerequisite: BIOL 110.

## CHEM 214 Chemical Analysis

3-4-5

Credit Hours: 5

This course presents the theory and application of qualitative and quantitative analysis, with an emphasis on quantitative methods. The course includes laboratory work in which students will gain hands-on experience with analytical methods and instrumentation.

Prerequisite: CHEM 122 with a grade of "C" or better and MATH 162 with a grade of "C" or better.

Only offered in the spring semester.

Additional course fee: \$260.

#### CHEM 221 Organic Chemistry I

3-4-5 Credit Hours: 5

An upper level organic chemistry course for Biology, Chemistry, Engineering and pre-professional program students requiring one or more semesters of organic chemistry. Topics covered include structure, synthesis, reactivity and stereochemistry of organic compounds (especially alkanes, cycloalkanes, alkyl halides, alkenes, cycloalkenes and alkynes); free radical substitution, nucleophilic substitution, elimination, ionic addition and free radical addition reactions; principles of organic spectroscopy; stereochemistry; introductory kinetics and reaction mechanisms. Substances representative of the various classes of organic compounds are prepared and analyzed in the laboratory.

**Prerequisites:** CHEM 122 with a grade of "C" or better.

Additional course fee: \$260.

## CHEM 222 Organic Chemistry II

3-4-5 Credit Hours: 5

A continuation of CHEM 221. An upper level organic chemistry course for Biology, Chemistry, Engineering and pre-professional program students requiring one or more semesters of organic chemistry. Topics covered include infrared spectroscopy; nuclear magnetic resonance spectroscopy; ethers and epoxides; conjugated systems; aromatic compounds and their reactions; carboxylic acids and their derivatives; ketone and aldehydes; amines; additions and condensation of enols and enolate ions. Substances representative of the various classes of organic compounds are prepared and analyzed in the laboratory.

**Prerequisite for CHEM 222:** CHEM 221 with grade of "C" or better.

Additional course fee: \$260.

## Medical Laboratory Technician Courses

### MLT 102 Phlebotomy

2-3-8-4 Credit Hours: 4

This course provides students the skills and knowledge required to work in specimen collection in a healthcare setting. Emphasis is on venipuncture procedures, professionalism, the operation of the clinical laboratory, and specimen processing. Clinical practice is included.

Prerequisite: English Level V; FNMT 017 placement or higher and approval of department head or MLT curriculum coordinator.

Additional course fee: \$175.

### MLT 155 Clinical Hematology

3-3-0-4 Credit Hours: 4

Principles of urinalysis and blood formation, constituents and function, including blood coagulation. Emphasis on theory and performance of diagnostic hematological procedures and the correlation of laboratory results with kidney and blood disorders.

Prerequisite: BIOL 108 or BIOL 110 which may be taken concurrently and MLT 102, which may be taken concurrently.

Additional course fee: \$105.

#### MLT 205 Immunohematology and Immunology

3-3-0-4 Credit Hours: 4

Basic theory and concepts of antigen-antibody reactions, relationships of infection and immunity, and specific serological methods for the diagnosis of disease. Fundamental theories of blood group antigens and the genetics of their inheritance. Routine methods used to select donors and perform basic blood bank techniques.

Prerequisite: BIOL 108 or BIOL 110 and MLT 155.

Additional course fee: \$105.

## MLT 225 Clinical Chemistry<sup>1</sup>

3-3-0-4 Credit Hours: 4

This course will explore the principles and procedures of routine clinical chemistry analyses, correlation of results with pathophysiology, and quality control. The laboratory focuses on routine procedures to include glucose, BUN, total protein using spectrophotometers, quality control materials and an introduction to instrumentation.

Prerequisite: <u>CHEM 122</u> or <u>CHEM 118</u>, <u>BIOL 108</u> or <u>BIOL 110</u>, <u>FNMT 118</u> or MATH 118, <u>MLT 205</u>.

Additional course fee: \$105.

#### MLT 245 Clinical Microbiology<sup>1</sup>

3-3-0-4 Credit Hours: 4

Continuation of BIOL 241. Isolation and identification of clinically significant pathogenic bacteria from all types of clinical specimens. Serologic procedures and an introduction to mycology and parasitology.

Prerequisites: BIOL 241, MLT 205, CHEM 110 and CHEM 118 or CHEM 121 and Chem 122 all with a C or better.

Additional course fee: \$105.

## MLT 265 Current Topics in Medical Laboratory Sciences<sup>1</sup>

3-0-0-3 Credit Hours: 3

Discussions, seminars and lectures to correlate laboratory findings with pathological conditions in humans. Resume and job interview skills will be included. Students will review clinical case studies and present a capstone project.

**Prerequisites:**  $\underline{MLT\ 225}$  and  $\underline{MLT\ 245}$  both with a C or better.

## MLT 295 Clinical Practice<sup>1</sup>

2-0-32-6 Credit Hours: 6

A coordinated period of supervised experience in all areas of an affiliated clinical laboratory providing the opportunity to perform a variety of clinical procedures and develop technical competence, plus a weekly seminar to address various aspects of laboratory science.

**Prerequisites:**  $\underline{MLT\ 225}$  and  $\underline{MLT\ 245}$  both with a C or better and  $\underline{MLT\ 265}$  may be taken concurrently.

Additional course fee: \$175.

<sup>1</sup>Enrollment restricted to MLT majors.

## College Success Courses

COL 101 College Success Seminar

0-2-1 Credit Hours: 1

The College Success Seminar is designed to increase students' persistence and success in college by providing them with the academic, personal, and life management tools needed to function effectively and complete their course of study. The seminar will cover topics that revolve around three major issues: navigating the system, academic focus and transition to college.

## Computer Science Courses

## CSCI 111 Computer Science I with Java and Python

3-2-4 Credit Hours: 4

An introduction to algorithm development and object-oriented programming, with an overview of computers, programming languages, and professional ethics. Programming topics include algorithms and problem-solving, fundamental programming constructs, and object-oriented software design. Students will use word processing, presentation, and social networking software to collaboratively document and report on programming projects within the course. The course uses the Java and Python programming languages.

**Prerequisite:** FNMT 118 or MATH 118 or higher; (or Math 161 placement)

Additional course fee: \$85.

## CSCI 112 Computer Science II with Java and C++

3-2-4 Credit Hours: 4

An introduction to object-oriented programming and algorithm development, with an overview of computers, programming languages, and professional ethics. Programming topics include algorithms and problem-solving, fundamental programming constructs, and object-oriented software design. Students will use word processing, presentation, and social networking software to collaboratively document and report on programming projects within the course. A continuation of CSCI 111, presenting fundamental concepts in computer science and object-oriented programming using the Java and C++ programming languages. Topics include recursion, using application programming interfaces (APIs), database connectivity, software validation, fundamental sorting and searching algorithms, parallel processing, and analysis of algorithmic complexity. Instruction in the use of electronic spreadsheet software to analyze and describe the spatial and temporal complexity of algorithms is a part of the course.

Prerequisite: CSCI 111 with a grade of "C" or better and MATH 161 or higher placement.

Additional course fee: \$85.

#### CSCI 125 Introduction to Video Game and Simulation Development

2-2-3 Credit Hours: 3

This course introduces students to professional video game and simulation development, including the modern video game industry and its historical development, game analysis and design, game programming technology and practices, graphics and sound technology used in games and simulations, and ethical issues related to video games and simulations. Students will learn about the game development process for both serious and casual games and the roles that various professionals play in that development. They will engage in a semester-long project to design, build, and publish an entry-level computer-based video game using a game development engine.

\*\*Additional course fee: \$85.\*\*

#### CSCI 211 Data Structures and Algorithms

3-2-4 Credit Hours: 4

Introduction to a variety of the most commonly used data structures and related algorithms for maintaining and editing them. Emphasis is placed on efficiency, appropriate use, and the creation of encapsulated, object-oriented data structures, including linked lists, stacks, queues, trees, heaps, graphs, and hashing schema. The course uses the Java, C++, and Python programming languages.

Prerequisites: CSCI 112 with a grade of "C" or better.

Additional course fee: \$85.

### CSCI 213 Computer Organization

3-2-4 Credit Hours: 4

Introduction to the fundamentals of information transfer and control within a digital computer, including the technology, structure, and function of processing, memory, and I/O devices and their interconnections. Some logical circuit design and a look at assembly language and machine code are included in the course.

**Prerequisite:** CSCI 111 or CIS 106 with a grade of "C" or better.

Additional course fee: \$85.

## CSCI 215 Introduction to Android Development

2-2-3 Credit Hours: 3

This course prepares students to enter the mobile computing field. Students begin to prepare for these careers in a variety of entry-level positions such as mobile app developer, software developer, programmer, and mobile game developer. The course builds on a solid foundation of programming skills and design skills and introduces the specific skills needed for developing Android mobile/wireless applications. Students gain an understanding of mobile/wireless technologies and how these technologies are utilized and integrated to meet specific business needs. Current technologies and architectures that provide the network and communications infrastructure for mobile enabled systems are also covered.

Students will learn to design mobile user interfaces and apply standards to create intuitive, usable and efficient applications. **Prerequisite:**  $\underline{CSCI\ 111}$  with a grade of C or higher.

# **Counseling Courses**

COUN 101 Life Planning and Career Decision-Making

3-0-3 Credit Hours: 3

A course in theories, techniques and resources for career exploration. Opportunities for self-assessment are provided, with assignments designed to identify personal interests, abilities, values and experiences as a basis for generating career alternatives. The decision-making model presented has applications for facilitating vocational selection and is equally appropriate for general life planning. The multimedia approach to the world of work information-gathering uses printed and computerized resources, as well as videotapes, guest speakers and personal interviews.

Prerequisite: ENGL 101 placement.

## Culinary Arts and Hospitality Management Courses

(Formerly Hospitality Technologies)

CAHM 110 Introduction to the Hospitality Industry

-0-3 Credit Hours: 3

This course is an overview of the hospitality industry and includes an introduction to the principles of hospitality management. The course begins with the history of the industry and proceeds to examine various sectors in the industry including resorts, hotels, restaurants, tourism, and gaming. Career opportunities in each industry segment are identified.

#### CAHM 120 Hotel Front Office Management

3-0-3 Credit Hours: 3

In this course, students learn about the activities performed in today's lodging operation, from reservations to check-in and check out. The main focus is on the components of a hotel, including the front of house and back of house operations. These include basic procedures of front office personnel, the guest cycle, equipment and information systems, reservations registration, room status, accounting, auditing, check out procedures and housekeeping operations.

Prerequisites: CAHM 110, CIS 103, and FNMT 118 or MATH 118 or higher placement.

Additional course fee: \$85.

#### CAHM 130 Hotel Facilities Management

3-0-3 Credit Hours: 3

The responsibilities and managerial functions of executive housekeepers including staffing, scheduling, and managing supplies and inventories are examined. Basic hotel engineering and maintenance problems and issues are studied.

Prerequisite: CAHM 110.

#### CAHM 151 Elementary Baking and Pastry

2-4-4 Credit Hours: 4

This course introduces students to proper techniques and principles of baking and pastry making, kitchen sanitation and safety standards, basic food preparation and equipment handling as practiced in the food service industry. Special significance is placed on ingredient functions, product identification and weight measure as applied to baking and pastry. Students will prepare a variety of baked and pastry goods including breads, pastries and decorated cakes.

(Approximate cost for uniform and supplies: \$500)

Additional course fee: \$85.

## CAHM 161: Food Service Safety and Sanitation

2-0-2 Credit Hours: 2

This course is recommended for all foodservice managers, supervisors and other personnel in restaurants, hospitals, nursing homes, child care facilities, school cafeterias and other food-handling establishments. This course prepares students for the ServSafe® certification exam.

### CAHM 170 Elementary Food Preparation, Principles, and Practices

2-4-4 Credit Hours: 4

This course teaches fundamentals of commercial food preparation with current methods and principles of food production practiced in the food service industry. The course introduces students to the techniques and principles of fundamental cooking methods, proper kitchen sanitation and safety standards, basic food preparation and knife handling. Students learn how to use commercial kitchen equipment and maintain restaurant industry sanitation and safety principles. Students will also learn how to handle and serve food safely.

(Approximate cost for uniform and supplies: \$500)

Additional course fee: \$85.

#### CAHM 171 Quantity Food Preparation

2-4-4 Credit Hours: 4

This course introduces students to advanced techniques and quantity cooking methods, emphasizing plate presentation and timing as well as safety in handling proteins in advanced food preparations. Students continue to learn how to use new commercial kitchen equipment and to maintain restaurant industry sanitation and safety principles.

Prerequisite: CAHM 170.

#### CAHM 185 Dining Room Management

2-3-3 Credit Hours: 3

Students learn the structure and organization of the dining room and the job categories and service techniques most widely used in dining rooms within the hospitality industry. The course includes proper service techniques in American, French, Russian and English service, the different roles and attributes of dining room personnel, grooming and appearance, and interactions with guests and with those involved in food preparation. Dining room organization and table setting training includes proper use of linens, flatware, glassware and china. Hotel restaurant, room service, banquet and buffet service and stewarding are also explored.

Prerequisites: CAHM 110 and CAHM 170.

Additional course fee: \$85.

### CAHM 198 Hospitality Management Work Experience

1-15-3 Credit Hours: 3

Students will work in a supervised environment related to their hospitality management career interests. Students are expected to recognize the relationship between principles taught in the CAHM curriculum and the practices they experience and observe in the workplace.

Prerequisites: CAHM 110 and CAHM 170.

#### CAHM 210 American Cuisine

2-4-4 Credit Hours: 4

American regional cuisines, including specialties, characteristics and ingredients are introduced. Preparation and presentation procedures for the production of regional dishes will be applied. This will be done through classroom instruction, demonstration and student laboratory practices.

**Prerequisite:** <u>CAHM 170</u>. *Additional course fee:* \$85.

#### CAHM 211 Techniques of Garde Manger and International Cuisine

2-4-4 Credit Hours: 4

Traditions of food preparation and presentation of selected foreign cultures such as Northern Europe, the Mediterranean, Latin America, Middle East and the Far East are studied and practiced. Students will also focus on the art of cold food preparation, production and presentation for items such as pates, terrines, salads, sausages, hors d'oeuvres, vegetables and fruit carvings, ice sculptures and cold dishes.

**Prerequisite:** <u>CAHM 170</u>. *Additional course fee:* \$85.

## CAHM 266 Hospitality Law

3-0-3 Credit Hours: 3

Law and the legal system, from agency to zoning law, will be applied to the rights and responsibilities of parties within the hospitality industry. Students will explore cases. regulations, statutes, etc., in a preventive approach to legal problems for owners, managers, employees, guests, customers and the public.

## CAHM 270 Advanced Food Production, Nutrition and Finishing

2-4-4 Credit Hours: 4

Students will learn the various stages of food production and will plan, prepare and serve a menu. Introduction to the science of nutrition with an emphasis on its importance in menu planning and food production will prepare students to take a nutrition certification exam from the National Restaurant Association Education Foundation (NRAEF).

Prerequisite: CAHM 171.

Additional course fee: \$85.

#### CAHM 271 Food, Beverage Management, and Labor Cost Controls

3-0-3 Credit Hours: 3

This course focuses on analyzing and controlling food, beverage management, and labor costs. Students will explore current common control methods and techniques using data and computer software for making quantitative decisions necessary in food service operations.

Prerequisite: CAHM 110, CAHM 170, CIS 103 and FNMT 118 or MATH 118 or higher.

#### CAHM 276 Food and Beverage Management

3-0-3 Credit Hours: 3

Various problems encountered in restaurant and bar management: menu planning; food purchasing, storage, preparation and service; liquor inventory and service; employment and training of production and service personnel; and cost controls.

Prerequisite: CAHM 171.

## CAHM 278 Hospitality Marketing

3-0-3 Credit Hours: 3

Students learn and apply principles of marketing and selling products and services with specific reference to hospitality and leisure industries. Students create a marketing plan for a hospitality business.

## CAHM 280 Introduction to Supervision in the Hospitality Industry

3-0-3 Credit Hours: 3

This course is a study of supervision in the food service industry. Emphasis is on the role of the first-line supervisor. Topics include the interrelated areas of self management, managing and leading others, organizational leadership, self assessment, and the various organizations and leadership styles. At the end of the course, students will be prepared to take a supervision certification exam from the National Restaurant Association Education Foundation (NRAEF).

Prerequisites: CAHM 110 and CAHM 198.

## **Dental Hygiene Courses**

## DH 115 Oral, Head and Neck Anatomy

3-0-0-3 Credit Hours: 3

Introduction to head and neck anatomy; dental nomenclature; primary and permanent tooth development, anatomy, function, terminology and occlusion will be included. **Prerequisites:** ENGL 101 and CIS 103.

### DH 121 Oral Histology and Embryology

2-0-0-2 Credit Hours: 2

Study of the embryologic development of orofacial organs and structure and the microscopic examination of tissue structures through the development and organization of these organs.

**Prerequisites:** <u>DH 115</u>, <u>DH 135</u>, <u>DH 150</u>, <u>DH 191</u> and <u>BIOL 109</u>.

### DH 135 Dental Radiology

2-3-0-3 Credit Hours: 3

Theoretical information will be presented to enable the students to competently expose dental radiographs first on a mannequin, then on patients in the dental clinic and in private practice. Discussions will include the health, safety and welfare of both the operator and the patient.

Prerequisites: ENGL 101 and CIS 103.

Additional course fee: \$105.\*

## DH 150 Dental Auxiliary Practices

3-3-0-4 Credit Hours: 4

This lecture and preclinical course will include principles and utilization of chair-side dental assisting, dental laboratory skills, dental materials and dental specialties. This foundation and theory will provide a foundation which will increase students' proficiency level for the treatment of the dental patient.

Prerequisites: ENGL 101 and CIS 103.

Additional course fee: \$105.\*

#### DH 165 Nutrition and Biochemistry in Dentistry

4-0-0-4 Credit Hours: 4

Introduction to the principles of human nutrition including energy metabolism with emphasis on carbohydrates, lipids, proteins and their action in the body particularly as related to oral health. Also included are the role of vitamins and minerals and the application of the relationship of food sources to oral health. In addition, students are introduced to the analysis of diets for patient evaluation and education.

**Prerequisites:** <u>DH 115</u>, <u>DH 135</u>, <u>DH 150</u>, <u>DH 191</u>, and <u>BIOL 109</u>.

#### DH 191 Clinical Dental Hygiene I

2-0-6-3 Credit Hours: 3

Discussion will include basic principles, terminology, charting and practice of dental hygiene, disease prevention and dental health education. Students will develop manual skills necessary for instrumentations while performing preventive and therapeutic services. Legal, ethical and management aspects of total patient care will be discussed. Theory is used to support those procedures during clinical experiences.

Prerequisites: ENGL 101, CIS 103 and CPR certification.

Additional course fee: \$175.\*

## DH 192 Clinical Dental Hygiene II

2-0-6-3 Credit Hours: 3

This course is a continuation of DH 191. The focus is on preparing students to perform traditional dental hygiene clinical techniques. They learn about instrumentation (sharpening, designs and uses of dental hygiene instruments) and tooth examination through radiographs and digital intraoral photography. Students also learn about tooth treatments, including deposit and stain removal, selective coronal polishing, and fluoride applications. They prepare and use study models, learn about the care of removable dental prosthesis, and develop treatment plans in preparation for the clinical work in DH 293. Students are provided with the opportunity to practice learned clinical skills on peers.

Prerequisites: BIOL 109, DH 115, DH 135, DH 150, DH 191 and ENGL 102 (ENGL 102 may be taken concurrently with DH 192).

#### DH 210 Local Anesthesia

2-3-0-3 Credit Hours: 3

During this course, the dental hygiene student will be introduced to oro-facial anatomy, physiology and pathology, to the local anesthesia armamentarium and to anesthesia treatment and application. Additionally, the student will participate in hands-on application of oro-facial anesthesia administration in pre-clinic lab and clinical component settings. **Prerequisites:** DH 121, DH 165, DH 192 and BIOL 110.

Additional course fee: \$105.\*

## DH 241 Oral Pathology

2-0-0-2 Credit Hours: 2

Acquaints the dental hygiene student with oral anomalies manifested by development, metabolic disturbances and disease. Emphasis will be directed toward the recognition of these pathological conditions from direct observations of patients, radiographs and slides of pertinent structures.

Prerequisites: ENGL 102, BIOL 110, DH 165, DH 192 and DH 121.

#### DH 245 Dental Pharmacology and Pain Management

2-0-0-2 Credit Hours: 2

Familiarizes the dental hygienist with the medications that patients may be taking and drugs that may be administered in the dental practice. It also will provide insight into the mechanism of drug action and interaction in the body. Anesthetics will be reviewed with a discussion of pain management techniques. The classification of different types of medications with examples and their uses will be discussed.

Prerequisites: ENGL 102, BIOL 110, DH 165, DH 121 and DH 192.

#### **DH 247 Periodontics**

4-0-0-4 Credit Hours: 4

Encompasses the study of clinical and histological characteristics of normal, pathological and etiological factors of periodontal disease. Emphasis is placed on correlating basic sciences with clinical aspects of periodontics. Wound healing, various modes of periodontal therapy including surgical techniques and preventive maintenance will be addressed. **Prerequisites:** ENGL 102, BIOL 110, DH 121, DH 192 and DH 165.

### DH 271 Community Dentistry

3-0-1-3 Credit Hours: 3

Principles of public health in relation to dental hygienist roles in providing health care to the community is addressed. Field assignments and/or community service in approved settings permit student participation in community health care planning and familiarization with patterns of comprehensive health care services and the appropriate dental team roles.

Prerequisites: DH 241, 245, 247, 293 and BIOL 241.

**Pre- or corequisite:** ENGL 115. *Additional course fee:* \$105.\*

## DH 293 Clinical Dental Hygiene III

4-0-12-6 Credit Hours: 6

Continuation of DH 192, with emphasis on additional clinical techniques and patients with "special needs," along with examination of a variety of medical emergencies that may occur in the dental practice.

Prerequisites: BIOL 110, ENGL 102, DH 165, DH 121 and DH 192.

Additional course fee: \$345.\*

#### DH 294 Clinical Dental Hygiene IV

3-1-18-6 Credit Hours: 6

Continuation of DH 293. Laboratory and/or clinical practice of more advanced aspects of the delivery of dental hygiene care.

**Prerequisites:** <u>DH 241</u>, <u>DH 245</u>, <u>DH 247</u>, <u>DH 293</u> and <u>BIOL 241</u>.

**Pre- or corequisite:** ENGL 115. *Additional course fee:* \$345.\*

## DH 295 Clinical Dental Hygiene V

1-0-8-2 Credit Hours: 2

Course work designed to prepare the Dental Hygiene student for the working world. Resume writing and job interview techniques will be taught. Career directions and the future of dental hygiene will be addressed. Clinical expertise will be refined in this course. Time management, in conjunction with total patient care, will be emphasized.

Prerequisites:  $\underline{DH\ 271}, \underline{DH\ 294}$  and  $\underline{ENGL\ 115}.$ 

 $Additional\ course\ fee:\ \$345.*$ 

## Diagnostic Medical Imaging Courses

## DMI 101 Introduction to Diagnostic Medical Imaging

2-0-0-2 Credit Hours: 2

Overall view of diagnostic medical imaging describing its relationship to radiology and its part in medicine. Communication skills, professional conduct of the radiographer in the clinical setting, basic medico-legal issues, HIV/AIDS, standard precautions and the basic concepts of radiation biology and protection are presented and discussed. *Additional course fee:* \$105.

### DMI 105 Image Production and Evaluation

4-0-0-4 Credit Hours: 4

This course presents the principles of radiographic exposure dealing with specific factors that control and affect radiographic image contrast and density, image recording and receiving systems including screen/film and digital radiography (DR). Radiographic image processing systems for these methods of image production are also discussed. **Corequisite:** DMI 131.

#### DMI 106 Image Production and Evaluation II

2-0-0-2 Credit Hours: 2

Pharmacology, classifications, use and precautions in the administration of contrast media in radiography. Factors controlling and affecting recorded definition and distortion. Basics of quality control and evaluation of radiographic equipment and documentation of results. Synthesis and application of film quality factors to exposure problems.

Prerequisite: DMI 105.

Corequisite: DMI 132.

#### DMI 119 Introduction to Radiologic Physics

2-0-0-2 Credit Hours: 2

Survey of mechanics, matter, atomic theory, magnetism, electricity and electromagnetism relevant to the field of radiography. The study of step-up and step-down transformers and the autotransformer begins the introduction to X-ray equipment circuitry.

#### DMI 120 Radiographic Equipment and Operation

2-0-0-2 Credit Hours: 2

This course provides an introduction to the circuitry of radiation-producing equipment. The principles and operation of single-phase, three-phase and high-frequency generators are compared. Because radiographers must operate X-ray equipment responsibly, students learn about the design, function and safety protocols pertaining to the modern radiographic tube. In preparation for the study of radiobiology and protection in the following semester, the production, characteristics and hazards of ionizing radiation are explained. Students will also survey the theories of photon interaction in the patient in general diagnostic radiography.

Prerequisite: <u>DMI 119</u>.

#### DMI 131 Patient Care and Procedures I

3-3-14-5 Credit Hours: 5

Radiographic terminology and positioning techniques of the upper and lower extremities, chest and abdomen. Application of technical factors and radiation protection. Clinical Objective Evaluation (COE) of respective radiographic examinations and evaluation of selected radiographs. Patient care skills in monitoring vital signs, body mechanics, and infection control and precautionary techniques with respect to the patient in radiology. Clinical Education I in hospital affiliate will be the application of knowledge from classroom to hospital setting; radiography of the patient with guided clinical supervision. Observation and evaluation of students; evaluation/critique of radiographic examinations completed by students conducted by College faculty.

Corequisite: <u>DMI 105</u>. *Additional course fee:* \$105.

## DMI 132 Patient Care and Procedures II

3-3-14-5 Credit Hours: 5

DMI 132 is the second of four sequential courses presenting the art of positioning in radiography. This course consists of three components: Patient Procedures, Patient Care, and Clinical Education II. In Patient Procedures, students will continue to learn positioning skills in order to radiograph the skeletal anatomy and physiologic systems of the human body. In laboratory sessions they will apply materials presented in the lecture and practice the skills necessary to pass their Clinical Objective Evaluations (COE). The Patient Care

component, a continuation of material learned in DMI 131, includes care and handling of various types of patients encountered in an imaging department. In Clinical Education II, students will apply knowledge gained in the classroom to the hospital setting where they will perform radiography of patients under clinical staff supervision. Corequisite: DMI 106.

Prerequisites: DMI 105 and DMI 131.

Fulfills American/Global Diversity requirement.

Additional course fee: \$105.

## DMI 181 Radiographic Osteology and Pathology I

2-0-0-2 Credit Hours: 2

Detailed study of the bone structure of the upper and lower extremities, pelvis and thorax; pathology of the respiratory, gastrointestinal and biliary systems. Case presentations of pathological conditions from clinical studies will be given by students.

## DMI 182 Radiographic Osteology and Pathology II

2-0-0-2 Credit Hours: 2

Detailed study of the bone structure of the vertebral column and cranium; radiographic pathology of the skeletal, urinary, reproductive, cardiovascular and central nervous systems. Case presentations of pathological conditions from clinical studies will be given by students.

Prerequisite: DMI 181.

#### DMI 198 Clinical Education III

0-3-13-2 Credit Hours: 2

Clinical experience in a hospital affiliate. This course builds on skills learned in DMI 131 and DMI 132 with additional patient interaction under supervision. In addition to doing general radiography and fluoroscopy, students perform rotations through the operating room.

**Prerequisite:** <u>DMI 132</u>. *Additional course fee:* \$345.

#### DMI 199 Clinical Education IV

0-3-13-2 Credit Hours: 2

Clinical experience in a hospital affiliate. This course builds on skills previously learned in DMI 131, DMI 132 and DMI 198, and provides additional patient interaction under supervision. Students perform rotations through the operating room and emergency room in addition to doing general radiography and fluoroscopy.

**Prerequisite:** <u>DMI 198</u>. *Additional course fee:* \$345.

## DMI 221 Advanced Imaging/Computer Modalities

4-0-0-4 Credit Hours: 4

Advanced imaging modalities such as body section radiography, automatic exposure control radiography, fluoroscopy with image intensifiers, TV monitors, and cine; angiographic changers and ancillary equipment. Computer-enhanced imaging such as Computerized Axial Tomography (CT), Magnetic Resonance Imaging (MRI) and Positron Emission Tomography (PET) are surveyed in detail. Overview of cross-sectional anatomy (transverse and longitudinal) of the cranium, thorax, abdomen and pelvis.

Prerequisites: <a href="mailto:DMI 106">DMI 106</a>, <a href="DMI 106">DMI 120</a> and <a href="DMI 199">DMI 199</a>;

Pre- or corequisite: CIS 103.

### DMI 222 Angiographic/Interventional Procedures

2-0-0-2 Credit Hours: 2

This course introduces students to arteriography and venography of the cranium, thorax, abdomen, pelvis and extremities to include clinical indications, patient care, contrast media, positioning and procedural methods for examination. Interventional procedures such as angioplasty, shunts, thrombolysis, embolization and atherectomy are detailed. Students will learn about the invasive diagnostic procedures of the central nervous system, salivary glands, reproductive system and joints. They will also gain a knowledge of ultrasound's historical development, production of sound waves and clinical applications.

Prerequisite: DMI 221.

## DMI 231 Patient Procedures III

2-2-21-5 Credit Hours: 5

Radiographic positioning techniques of the cervical spine, ribs, cranium, advanced orthopedic studies and mammography. Application of technical factors and radiation protection. Clinical Objective Evaluation (COE) of respective radiographic examinations and evaluation of selected radiographs. Clinical Education V in hospital affiliate with the application of knowledge from classroom to hospital setting: radiography of the patient with guided clinical supervision. Observation and evaluation of students; evaluation/critique of radiographic examinations completed by students conducted by College faculty.

Prerequisite: <u>DMI 132</u>.

Additional course fee: \$345.

2-5-21-5 Credit Hours: 5

This course consists of three components: Patient Procedures, Clinical Education, and Professional Skills Development Sessions (PSDS). Students will learn about radiographic positioning techniques of the facial bones and articulations, trauma and pediatric radiography emphasizing Clinical Objective Evaluation (COE) of these examinations and film evaluation of selected radiographs. Clinical Education IV is the main vehicle for real-life application of skills learned in the Procedures sections and is performed in an affiliate hospital applying knowledge from classroom to a hospital setting with guided clinical supervision. The PSDS focuses on reviewing for the ARRT examination through various classroom activities.

**Prerequisite:** <u>DMI 231</u>. *Additional course fee:* \$345.

#### DMI 261 Radiation Biology and Protection

2-0-0-2 Credit Hours: 2

This course identifies the sources of natural and artificial radiation and examines the effects of radiation on the cells, tissues and organs in the human body. Mathematical conversions of radiation measurement units, from traditional to the international system, are performed, calculations of dose equivalent and relative biological effectiveness are practiced, and the direct and indirect theories of biological effects, cellular radiosensitivity, and radiation dose-response curves are studied. The early and late effects of radiation exposure are defined and classified as either stochastic or deterministic. Because of their importance in clinical practice, methods of patient protection, operator protection, and radiation monitoring are also emphasized.

Prerequisites: DMI 119 and DMI 120.

#### DMI 299 Clinical Education VII

0-3-13-2 Credit Hours: 2

Continued clinical experience in hospital affiliate. Student-radiographer functions independently in all areas of the Radiology Department with limited supervision prior to completion of the Diagnostic Medical Imaging program.

**Prerequisite:** <u>DMI 232</u>. *Additional course fee:* \$175.

## **Dietetics Courses**

## DIET 106 Nutrition for a Healthy Lifestyle

3-0-0-3 Credit Hours: 3

Introduction to the science of nutrition with an emphasis on the application of optimal nutrition for a healthy lifestyle. Presents basic nutrition principles for students to analyze and apply to their nutrition habits. The students will utilize a variety of tools and techniques, including computer applications, to evaluate their lifestyles.

#### **DIET 111 Introduction to Nutrition**

3-0-0-3 Credit Hours: 3

Aspiring nurses and other healthcare professionals will obtain foundational knowledge in human nutrition science and evaluate lifestyle behaviors as determinants of health, wellness, and prevention of chronic disease. The course will provide evidence-based recommendations for nutrients and energy throughout the lifecycle. Learners will identify the consequences of inadequate and excess consumption of nutrients and will explore the influence that food behaviors, environment, culture and physical activity have on health and wellbeing.

Prerequisites: ENGL 101 and BIOL 109 with a "C" or higher.

## **Digital Forensics Courses**

## DF 101 Introduction to Digital Forensics

3-0-3 Credit Hours: 3

This course examines the use of computers in the commission of crimes and civil wrongs, the elements of computer crimes and civil wrongs, and the detection, collection, analysis and production of digital evidence. Students will use computer and digital media resources to explore basic digital forensic investigation techniques.

Prerequisites: JUS 101 or PLS101

#### DF 201 Digital Forensics II

3-0-3 Credit Hours: 3

In this course students examine the techniques used to gather evidence from digital media in a court-acceptable manner and then analyze that evidence using advanced tools and techniques. Students will use computer resources to conduct analyses on actual digital media and attempt to recover evidence that can be used in a classroom "investigation" exercise.

Prerequisites: DF 101

### DF 203 Networking and Forensics

3-0-3 Credit Hours: 3

Students will focus on the tools and skills involved in recovering information and/or evidence from computers, networks and network components in a forensically sound manner. Students will learn how network artifacts can serve as repositories for important data including evidence of crimes and other wrongful acts. They will also become skilled in the best practices for acquiring this data.

Prerequisite: DF 101 and CIS 150

## DF 220 Intrusion Response

3-0-3 Credit Hours: 3

In this course, students learn the complexities, technical details, and skills involved in investigating instances in which network and computer defenses have been compromised due to intrusions. Because of the sheer scope of a network, this course will require students to expand their technical and analytical skills. They will examine the planning of intrusions, methods employed in the surveillance of networks, and techniques intruders employ to penetrate and damage them. These concepts will be put into the context of investigating crimes that occur where computer networks are the "victim."

Prerequisites: DF 101 and CIS 150

#### DF 250 Digital Forensics Case and Laboratory Management

3-0-3 Credit Hours: 3

This course focuses on the processes involved in digital forensics case work and is designed to prepare students to develop and sustain a career in the field. The course will cover creation of the laboratory, development of effective operating procedures, quality management, and expert report development in the analysis of digital media.

Prerequisite: <u>DF 201</u>

## Digital Video Production

## DVP 120 Camera and Lighting Techniques for Digital Video Production

2-4-4 Credit Hours: 4

This course provides study of video camera operation and lighting techniques as they relate to digital video production. Students will review the basics of video production theory and practice, compare digital and analog technologies, use advanced devices and techniques for controlling the video camera, learn advanced concepts of the moving camera, and practice types and varieties of shots used in professional production. They will also study camera mechanisms and electronics pertaining to professional cameras and accessories and gain practical experience using different professional grade cameras to videotape interviews, location "B-roll" footage, groups and theatrical productions. This course also covers the advanced techniques of lighting and provides practical experience with a variety of advanced lighting techniques, including on-camera, key with fill, and three point lighting as well as available light control.

Prerequisite: PHOT 104 with a B or better.

Additional course fee: \$85.

#### DVP 130 Audio Techniques for Digital Video Production

2-4-4 Credit Hours: 4

This course includes in-depth exploration of audio theory, comparison between digital and analog technologies, advanced theory regarding analog and digital recording devices and microphone design and operation, techniques for acquiring professional quality audio for digital video productions, duties of the audio crew member, and practical experience acquiring audio for productions such as interviews, large groups, voice over narrations and theatrical productions. It concludes with the compilation of a digital portfolio of audio acquisition examples.

Prerequisite: PHOT 104 with a B or better.

Additional course fee: \$85.

#### DVP 140 Video Editing Techniques for Digital Video Production

2-4-4 Credit Hours: 4

This course covers editing techniques as they relate to digital video production. It includes a foundation in the basics of video editing theory, the history and development of editing techniques, similarities and differences between editing for motion pictures and editing for video, comparison between the digital and analog technologies, fundamentals of analog (linear) and digital (non-linear) editing techniques, overview of non-linear editing software, and basic techniques needed to complete the editing of a video production (preparation, assembly, transitions and effects, and outputs), and practical experience editing productions such as interviews, large groups, voice over narrations and theatrical productions. This course concludes with the compilation of the demo reel of basic editing examples.

Prerequisite: PHOT 104 with a B or better.

Additional course fee: \$85.

## DVP 150 Producing and Directing Techniques for Digital Video Production

2-4-4 Credit Hours: 4

This is a course in the fundamentals of producing and directing techniques used in digital video production. It includes an overview of the field from the early days of silent films to today's complex productions. Using state of the art technology students have an opportunity to learn and practice the professional skills and techniques needed to produce and direct interviews and electronic news gathering (ENG) sequences, as well as theatrical productions. The course concludes with the compilation of a demo reel.

**Prerequisite:**  $\underline{PHOT\ 104}$  with B or better.

Additional course fee: \$85.

## DVP 210: Advanced Techniques for Digital Video Production

0-6-4 Credit Hours: 4

This is a course in advanced digital video production focusing on the skills needed to complete professional digital video productions pertaining to location and studio programs. The students will produce material including short documentaries, interviews, news events, and studio productions such as news and variety shows and music videos. In this course students will rotate through the roles of a production team while producing projects some of which may be broadcast on CCPTV.

Prerequisites: DVP <u>120</u>, <u>130</u>, <u>140</u>, and <u>150</u>.

Additional course fee: \$135.

#### DVP 220: Advanced Studio Techniques for Digital Video Production

0-6-4 Credit Hours: 4

This is a course in advanced studio techniques for digital video production focusing on the skills needed to complete professional digital video productions pertaining to studio programs. The students will produce material live and live to tape in a television studio, including news magazine broadcasts, talk show interviews, variety shows, and music videos. In this course, students will rotate through the roles of a production team in a television studio setting while producing projects, some of which may be broadcast on CCPTV

Prerequisites: DVP <u>120</u>, <u>130</u>, <u>140</u>, and <u>150</u>.

Additional course fee: \$135.

## DVP 240: Advanced Editing Techniques for Digital Video Production

2-4-4 Credit Hours: 4

This course builds on the skills and knowledge acquired in DVP 140, while introducing advanced editing techniques including compositing footage, color balancing, chromakeying, advanced effects, and sound mixing and manipulation. Students will also be introduced to animation techniques, title sequence animation, video compression, and DVD authoring. This course concludes with the compilation of a reel that demonstrates mastery of advanced editing techniques.

**Prerequisites:** <u>DVP 140</u>. *Additional course fee:* \$85.

## Earth Science Courses

NOTE: Geography/Earth Science courses are offered by the Social Sciences Department.

#### EASC 111 Environmental Conservation

3-0-3 Credit Hours: 3

Introduction to the many serious environmental problems facing the world today, the extent and causes of these problems and the kinds of solutions being proposed. Topics include ecological systems, population, land management, hunger and food production, energy supplies, waste management and environmental pollution. The course is organized around the theme of our relationship to the environment.

## EASC 111H Environmental Conservation (Honors)

3-0-3 Credit Hours: 3

This course examines global and local environmental issues using an interdisciplinary approach, including scientific, political, social, economic and ethical perspectives. Students consider humans' role within the natural environment while studying topics including ecological systems, energy, population, pollution, climate change, sustainability, and environmental equity and justice. The course requires reading and analyzing primary texts, including scientific articles, academic writing and participation in seminars, service opportunities and one or more field trips.

## **Economics Courses**

#### ECON 112 Statistics I

4-0-4 Credit Hours: 4

This course is designed to introduce the student to the application of statistical techniques in modern decision making. Emphasis is placed on measures of central tendency and dispersion, probability and probability distributions, sampling, estimation, and hypothesis testing.

Prerequisite: FNMT 118 or MATH 118, or higher than FNMT 118 or MATH 118 on placement test.

#### ECON 114 Statistics II

3-0-3 Credit Hours: 3

Continuation of ECON 112. Topics include: tests of population variance, quality control, time series analysis, analysis of variance, index numbers, and bivariate and multivariate regression and correlation analysis. Emphasis will be placed on the use of Excel in the analysis of data.

Prerequisite: ECON 112.

#### ECON 181 Principles of Economics (Macroeconomics)

3-0-3 Credit Hours: 3

Macroeconomics is concerned with the performance of the economy as a whole. In this course, the student will be introduced to an analysis of the changes in levels of income, employment, prices, and output in the economy and the role government and the central banking system play in the maintenance of overall economic growth and stability. This course is intended to serve as an introduction to a vast field of knowledge and academic endeavor.

#### ECON 182 Principles of Economics (Microeconomics)

3-0-3 Credit Hours: 3

Topics include analysis of the economics of the firm and resource allocation, current domestic problems and international economics. Microeconomics deals with the significant aspects of the individual firm.

## **Electronics Courses**

## ELEC 120 Direct and Alternating Current Circuits

3-2-4 Credit Hours: 4

Students will be introduced to basic DC and AC circuits, including the characteristics of passive devices such as resistors, capacitors and inductors. Students will apply basic circuit laws (Ohm's Law, Kirchhoff's Current Law, Kirchhoff's Voltage Law) and basic circuit analysis techniques to the solution of a range of series, parallel and series-parallel circuits. Students will be introduced to basic concepts of frequency response and filters. Students will learn to build and troubleshoot circuits and measure circuit parameters using a digital multimeter and oscilloscope.

**Prerequisite:** FNMT 118 may be taken concurrently.

Additional course fee: \$90.

#### **ELEC 124 Semiconductor Devices**

3-2-4 Credit Hours: 4

Students are introduced to basic semiconductor theory and the operating principles of semiconductor devices such as diodes, transistors, and operational amplifiers. Common circuit configurations and their applications are also explored. In lab, students will build basic circuits utilizing semiconductor devices and measure typical circuit parameters such as voltage, current and frequency.

Prerequisite: ELEC 120 with a "C" or better.

Additional course fee: \$135.

#### **ELEC 130 Digital Electronics**

3-2-4 Credit Hours: 4

Students are introduced to basic digital circuit components and how these components can be used in combination to carry out more complex operations. Boolean algebra and numbering systems are covered. Common circuit configurations and their applications will also be explored.

**Prerequisite:** FNMT 118 or MATH 118 (or higher math).

Additional course fee: \$105.

## **Engineering Courses**

## ENGR 102 Engineering Design and Laboratory I

2-4-4 Credit Hours: 3

Engineering 102 provides for the development of analytical and communication skills by problem solving, teamwork and project presentation. The course gives instruction on how to use computers in engineering: how to utilize engineering software, problem solving, data acquisition and analysis. Included is how to use a computer algebra system to solve math and engineering problems. Students learn the elements of the engineering design process through execution of actual design projects. Other topics include an introduction to patents and patent law and the interaction between the engineer and physical environment. Offered only in the fall semester.

**Prerequisite:** MATH 162 or a higher-level Mathematics course.

Additional course fee: \$85.

#### ENGR 202 Engineering Design and Laboratory II

2-4-4 Credit Hours: 3

This course is a continuation of Engineering Design and Laboratory I. It provides for the development of analytical and communication skills by problem solving, teamwork and project presentation. The course gives instruction on how to use computers in engineering: how to utilize engineering software, problem solving, data acquisition and analysis. In addition, students learn technical sketching and computer-aided drafting techniques with industry-standard software. Students learn the elements of the engineering design process through execution of actual design projects. Offered only in the spring semester.

Prerequisite: ENGR 102.

Fulfills Writing Intensive requirement.

Additional course fee: \$85.

#### **ENGR 205 Materials Engineering**

3-2-4 Credit Hours: 4

In this course, students will be taught to recognize and differentiate between the several types of engineering solids, understand solids at the atomic level in terms of bonding and energy, establish a quantitative picture of the structure of crystalline and non-crystalline solids, explain atomic movements in solids using the concept of diffusion, explain the electrical and magnetic properties of different kinds of materials, and understand the processes that give rise to degradation of materials. They will also learn to interpret the optical behavior of materials in terms of the interaction of electromagnetic radiation with the material and choose materials optimally for engineering design purposes. Offered only in the spring semester.

Prerequisites: PHYS 241 and MATH 172.

Additional course fee: \$85.

#### ENGR 221 Vector Mechanics I (Statics)

3-0-3 Credit Hours: 3

Students will learn how to use analytic geometry, differential and integral calculus and vector algebra in solving engineering problems. They will also learn about the concept of the free-body diagram and its use in conjunction with static equilibrium of forces. The course will focus upon using the deductive process to solve a great variety of problems involving particles and rigid bodies in a state of static equilibrium.

Prerequisites: PHYS 140 and MATH 172.

## ENGR 222 Vector Mechanics II (Dynamics)

3-0-3 Credit Hours: 3

Students will learn how to use calculus-based mathematics in solving engineering problems in dynamics, including problems related to rectilinear and curvilinear motion of rigid bodies and concept of impact, rotation and acceleration of the system of rigid bodies in a plane motion.

Prerequisites: ENGR 221 and MATH 271.

# **Entrepreneurship Courses**

## ENTR 110 Fundamentals of Entrepreneurship

3-0-3 Credit Hours: 3

This course introduces students to the characteristics, skills and challenges associated with entrepreneurship. Students will focus on aspects of entrepreneurship, including information, operations, human resources, finance, marketing, and general administration. Topics will include self-evaluation, how to recognize and shape new ideas and opportunities, planning, analysis, methods, technology, global impacts, and ethical responsibilities.

## ENTR 120 Entrepreneurial Marketing

3-0-3 Credit Hours: 3

The focus of this course is on fulfilling the needs of potential customers as a driving force of entrepreneurship. Students in this course examine the role of marketing in start-up ventures and the role of entrepreneurial thinking in marketing efforts. Students will explore traditional and novel approaches to defining markets and market segments, will discover inexpensive ways to conduct relevant market research, and will learn to identify ways to leverage marketing resources and networks to accomplish marketing tasks. The course will also include e-marketing techniques and the use of social networking as they apply to marketing products and services. The course will conclude with the students submitting a working marketing plan.

### ENTR 130 Entrepreneurial Financial Intelligence

3-0-3 Credit Hours: 3

This course is designed to familiarize entrepreneurs with key financial and accounting concepts that are essential in starting and running a business and help them acquire the tools they need to manage an entrepreneurial venture effectively. This course will cover basic accounting terms and ratios, financial statements, cash flow and budgets, and review the accounting software available for a prospective business entity. This course is designed for small business owners and entrepreneurs, rather than those seeking to work as professional accountants.

#### ENTR 140 Business Plan Development for Entrepreneurs

3-0-3 Credit Hours: 3

In this course, entrepreneurs learn the process of preparing and implementing a business plan and presenting it to potential lenders and investors. That process includes creating concept statements, developing feasibility studies, and designing business models. Students will learn how to anticipate and solve both typical and atypical problems that entrepreneurs encounter.

Prerequisite: ENTR 110

## **Finance Courses**

## FIN 151 Risk Management and Insurance

3-0-3 Credit Hours: 3

This course is designed to provide the student with an introduction to risk and methods of insurance. The objective of this course is to enable the student to develop an understanding of the many types of exposure to loss, the alternative methods of treating such exposures, and the role of insurance in personal and business affairs. Consideration is given to the legal framework surrounding the insurance mechanism. In addition, the regulation of insurance is discussed.

#### FIN 190 Personal and Consumer Finance

3-0-3 Credit Hours: 3

This course prepares students to understand and apply the fundamentals of personal finance management. Students will be able to assess their personal financial literacy, establish financial goals and develop a strategy to achieve desired personal finance goals. Topics covered include: budgeting, banking and financial transactions; consumer credit principles including maintaining and restoring credit, and current regulations and practices that govern consumer financial transactions; banking services and products including housing financing; personal insurance basics; investment basics and their application to retirement planning; the role of financial counselors and required skills sets; financial planning for postsecondary education. This course will be open to students who are in or have placed into ENGL 098 or higher.

## Fire Science Courses

## FSCI 104 Fire Prevention and Building Codes

3-0-3 Credit Hours: 3

The course provides students with an in-depth knowledge of fire safety based on model (nationally recognized) fire prevention and building codes with amendments unique to the city of Philadelphia. A description of the historical background and purpose of fire prevention and building codes is followed by major topics of fire safety: occupancy and construction types, egress requirements, hazardous materials (types, storage, restrictions), fire protection systems and the conducting of fire safety inspections of buildings.

## FSCI 111 Emergency Scene Management

3-0-3 Credit Hours: 3

This course introduces the student to the complexities of managing a response to an emergency scene such as a fire, explosion or multi-casualty incident. The student will learn the importance of the Incident Command System (ICS), the primary functional duties within this system and the process of establishing command and control at an emergency scene. In addition, this course teaches the student several methods of emergency scene analysis and a systematic approach to deciding on the appropriate course of action for first-responders.

#### FSCI 142 Introduction to Occupational Health and Safety for Firefighters

3-0-3 Credit Hours: 3

Provides an understanding of contemporary health and safety issues, and regulations in modern workplaces and communities. Major study of basic health and safety management principles.

#### FSCI 172 Fire Detection and Suppression Systems

3-0-3 Credit Hours: 3

This course will provide students with knowledge of basic hydraulic principles and the practical application to sprinkler and standpipe delivery system design and operation. It will assist students in making tactical decisions on the emergency scene or when planning for emergencies.

#### FSCI 181 Building Construction for the Fire Service

3-0-3 Credit Hours: 3

Course will familiarize students with qualities and types of structures commonly encountered in Philadelphia: ordinary construction, wood frame, masonry, concrete and steel frame. The course will identify the inherent strengths and weaknesses of building structural systems and building materials with regard to flammability, toxicity and emergency scene personnel deployment. In addition, the course will address newly developed construction techniques.

#### FSCI 221 Fire Prevention and Protection

3-0-3 Credit Hours: 3

This course provides students with an understanding of the evolution of the fire service. They will examine historical precedents and the major responsibility of the fire service in preventing fire and establishing and maintaining safe environments. Analysis of fire prevention problems and the components of an effective fire prevention program are studied.

#### FSCI 241 Fire Administration

3-0-3 Credit Hours: 3

This course provides students with an understanding of management as a theoretical as well as a practiced discipline. They will examine how management is practiced in various environments with particular emphasis on identifying and understanding the differences between public service institutions and private organizations with regard to public safety.

#### FSCI 271 Hazardous Materials

3-0-3 Credit Hours: 3

This course provides students with the basic knowledge to recognize, identify, classify and evaluate the dangers posed by hazardous materials. Students will learn to control hazardous materials emergencies by using the incident management model. Topics covered include: site safety and control; responder roles within the incident management system; related standards, laws and regulations; evaluation of the properties of hazardous materials; container and environment evaluation; personal protective equipment; decontamination and termination procedures. This course prepares interested students for the Pennsylvania Voluntary Fire Service Hazardous Material Awareness (NFPA #472 Standard) Certification Exam, that is proctored at the Philadelphia Fire Training Academy.

## FSCI 281 Fire Investigation

3-0-3 Credit Hours: 3

This course will acquaint students with the theories of fire investigation, consistent with National Fire Protection Agency (NFPA) protocols. Methodology of fire investigation, motives of arsonists, fuels, incendiary fires, explosions and auto fires will be discussed, as will the formulation and testing of a hypothesis with regard to the origin and cause of a fire

## FSCI 291 Computer Assisted Pre-Fire Planning

2-2-3 Credit Hours: 3

This course teaches students to create, maintain, modify and enact pre-fire plans regarding a variety of building occupancies and facilities. Using CAD technology, students learn to create graphic depictions of buildings and fire access routes, plot locations of fire stand-pipes and hydrants, charge emergency egress routes throughout building interiors, and plan for the deployment of firefighting equipment.

Additional course fee: \$85.

## First Year Experience

## FYE 101 First Year Experience

3-0-3 Credit Hours: 3

This course introduces first-year students to ideas and strategies required for college-level academic inquiry and college success, including critical thinking, communication, cultural competence, problem-solving, data interpretation, and institutional knowledge. Students develop college preparedness skills such as time management, note taking, study methods, test taking, information literacy, and an understanding of academic integrity. Students apply critical thinking and communication skills to areas such as cultural diversity, media literacy and financial literacy and gain an understanding of campus and community resources. Students create an appropriate academic plan, financial plan, and career/transfer plan in the course of the semester. Liberal Arts and Liberal Arts-Social/Behavioral Science students are required to enroll in FYE 101 within the first 12 credits.

## Foreign Languages Courses

#### LABORATORIES

The one-hour lab indicated for all foreign language courses is a period in which students are required to complete listening and speaking exercises using various technologies as instructed by faculty.

#### PLACEMENT

It is recommended that students with prior experience in a language offered by the College be evaluated by the Department of Foreign Languages in order to be placed in the appropriate course. If it is determined by the instructor and/or department head that a student's level is too advanced for the course in which he or she has enrolled, that student will be required to move to the appropriate level or be advised to take a different language. Students may earn up to six academic credits in Spanish or French by taking the College Board's College Level Examination Program (CLEP) test. Further information about the CLEP test is available at <a href="https://www.collegeboard.com/clep">www.collegeboard.com/clep</a>, or by contacting the department head.

Only students who have completed 101-102 level courses successfully at the College or at another collegiate institution or those who have received department permission (based on the placement test) may enroll in intermediate level language courses.

#### AMERICAN SIGN LANGUAGE

#### ARABIC

### ARAB 101 Elementary Arabic

3-1-3 Credit Hours: 3

Elementary Arabic 101 introduces basic written and spoken Arabic to students who have had little or no previous knowledge of the language. The main focus of the course is to help students master the Arabic alphabet in written form and orally. The students will write simple sentences, understand selected principles of basic grammar, and will be introduced to the classical Arabic of the Qur'an as well as to a modern spoken dialect. Students will learn aspects of Arab culture.

Prerequisite: ENGL 073 and ENGL 083/093 or higher placement.

Fulfills American/Global Diversity requirement.

#### ARAB 102 Elementary Arabic

3-1-3 Credit Hours: 3

Elementary Arabic 102 is a continuation of spoken and written Arabic for students who have successfully completed Elementary Arabic101. Students continue to develop basic communicative skills, both in standard modern written form and as a spoken dialect. Students will continue their study of the classical Arabic of the Qur'an, in addition to deepening their knowledge of contemporary Arab culture. Prerequisite: ARAB 101 or equivalent. Fulfills American/Global Diversity requirement.

#### ARAB 201 Intermediate Arabic

3-1-3 Credit Hours: 3

Arabic 201, the first course of the intermediate sequence of Arabic 201 and 202, is a continuation of Arabic 101 and 102. The course enables students to further develop the four language skills: reading, writing, listening and speaking, and to understand key aspects of the Arab-speaking world and its culture(s). Students will be introduced to varied and complex topics, to language structures, and to written and aural texts of the modern standard Arabic. Prerequisite: ARAB 102. Fulfills American/Global Diversity requirement.

#### **CHINESE**

### **CHIN101 Elementary Chinese**

3-1-3 Credit Hours: 3

Elementary Chinese 101 will introduce spoken and written Chinese to students who have had little or no previous knowledge of the language. Students will develop basic communicative competence in both spoken and written Chinese and are introduced to the cultural nuances that lie behind basic communication.

Prerequisite: ENGL 073 and ENGL 083/093 or higher placement.

Fulfills American/Global Diversity requirement.

#### **CHIN 102 Elementary Chinese**

3-1-3 Credit Hours: 3

A continuation of spoken and written Chinese for students who have completed Elementary Chinese 101. Students will develop basic communicative competence in both spoken and written Chinese and are introduced to the cultural nuances that lie behind basic communication.

Prerequisite: CHIN 101.

Fulfills American/Global Diversity requirement.

#### **CHIN 201 Intermediate Chinese**

3-1-3 Credit Hours: 3

A continuation of Chinese 102. Building upon language skills acquired in the previous course, Chinese 201 will increase students' knowledge of the fundamental grammatical structures of Chinese and their ability to communicate in both spoken and written Chinese in a wide range of situations in daily, social and academic life. Students will be introduced to reading materials of increasing complexity on a variety of topics reflecting different aspects of traditional and modern Chinese culture.

Prerequisite: CHIN 102.

Fulfills American/Global Diversity requirement.

#### **CHIN 202 Intermediate Chinese**

3-1-3 Credit Hours: 3

A continuation of Chinese 201. Building upon language skills acquired in the previous course, Chinese 202 will increase students' knowledge of the fundamental grammatical structures of Chinese and their ability to communicate in both spoken and written Chinese in a wide range of situations in daily, social and academic life. Students will be introduced to reading materials of increasing complexity on a variety of topics reflecting different aspects of traditional and modern Chinese culture. **Prerequisite:** CHIN 201.

Fulfills American/Global Diversity requirement.

#### **FRENCH**

### **FREN 101 Introductory French**

3-1-3 Credit Hours: 3

Introduction to spoken and written French for students who have had no previous French.

Prerequisite: ENGL 073 and ENGL 083/093 or higher placement.

Fulfills American/Global Diversity requirement.

#### **FREN 102 Introductory French**

3-1-3 Credit Hours: 3

Introduction to spoken and written French for students who have completed French 101.

Prerequisite: FREN 101 or equivalent.

Fulfills American/Global Diversity requirement.

#### **FREN 201 Intermediate French**

3-1-3 Credit Hours: 3

Spoken and written French for students who have had French 101-102 or the equivalent.

Prerequisite: FREN 102 or permission of department head.

Fulfills American/Global Diversity requirement.

### **FREN 202 Intermediate French**

3-1-3 Credit Hours: 3

Spoken and written French for students who have had French 201 or the equivalent.

Prerequisite: FREN 201 or permission of the department head.

Fulfills American/Global Diversity requirement.

#### **HEBREW**

#### **HEBR 101 Introductory Hebrew I**

3-1-3 Credit Hours: 3

Elementary Hebrew I introduces students with no prior knowledge of the language to basic forms, words and structures of the Hebrew language. Its main goal is to teach the fundamentals of writing and reading and provide students with basic abilities to hold simple conversations in Hebrew. Aspects of Jewish and Israeli culture and values that relate to the language are studied and discussed.

Prerequisite: ENGL 073 and ENGL 083/093 or higher placement.

Fulfills American/Global Diversity requirement.

#### **HEBR 102 Elementary Hebrew II**

3-1-3 Credit Hours: 3

A continuation of HEBR 101, Elementary Hebrew I, this course builds on the foundations of writing and reading acquired in the first semester and provides additional skills in these areas. A strong emphasis is put on listening and speaking skills and consequently most of class time is conducted in Hebrew. Aspects of Jewish and Israeli culture, history and values are integrated into the material.

Prerequisite: HEBR 101.

Fulfills American/Global Diversity requirement.

#### **ITALIAN**

#### **ITAL 101 Elementary Italian**

3-1-3 Credit Hours: 3

Elementary Italian introduces basic written and spoken Italian to students who have had little or no previous knowledge of the language. The main focus of the course is to help students begin to learn the Italian language in all its aspects, both orally and in writing. The goals of the course are to maximize each student's potential to communicate in Italian by speaking, reading and writing it. The course emphasizes communication skills and vocabulary, in terms of both everyday oral performance and basic reading knowledge. Students also learn aspects of the Italian culture.

 $\boldsymbol{Prerequisite} : \underline{ENGL~073}$  and  $\underline{ENGL~083/093}$  or higher placement.

Fulfills American/Global Diversity requirement.

#### ITAL 102 Elementary Italian

3-1-3 Credit Hours: 3

Elementary Italian 102 is a continuation of spoken and written Italian for students who have successfully completed Elementary Italian 101. The main focus of the course is to enable students to continue developing their basic communication skills in standard written and spoken Italian. Students will continue their study of classical Italian in addition to learning more aspects of the contemporary Italian culture.

Prerequisite: ITAL 101.

Fulfills American/Global Diversity requirement.

#### ITAL 201 Intermediate Italian

3-1-3 Credit Hours: 3

Intermediate Italian 201 emphasizes the four basic aspects of language learning—reading, writing, speaking and comprehension--building on the students' existing skills in Italian developed in Italian 101 and 102. More refined grammatical structures are introduced as well as additional idiomatic expressions used in everyday Italian.

**Prerequisite:** <u>ITAL 102</u> or placement.

Fulfills American/Global Diversity requirement.

## ITAL 202 Intermediate Italian

3-1-3 Credit Hours: 3

Intermediate Italian 202 is the second half of a two-semester sequence in Intermediate Italian. It continues to emphasize the four basic aspects of language learning--reading, writing, speaking and comprehension--building on the students' existing skills in Italian. More refined grammatical structures are introduced as well as additional idiomatic expressions used in everyday Italian. Strong emphasis is placed on aural comprehension and oral presentation.

Prerequisite: ITAL 201 or placement.

Fulfills American/Global Diversity requirement.

#### **JAPANESE**

## **JAPN 101 Elementary Japanese**

3-1-3 Credit Hours: 3

This course introduces basic modern spoken and written Japanese to students who have had little or no previous knowledge of the language. The course will focus on developing students' communication skills in Japanese, including writing, reading, listening and speaking in order for students to function using Japanese in a Japanese social environment. Students will also learn aspects of Japanese culture associated with the use of the language.

Prerequisite: ENGL 073 and ENGL 083/093 or higher placement.

Fulfills American/Global Diversity requirement.

## **JAPN 102 Elementary Japanese**

3-1-3 Credit Hours: 3

A continuation of Elementary Japanese 101. The course will focus on developing students' communication skills in Japanese including writing, reading, listening and speaking with more advanced basic expressions and more Kanji in order for students to function using Japanese in actual settings. Students will also learn aspects of Japanese culture associated with the use of the language.

Prerequisite: JAPN 101.

Fulfills American/Global Diversity requirement.

#### **JAPN 201 Intermediate Japanese**

3-1-3 Credit Hours: 3

An intermediate course in spoken and written Japanese. The course will focus on developing more advanced communication skills in Japanese: writing, reading, listening and speaking. Students will also continue to learn about aspects of Japanese culture reflected in its language.

Prerequisite: JAPN 102.

Fulfills American/Global Diversity requirement.

#### **JAPN 202 Intermediate Japanese**

3-1-3 Credit Hours: 3

Intermediate Japanese 202 is a continuation of spoken and written Japanese for students who have had Japanese 201 or the equivalent. The course will focus on helping students continue to develop more advanced communication skills in Japanese: writing, reading, listening and speaking. Students will also continue to learn about aspects of Japanese culture associated with the use of the language.

Prerequisite: JAPN 201.

Fulfills American/Global Diversity requirement.

### **SPANISH**

## **SPAN 101 Elementary Spanish**

3-1-3 Credit Hours: 3

Introduction to spoken and written Spanish language and to selected aspects of Hispanic cultures. For students who have had little or no previous Spanish.

Prerequisite: ENGL 073 and ENGL 083/093 or higher placement.

Fulfills American/Global Diversity requirement.

#### **SPAN 102 Elementary Spanish**

3-1-3 Credit Hours: 3

Introduction to spoken and written Spanish language and to selected aspects of Hispanic cultures. Continuation of Spanish 101.

Prerequisite: SPAN 101.

Fulfills American/Global Diversity requirement.

## SPAN 111 Elementary Spanish for Healthcare I

3-1-3 Credit Hours: 3

Elementary Spanish for Healthcare I introduces students to the spoken and written Spanish language as used in medical settings as well as to various aspects of the Spanish and Hispanic cultures. Designed specifically for students in the health care curricula or health care profession who have had little or no previous Spanish, this course focuses on language commonly used in health care settings and enables students to develop their listening, speaking, reading, and writing skills. Fulfills American/Global Diversity requirement.

## SPAN 112 Elementary Spanish for Healthcare II

3-1-3 Credit Hours: 3

A continuation of Spanish 111, Elementary Spanish for Healthcare II focuses on the spoken and written Spanish language in medical settings as well as to various aspects of the Spanish and Hispanic cultures. Designed specifically for students in the health care curricula or health care profession who have already taken Spanish 111, this course centers on language commonly used in health care settings and enables students to continue developing their listening, speaking, reading, and writing skills.

**Prerequisite:** SPAN 111; although students who have successfully completed Spanish 101 may take Spanish 112 with permission of the department head.

Fulfills American/Global Diversity requirement.

#### **SPAN 201 Intermediate Spanish**

3-1-3 Credit Hours: 3

Intermediate Spanish 201 advances students beyond the basic language requirements of Spanish 101 and Spanish 102 by continuing to help them develop communicative skills in listening, speaking, reading and writing so that they can communicate more efficiently in Spanish-speaking contexts. The course also aims at expanding the range of cultural and personal topics of discussion and at encouraging students to use the target language meaningfully and creatively.

Prerequisite: SPAN 102.

Fulfills American/Global Diversity requirement.

#### **SPAN 202 Intermediate Spanish**

3-1-3 Credit Hours: 3

Intermediate Spanish 202 advances students beyond the language requirements of Spanish 101, 102 and 201 by continuing to help them develop communicative skills in listening, speaking, reading and writing so that they can communicate more efficiently in Spanish-speaking contexts. The course also aims at expanding the range of cultural and personal topics of discussion and at encouraging students to use the target language meaningfully and creatively.

Prerequisite: SPAN 201.

Fulfills American/Global Diversity requirement.

## SPAN 205 Spanish for Heritage Speakers

3-1-3 Credit Hours: 3

Spanish 205 for Heritage Speakers is designed to meet the specific linguistic needs of students with a Spanish-language background. The course focuses on the issues most common to Heritage Spanish speakers, including syntax, grammar, spelling and punctuation. The course aims to refine and broaden students' oral, written, reading and listening skills in standard Spanish. Students will be introduced to the linguistic variations and cultural richness found throughout the Spanish-speaking world.

Prerequisite: SPAN 202 or demonstrated proficiency in Spanish, as determined by department head

#### **SWAHILI**

## **SWAH 101 Elementary Swahili**

3-1-3 Credit Hours: 3

Elementary Swahili introduces modern spoken and written Swahili to students who have little or no previous knowledge of the language. The course focuses on developing students' communication skills in Swahili, such as would be useful to conduct daily activities in an East African cultural and social environment. These skills include speaking, listening, writing and reading. Students will also learn about aspects of culture associated with the use of the language.

Prerequisite: ENGL 073 and ENGL 083/093 or higher placement.

Fulfills American/Global Diversity requirement.

## **SWAH 102 Elementary Swahili**

3-1-3 Credit Hours: 3

Elementary Swahili 102 is a continuation of spoken and written Swahili for students who have successfully completed the first semester of elementary Swahili. Students will continue to develop basic communicative skills, both in modern spoken and written Swahili. These skills include speaking, listening, writing and reading. Students will also continue to deepen their knowledge of contemporary East African culture.

Prerequisite: SWAH 101.

Fulfills American/Global Diversity requirement.

#### **SWAH 201 Intermediate Swahili**

3-1-3 Credit Hours: 3

This course offers study of spoken and written Swahili beyond the introductory level. Students will continue to develop their intermediate skills in reading, writing, speaking and listening. They will study Swahili grammar and will learn about East African culture by studying folklore, poetry, proverbs, kanga writings, and relevant films and music. **Prerequisite:** SWAH 102.

Fulfills American/Global Diversity requirement.

#### **SWAH 202 Intermediate Swahili**

3-1-3 Credit Hours: 3

This course provides intermediate study of spoken and written Swahili beyond the Swahili 201 level. Students will continue to develop their intermediate skills in reading, writing, speaking, and listening. Students will continue to study Swahili grammar while learning the meaning of African folklore and poetry, interpreting kanga writings in depth, and experiencing and discussing relevant films and music.

Prerequisite: <u>SWAH 201</u>.

 $Fulfills\ American/Global\ Diversity\ requirement.$ 

## Foundational Mathematics Courses

NOTE: On the basis of placement tests in mathematics, students are assigned to math courses at an appropriate level. There are courses at the pre-college level, as well as a variety of transferable college courses. All courses numbered below 100 are pre-college courses.

## FNMT 016 Arithmetic

3-0-3 Credit Hours: 3

This arithmetic course covers operations on natural numbers, integers, rational numbers (fractions), decimals and percents. Multi-step problems utilizing the correct order of arithmetic operations will be stressed. Correct mathematical format will be stressed. A Departmental Exam is required with no calculators allowed. Credit will not apply toward graduation.

#### FNMT 017 Elementary Algebra

3-0-3 Credit Hours: 3

This course covers algebraic expressions; equivalent algebraic expressions; operations on algebraic expressions; linear equations and inequalities in one variable; and factoring. A Departmental Exam is required with no calculators allowed. Credit will not apply toward graduation.

Prerequisites: "Pass" grade in FNMT 016 or satisfactory score on mathematics placement test.

## FNMT 118 Intermediate Algebra

3-0-3 Credit Hours: 3

Real numbers, polynomials, rational expressions, algebraic expressions, linear equations and inequalities in one variable, absolute value equations and inequalities, linear equations in two variables, graphs of lines, systems of linear equations in two variables, quadratic equations in one variable, problem solving. A Departmental Exam is required with no calculators allowed.

**Prerequisites:** FNMT 017 or FMNT 118 (or higher) placement.

## Geographic Information Systems Courses

## GIS 101 Introduction to Geographic Information Systems

3-0-3

This course is an introduction to GIS concepts and

Credit Hours: 3

software. Students will develop a basic understanding

of what constitutes a GIS, how it is used in the contemporary workplace, and how to become a specialist in the GIS field. Students will develop skill working with industry standard GIS software.

Additional course fee: \$85.

## GIS 102 Intermediate Geographic Information Systems

3-0-3

A continuation of GIS 101, Intermediate GIS,

Credit Hours: 3

prepares students for more advanced geographic

analyses. Students will integrate geographic concepts and techniques used in spatial data analysis with both raster and vector data. A more advanced GIS analysis using spatial statistics, geodatabases and advanced layout for mapmaking will also be emphasized.

Prerequisite: GIS 101.

Additional course fee: \$85.

## GIS 104 Principles of Computer Cartography and Visualization

3-0-3 Credit Hours: 3

This course introduces students to computer cartography and the interpretation of map data. They will learn about cartographic representations, map design considerations and thematic mapping techniques, among other topics. The course will use examples of applications in both the private and public sectors.

Prerequisite: GIS 101.

## GIS 201 Advanced Geospatial Applications

3-0-3 Credit Hours: 3

This course will focus on advanced geoprocessing topics and analysis workflows. The course will introduce a modeling environment for automation of geoprocessing and analysis functions. The course will cover database modeling and schema designs. It is also designed to increase students' understanding of Python scripting to automate GIS processes. **Prerequisite:** GIS 102.

## GIS 203: Remote Sensing and Global Positioning Technologies

3-0-3 Credit Hours: 3

This course introduces students to Remote Sensing and Global Positioning Technologies. Students will learn about Remote Sensing equipment and techniques and how these are used for analyzing earth surface changes and monitoring the environment. They will also learn about Global Positioning Systems (GPS) and how to utilize GPS field-data collection techniques to accurately gather and assess information about the position and characteristics of various objects. Emphasis will be placed on real-world applications in both the private and public sectors.

Prerequisites: GIS 101, FNMT 118 or MATH 118.

#### GIS 206 Introduction to Web GIS

3-0-3 Credit Hours: 3

This course is designed as an introduction to web GIS, exposing students to the programming concepts underlying web-based mapping applications. This course will focus on the basics of web GIS architecture, web technologies, web services, web mapping Application Programming Interfaces (API's) and mashups. This course is designed to increase students' understanding of developing web applications from start to finish. The course will focus on the most widely used API's at the time.

Prerequisite: GIS 201

# Geography Courses

NOTE: All Geography and Earth Science courses are considered Social Science courses.

## GEOG 101 Introduction to Physical Geography

3-0-3 Credit Hours: 3

An introduction to the basic concepts of physical geography that will involve the examination of the physical systems and processes which create many types of landforms and shape the earth's environment. In addition to introducing students to the concepts relevant to the physical world patterns, such as those relating to the makeup of the earth, weathering and mass movement, ocean currents and wind interaction, glaciation and periglaciation, this course also helps them understand the creation of the physical world as a systematic rather than a random formation.

#### GEOG 103 Introduction to Human Geography

Credit Hours: 3

Human Geography examines the relationships among people, culture, and space. It is the study of spatial variations among cultural groups and the spatial functioning of societies at local, regional and global scales both within the United States and throughout the world. This course focuses on describing, analyzing and comparing the ways in which human attributes, cultural characteristics and structures, including population, demographics, migration, language, religion, popular and folk cultures, race, ethnicity, gender roles, political and economic systems, levels of development, resource management, and land use and urbanization, remain constant or vary around the world. Students will learn to examine the relationships among cultural and human patterns, economic activities, and the physical environment and will also analyze and interpret information from primary sources and develop skills in writing appropriate for geography and the social sciences.

Fulfills the American/Global Diversity, Interpretive Studies and Writing Intensive requirements.

#### GEOG 180 Urban Geography

3-0-3 Credit Hours: 3

Examines cities and their surrounding regions from the perspective of a geographer, a social scientist searching for order in the way people organize and use the space they inhabit, through an analysis of physical, economic and social patterns within the urban areas of the United States and the world.

Fulfills American/Global Diversity requirement.

#### GEOG 222 World Regional Geography

3-0-3 Credit Hours: 3

This course examines the numerous physical processes which have shaped the world's landscapes, as well as various historical, political and economic forces which underlie the world's complex social landscapes. The regions covered include North America, Latin America, Europe, Africa, the Middle East, the former Soviet Union, Asia and the Pacific. **Prerequisite:** GEOG 101 or GEOG 103.

Fulfills American/Global Diversity requirement.

## Health Courses

## HLTH 110 Teaching Strategies for Health Professionals

2-0-0-2 Credit Hours: 2

This course introduces the role of teaching as an essential responsibility of the professional nurse. The application of the concepts of teaching and learning in client education is emphasized. The course investigates a systematic approach to assessing the needs and readiness of the learner, devising appropriate teaching strategies, and evaluating the teaching process. This is not an elective course for students enrolled in the Nursing program at Community College of Philadelphia.

Prerequisite: ENGL 101.

## HLTH 120 Theoretical Foundations in Nursing

3-0-3 Credit Hours: 3

This course provides students with a theoretical foundation in the science of nursing. The application of theoretical concepts to current trends and issues in nursing is emphasized. An overview of the historical, philosophical, political and conceptual development of the profession of nursing is examined. This is not an elective course for students enrolled in the Nursing program at Community College of Philadelphia.

#### **HLTH 211 Health Assessment**

2-2-3 Credit Hours: 3

This course develops the skills of health assessment and clinical examination techniques using a critical thinking and reasoning approach. It emphasizes an understanding of the range of normal and abnormal findings in both the healthy client and the client experiencing a health alteration. The student actively utilizes the theoretical constructs of assessment to complete course activities. A systematic method of obtaining and documenting findings is learned through case studies and hands-on practice. This is not an elective course for students enrolled in the Nursing program at Community College of Philadelphia.

**Prerequisites:** ENGL 101 and BIOL 110.

Corequisite: BIOL 271.

## **History Courses**

NOTE: History 101, 102 and 103 may be taken in any order.

## HIST 101 United States History: Colonial America through the Revolutionary Era

3-0-3 Credit Hours: 3

Colonial America through the Revolutionary Era surveys the political, social, economic, cultural and ideological characteristics of the 17th and 18th centuries, beginning with the earliest settlements through the establishment of the early American republic. Students are introduced to the techniques and strategies of historians through the use of historical texts, both primary and secondary, as well as the procedures of historical writing. Attention is given to multiple American cultures and their prevalent values and institutions; the explanations for change in such values and institutions; and relationships within the American colonies and the early United States both among the cultural groups comprising the national population as well as with those of Europe.

 $Fulfills\ the\ American/Global\ Diversity, Interpretive\ Studies, and\ Writing\ Intensive\ requirements.$ 

#### HIST 102 United States History: The 19th Century

3-0-3 Credit Hours: 3

United States History: The 19th Century surveys the political, social, economic, cultural and ideological characteristics of the United States from the early Republic to the Spanish American War. Students are introduced to the techniques and strategies of historians through the use of historical texts, both primary and secondary, as well as the procedures of historical writing. Attention is given to the prevalent values and institutions of America; the explanations for change in such values and institutions; and the interaction of the United States with the cultural groups comprising the national population as well as with specific nations of the world.

Fulfills the American/Global Diversity, Interpretive Studies, and Writing Intensive requirements.

#### HIST 103 United States History: The 20th Century

3-0-3 Credit Hours: 3

United States History: The 20th Century surveys the political, social, economic, cultural and ideological characteristics of modern America beginning c. 1900. Students are introduced to the techniques and strategies of historians through the use of historical texts, both primary and secondary, as well as the procedures of historical writing. Attention is given to prevalent American values and institutions; the explanations for change in such values and institutions; and the relationship between the United States and other cultures. Fulfills the American/Global Diversity, Interpretive Studies, and Writing Intensive requirements.

#### HIST 103H United States and Pennsylvania History: The 20th Century (Honors)

3-0-3 Credit Hours: 3

Modern United States History from the end of the 19th century to the present with special attention to its relationship to other humanities and social sciences, and with an emphasis on historical theory and interpretation.

Prerequisites: None.

Fulfills Interpretive Studies requirement.

NOTE: History 121 and 122 may be taken in any order.

### HIST 121 Global History I

3-0-3 Credit Hours: 3

In this course, students examine the remote past to understand the roots of contemporary social institutions. Students study the Old World (Africa and Eurasia) and the New World (The Americas) in separate units, in order to emphasize that the two developed simultaneously and in isolation from each other, thus laying the groundwork for History 122, which begins with the breaking of that isolation.

Fulfills American/Global Diversity, Interpretive Studies and Writing Intensive requirements.

## HIST 122 Global History II

3-0-3 Credit Hours: 3

In this course, students look at the roots of contemporary institutions and contemporary social problems by examining world events from the late fifteenth century onward, beginning with the initial contact between Western Europe and the Americas, and continuing until the present day.

Fulfills the American/Global Diversity, Interpretive Studies, and Writing Intensive requirements.

3-0-3 Credit Hours: 3

In this course, students will study the historical relationship between human beings and the food they consume, as well as the social institutions that have evolved around the production and consumption of food across cultures and time periods.

Fulfills American/Global Diversity, Interpretive Studies and Writing Intensive requirements.

#### HIST 146 Latino American History

3-0-3 Credit Hours: 3

Analyzing the Latino story in terms of race, gender and class, this course weaves the too little known story of Latino Americans into the history of the United States. Some of the time periods and movements analyzed include the 16th century conquest, colonization, 19th century expansion, the Great Depression, World War II, Post war society, the Civil Rights movement, and late 20th and early 21st century immigration. For this course, the term, "Latinos" includes people from the Caribbean, Central and South America, Mexico and Belize.

Fulfills American/Global Diversity, Interpretive Studies and Writing Intensive requirements.

#### HIST 150 History of American Health Care

3-0-3 Credit Hours: 3

A historical, conceptual survey of the origins and development of American health care from colonial America to the contemporary health care issues of the United States. Fulfills the American/Global Diversity, Interpretive Studies, and Writing Intensive requirements.

#### HIST 160 History of American Diversity

3-0-3 Credit Hours: 3

This course places the themes of race, ethnicity, gender, class and religion in a historical context from pre-Columbian America through colonial and revolutionary North America and into the nineteenth and twentieth centuries. It strives to be culturally inclusive and intellectually encompassing, emphasizing the actual experiences of ordinary citizens as well as those of extraordinary individuals.

#### HIST 170/RS 170 Religion in American History

3-0-3 Credit Hours: 3

This course covers the origins, beliefs, practices and cultural significance of the major religious traditions and movements in American history. Close reading and interpretive analysis of primary texts constitute the major course activities.

Fulfills American/Global Diversity and Interpretive Studies requirements.

## HIST 176/ADC 176 Philadelphia History: Architecture and Planning

3-0-3 Credit Hours: 3

Students in this course will study Philadelphia's physical and social development from William Penn's initial founding through the 21st Century. The course will focus on interpretation of the city's physical design as an expression of social, demographic and political contexts, technological advances and new materials, and evolving construction techniques of each significant historical period. Students participate in field trips and other onsite experiences that take place in various sections of the city. Fulfills American/Global Diversity, Interpretive Studies and Writing Intensive requirements.

## HIST 180 Women in History

3-0-3 Credit Hours: 3

The role of women in a multi-cultural context studied historically. Special emphasis on women's cultural and social roles in diverse societies in different periods. Fulfills American/Global Diversity requirements and Interpretive Studies.

## HIST 220 African American History to 1877

3-0-3 Credit Hours: 3

Making use of primary texts, this course surveys the social, cultural and political history of African Americans from enslavement through the Civil War and the post-war period, Reconstruction. Beginning in West Africa, the course examines three centuries of North American slavery, as well as the initial experiences of African Americans with emancipation and the promises of Reconstruction.

Fulfills American/Global Diversity requirements and Interpretive Studies.

#### HIST 221 African American History After 1865

3-0-3 Credit Hours: 3

This course surveys the cultural, social and political history of African Americans after the Civil War. Especially through close reading of primary texts, the course examines the experiences of African Americans during emancipation, urbanization, and the modern Civil Rights and Black Power eras.

Fulfills American/Global Diversity requirements and Interpretive Studies.

## HIST 297H Intellectual History: Ancient and Medieval (Honors)

3-0-3 Credit Hours: 3

Ancient and medieval intellectual history with special attention to its relationship to other disciplines in the humanities and social sciences, and with an emphasis on historical theory and interpretation.

**Prerequisite:** ENGL 101 or ENGL 101H. Fulfills American/Global Diversity requirement.

## HIST 298H Intellectual History: Modern (Honors)

3-0-3 Credit Hours: 3

Modern History from the Reformation to the 21st century with special attention to its relationship to other disciplines in the humanities and social sciences, and with an emphasis on historical theory and interpretation.

Prerequisite: ENGL 101 or ENGL 101H.

## **Humanities Courses**

#### **HUM 101 Cultural Traditions**

3-0-3 Credit Hours: 3

Interdisciplinary study of the humanities from the ancient world to the European renaissance drawing on works of literature, philosophy, art and history. Themes of continuing significance, including concepts of the hero, justice and the self are examined in Western and non-Western contexts. The course emphasizes oral and written analysis of primary texts. Recommended for students desiring to transfer.

Prerequisite or Corequisite: ENGL 101.

Fulfills American/Global Diversity and Interpretive Studies requirements.

#### **HUM 101H Cultural Traditions (Honors)**

3-0-3 Credit Hours: 3

Interdisciplinary study of the humanities, from Antiquity to the Age of Exploration, including literature, philosophy, art and history. Crucial themes of continuing importance, such as justice, the hero and the concept of the self will be examined in both Western and non-Western cultures. Course will emphasize oral and written analysis of primary works. May be taken concurrently with any Honors course.

Fulfills American/Global Diversity and Interpretive Studies requirements.

#### **HUM 102 Cultural Traditions**

3-0-3 Credit Hours: 3

Interdisciplinary study of the humanities in the period from the European renaissance to modern times drawing on works of literature, philosophy, art and history. Themes of continuing significance are examined in Western and non-Western contexts. The course emphasizes oral and written analysis of primary texts.

Prerequisite or Corequisite: ENGL 101.

Fulfills American/Global Diversity and Interpretive Studies requirements.

#### HUM 120 Introduction to Chinese Culture and Civilization

3-0-3 Credit Hours: 3

This interdisciplinary humanities course studies Chinese culture and civilization through art, music, philosophy, literature and history. Close reading of texts, class discussion and writing is required.

Prerequisite or Corequisite: ENGL 101.

Fulfills American/Global Diversity and Interpretive Studies requirements.

## HUM 130 Introduction to Japanese Culture and Civilization

3-0-3 Credit Hours: 3

Japanese culture and civilization will be studied through art and philosophical, literary and historical texts set in a chronological context. A close reading and interpretive analysis of primary texts will shape the major course activities which consist of in-class discussion and writing as well as writing assignments.

Prerequisite or Corequisite: ENGL 101.

Fulfills American/Global Diversity and Interpretive Studies requirements.

#### HUM 150 Introduction to Latin American Cultures and Civilizations

3-0-3 Credit Hours: 3

An introductory interdisciplinary humanities course on the cultures and civilizations of Latin America that will focus on the interpretation of literary, philosophical and historical texts, with a balanced representation from film, art and music. Students will learn about some of the cultures of Latin America from political, economic and social perspectives. Areas include Meso, Central and South America, as well as the Caribbean.

Prerequisite: ENGL 101.

Fulfills American/Global Diversity and Interpretive Studies requirements.

## HUM 170 Middle East Cultures and Civilizations

3-0-3 Credit Hours: 3

This course offers an interdisciplinary approach to the cultures and civilizations of the Middle East that recognizes both the diversity of the region and the unifying themes common

to Middle Eastern societies. Students will explore the ancient past, the impact of Islam and the Golden Age, colonization and nationalist movements, and the contemporary Middle East. History, religion, literature and the arts will be investigated in both traditional and modern contexts. These varied course experiences will provide students with an integrated view of the Middle East today.

Prerequisite: ENGL 101, which may be taken concurrently.

Fulfills American/Global Diversity and Interpretive Studies requirements.

#### HUM 180 Introduction to African Cultures and Civilizations

3-0-3 Credit Hours: 3

This introductory humanities course on the cultures and civilizations of the continent of Africa will focus mainly on the interpretation of texts (literary, philosophical or historical), film, art and/or music. Through these texts and artistic expressions, students will learn about some of the peoples of Africa and the ways these people think, act and organize their universe. Specifically, they will examine the values, beliefs, assumptions, practices and the various institutions through which these are transmitted.

Prerequisite or Corequisite: ENGL 101.

Fulfills American/Global Diversity and Interpretive Studies requirements.

#### HUM 190 Modern Africa and Asia

3-0-3 Credit Hours: 3

This interdisciplinary humanities course studies modern Africa and Asia mainly through their literature and films, and secondarily through historical documents, art and/or music. Students will study the primary texts to understand key twentieth century issues, events and themes. Writing assignments and in-class discussions will enable students to develop their interpretive and analytical skills which are important in making cross-cultural comparisons.

Prerequisite or Corequisite: ENGL 101.

Fulfills American/Global Diversity and Interpretive Studies requirements.

## **Interdisciplinary Studies Courses**

## IDS 120 Introduction to a Study Abroad Site

1-0-1 Credit Hours: 1

This one-credit course introduces students to the history, cultural traditions, and current circumstances of a specific study abroad site. This course combines fifteen hours of formal class time with additional co-curricular activities at the program site. Students are required to attend lectures and discussions on campus prior to the trip, at the site, and on campus after returning from the site. Students will spend at least five days at the site not including travel days to and from the destination.

## IDS 150 Introduction to African Diaspora Studies

3-0-3 Credit Hours: 3

Students in this course will study the experience of Africans living in Africa, Europe, North and South America, the Caribbean and the Mediterranean. An interdisciplinary course, it makes use of sources from history, literature and the social sciences. Students will study racial, ethnic, cultural and religious traditions of the African Diaspora, including patterns of exclusion and inclusion and the social relations between Diaspora Africans and non-African populations.

#### IDS 297H Seminar in the Humanities and Social Sciences: Ancient and Medieval (Honors)

3-0-3 Credit Hours: 3

An interdisciplinary seminar in ancient and medieval social thought with a focus on philosophy, literature and intellectual history.

Prerequisite: ENGL 101 or ENGL 101H.

Fulfills Interpretive Studies requirement.

#### IDS 298H Seminar in the Humanities and Social Sciences: Modern (Honors)

3-0-3 Credit Hours: 3

An interdisciplinary seminar in modern social thought with a focus on philosophy, literature and intellectual history.

Prerequisite: ENGL 101 or ENGL 101H.

Fulfills Interpretive Studies requirement.

## Leadership Studies Courses

## LEAD 104 Introduction to Leadership Studies

3-0-3 Credit Hours: 3

This course introduces students to concepts, models and practices of leadership that are effective in civic, community and political organizations. The course examines the purposes and structures of various types of organizations and looks at the sorts of leadership styles and strategies that match these organizations under particular circumstances. Using case studies, simulations and real-life applications, the course aims to help leaders and potential leaders better envision their organizations' purposes, better communicate with members, and better organize members for effective action.

### LEAD 114 Leadership for Effective Organizations

3-0-3 Credit Hours: 3

This course engages students in case studies, reading, research and discussion about leadership, especially in community nonprofit organizations. The course focuses on the articulation of an organization's purpose; on the recruitment, organizing, and encouragement of members; on teamwork, effective fund-raising and the successful conducting of projects; and on communicating an organization's mission and activities to the public.

### LEAD 120 Introduction to Conflict Resolution Theory and Practice

3-0-3 Credit Hours: 3

This course introduces students to the psycho-social dynamics of conflict as it occurs at the interpersonal, organizational, and community levels of interaction. Various theories addressing the causes and stages of conflict will be presented in order to examine ways in which conflict functions to create and maintain personal identity, group boundaries, and in and out-group identities. Students will develop theoretical and practical frameworks within which to analyze and explore ways to resolve conflicts in settings ranging from home to the workplace. Particular attention will be paid to intractability in community relations and best practices for dispute management and resolution.

## Management Courses

#### MNGT 111 Business Mathematics

3-0-3 Credit Hours: 3

Basic mathematical processes required for business calculations. Fundamentals of arithmetical operations, business problem solving, linear algebra and logarithms. Interest and discount calculation, allocation and depreciation, markup and markdown, annuities and present value.

#### MNGT 121 Introduction to Business

3-0-3 Credit Hours: 3

The course introduces students to business activity and its role in the free enterprise system. The course gives an overview of economic systems, e-commerce, forms of business ownership, issues of ethical and social responsibility, global business, small business ownership, principles of management, marketing, information technology and systems, accounting, finance and business law.

### MNGT 141 Principles of Management

3-0-3 Credit Hours: 3

This course reviews the five functions of management (planning, organizing, staffing, leading and controlling) and the history of the development of management theory. It covers in detail the subset concepts and theories associated with the functions. The course explains the universality of management theory in its application within commercial, nonprofit, governmental and other organizational settings. It covers management in its global applications as well as its involvement with organizational ethics and organizational social responsibility.

**Pre- or corequisite:** MNGT 121.

#### MNGT 142 Management Information Systems

3-0-3 Credit Hours: 3

This course provides students with an understanding of the systems analyst's job requirements and skills, and familiarizes students with the methods of creating and maintaining a management information system. Students are also exposed to management functions and project management techniques and will trace the five phases of a systems study. Datagathering methods are studied, as well as interviewing and documentation techniques, cost analysis, hardware and software acquisition and the finalization of systems implementation.

Prerequisite: MNGT 121.

#### MNGT 262 Business Law

3-0-3 Credit Hours: 3

A study of the key areas of the law as they apply to business including analysis of the advantages and disadvantages of the "S" corporation, "C" corporation, Limited Liability Company, limited and general partnership and sole proprietorships; the Uniform Commercial Code, including the law of sales, warranties and negotiable instruments; contract law and enforceability; liability for negligence and intentional torts; purchase and sale of real estate; and bailment of personal property.

## **Marketing Courses**

## MKTG 131 Principles of Marketing

3-0-3 Credit Hours: 3

By studying its role in society generally and specifically within business organizations, students learn the intricacies of marketing. They learn how marketing strategies are developed and implemented and how a product is priced, promoted and distributed to influence consumers to buy it. They learn the uniqueness of consumers and organizational groups and how to develop successful marketing programs in domestic, international and global settings to market particular products, services or ideas to those groups while remaining both ethically and socially responsible.

Pre- or corequisite: MNGT 121.

## **Nursing Courses**

### NURS 101 Nursing I

4-2-12-7 Credit Hours: 7

Introduction to the knowledge, skills and abilities associated with nursing practice. Concepts of physiological integrity; psychosocial integrity; a safe, effective care environment; and health promotion/maintenance are examined. The nursing process provides a framework to help the learner think critically, assess factors that influence safe and effective care delivery, and integrate theory with care of clients and families. Offered fall semester only.

Corequisites: BIOL 109, DIET 111 and ENGL 101.

Additional course fee: \$345.

#### NURS 132 Nursing II

4-2-12-7 Credit Hours: 7

Concepts of physiological integrity; psychosocial integrity; a safe, effective care environment; and health promotion/maintenance are further explored as students assess and intervene to improve function for clients and families experiencing threats to physiological and psychosocial integrity. Nursing care is aimed at restoring optimal functioning for clients/families and assisting them through life transitions, using the nursing process as a framework to help the learner think critically and integrate theory with practice. Offered spring semester only.

Prerequisites: NURS 101.

Corequisites: BIOL 110, ENGL 102, and FNMT 118 or MATH 118 or higher.

Fulfills Writing Intensive requirement.

Additional course fee: \$345.

#### NURS 231 Nursing III

5-0-12-7 Credit Hours: 7

Nursing care for clients/families experiencing common health alterations across the lifespan in a variety of settings is studied in depth. Students synthesize and integrate knowledge, skills and abilities associated with nursing practice to develop a plan of care for clients/families to assure the delivery of safe and effective care, to facilitate physiological and psychosocial integrity, and to promote health. Clinical decision-making skills and resource management principles are introduced. Offered fall semester only.

Prerequisites: NURS 132.

Corequisites: BIOL 241, SOC 101 and CIS 103.

Additional course fee: \$345.

## NURS 232 Nursing IV

5-0-12-7 Credit Hours: 7

Nursing care for clients/families experiencing common health alterations across the lifespan in a variety of settings continues to be examined in depth. Students synthesize and integrate knowledge, skills and abilities to evaluate and modify a plan of care; to independently plan, implement, and evaluate the delivery of safe and effective care; to facilitate physiological and psychosocial function; to assist client/family coping; to maximize self-care; and to promote optimal functioning. Concepts of management are further developed through collaboration with members of the health care team. Offered spring semester only.

**Prerequisites:** <u>NURS 231</u>. *Additional course fee:* \$345.

## Office Administration Courses

## OA 102 Keyboarding and Skill Development

1-1-1 Credit Hours: 1

This course is designed to provide students with the proper techniques necessary for developing mastery of the keyboard through the touch system. Diagnostic/prescriptive approach for developing keyboarding accuracy and speed is used. Ideal for learning basics and improving skills.

\*\*Additional course fee: \$85.

#### OA 106 Introduction to Word, Excel and PowerPoint

3-0-3 Credit Hours: 3

A hands-on introduction to the core features of Microsoft Word, Excel, and PowerPoint. In Word, students will create, edit, and format documents. In Excel, they will create worksheets with labels, values and formulas, and create graphs and charts. They will prepare, edit and format PowerPoint presentations.

#### OA 110 Professional Keyboarding I

3-0-3 Credit Hours: 3

Development of correct "touch key-boarding" techniques on the computer keyboard. Speed development to 30+ words a minute with controlled errors on straight copy material. Introduction to business correspondence. Includes basic computer operations and elementary word processing functions such as creating, saving, retrieving and printing of documents.

#### OA 161 Business Communications I

3-0-3 Credit Hours: 3

Development and refinement of language facility and usage through complete and comprehensive coverage of grammar and language mechanics via printed and electronic resources. Upon successful completion of the course, the student will demonstrate competency in the digital workplace in both the spoken and the written word.

## Ophthalmic Courses

## OPH 101 Ophthalmic Pre-Testing

2-2-3 Credit Hours: 3

This course includes the study of, and practical experience in, the procedures and measurements that comprise the preliminary testing for a comprehensive eye and vision examination. Students will learn how to obtain a patient's case history and blood pressure and how to measure visual acuity, color vision, pupil evaluation, and depth perception. Students will learn the use of automatic equipment and how to provide ophthalmic chair–side assisting.

\*\*Additional course fee: \$105.\*\*

\*Restricted to Ophthalmic Technician Proficiency Certificate students

## OPH 102 Ocular and Ophthalmic Concepts

2-0-2 Credit Hours: 2

This course covers ophthalmic terminology, the properties of light, the nature of refractive errors, and ophthalmic lens design for the correction of refractive errors.

\*Restricted to Ophthalmic Technician Proficiency Certificate students

## OPH 105 Ocular Anatomy, Physiology and Pharmacology

3-0-3 Credit Hours: 3

This course focuses on the study of the form and function of the human eye, enabling students to develop an understanding of the anatomy of the eye. Relevant physiology and function of the eye will also be covered. The actions of diagnostic and therapeutic pharmaceutical agents will be discussed along with common ocular conditions and diseases. The course will also cover common systemic medications that may affect the eye and vision.

\*Restricted to Ophthalmic Technician Proficiency Certificate students

### **OPH 106 Optical Dispensing**

2-2-3 Credit Hours: 3

This course covers frame definition, parts and types of frames, measurement of frames and lenses, alignment of frames, inserting and removing lenses, selection and filling of eyewear; dispensing, adjustment, and repair of eyewear; and patient education regarding eyewear.

Corequisites: OPH 101, OPH 102, OPH 105 and OPH 110.

Additional course fee: \$105.

\*Restricted to Ophthalmic Technician Proficiency Certificate students

## OPH 110 Clinical Experience I

0-0-4-1 Credit Hours: 1

This course gives students clinical experience through active observation and scribing, as well as vision screening activities at clinical affiliates. Students are expected to interact with patients and be engaged in problem–solving activities. Students will actively collaborate with fourth–year Doctor of Optometry students, optometric residents and faculty members/preceptors, as well as other clinical staff and health care professionals. Seminars/case discussions are included in the course.

Corequisites: OPH 101, OPH 102, OPH 105, and OPH 106.

Additional course fee: \$105.

\*Restricted to Ophthalmic Technician Proficiency Certificate students

## OPH 120: Cornea and Contact Lenses

2-2-0-3 Credit Hours: 3

This course is designed to give students hands on experience with soft, gas permeable, and specialty contact lenses. Students will interact with patients and teach them contact lens insertion, removal, cleaning, and disinfection techniques. Students will be required to understand basic corneal physiology and become capable of evaluating a contact lens on the eye. Students will learn to manage a contact lens department, gaining the ability to inventory and order contact lenses.

Prerequisites: OPH 101, OPH 102, OPH 105, OPH 106, and OPH 110 with a grade of C or better.

Additional course fee: \$105.

<sup>\*</sup>Restricted to Ophthalmic Technician Proficiency Certificate students

2-2-0-3 Credit Hours: 3

This course is designed to give students hands on experience with specialty ophthalmic testing. Students will actively collaborate with fourth-year Doctor of Optometry students, optometric residents, and faculty members/preceptors, as well as clinical staff and other health care professionals.

**Prerequisites:** OPH 101, OPH 102, OPH 105, OPH 106, and OPH 110 with a grade of C or better.

Additional course fee: \$105.

\*Restricted to Ophthalmic Technician Proficiency Certificate students

## OPH 140: Patient Relations/Practice Management

2-0-2 Credit Hours: 2

This course introduces the student to their personal and vocational responsibilities as an ophthalmic technician, as a member of a clinical practice, and as a participant in the health care delivery team. The content of this course supports students in the development of their societal, professional, and work ethics.

Prerequisites: OPH 101, OPH 102, OPH 105, OPH 106, and OPH 110 with a grade of C or better.

\*Restricted to Ophthalmic Technician Proficiency Certificate students

#### OPH 150: Clinical Experience II

0-0-8-2 Credit Hours: 2

This course gives students clinical experience through active scribing and hands on testing, as well as vision screening activities at clinical affiliates. Students are expected to interact with patients and be engaged in problem-solving activities. Students will actively collaborate with fourth-year Doctor of Optometry students, optometric residents and faculty members/preceptors, as well as other clinical staff and health care professionals. Seminars/case discussions are included in the course.

Prerequisites: OPH 101, OPH 102, OPH 105, OPH 106, and OPH 110 with a grade of C or better.

Additional Course Fee: \$85

<sup>\*</sup>Restricted to Ophthalmic Technician Proficiency Certificate students

# Paralegal Studies Courses

## PLS 101 Introduction to Paralegal Studies

3-0-3 Credit Hours: 3

A general introduction to the field of legal assistance with specific emphasis on the variety of tasks performed by paralegals in different employment settings, as well as the ethical obligations of paralegals.

## PLS 111 Legal Research and Writing I

3-0-3 Credit Hours: 3

This foundation course is an introduction to the field of legal research and writing. It provides students with an overview of the legal research process, the various legal source materials—both primary and secondary—and the basics of drafting a legal memorandum.

Prerequisite: PLS 101.

Fulfills Writing Intensive and Interpretive Studies requirements.

Additional course fee: \$265.

### PLS 115 Legal Technology

3-0-3 Credit Hours: 3

An introduction to the use of computers and legal specialty software programs in the contemporary law office and other legal environments. The course will examine applications involving office management, document management, electronic discovery and trial presentation. The course will also address legal ethical considerations in the use of computer technology.

Prerequisites: PLS 101 and CIS 103.

## PLS 121 Civil Litigation I

3-0-3 Credit Hours: 3

This foundation course in civil litigation for paralegals provides students with an overview of the entire litigation process. The course considers the civil court system, client interviews and the drafting of documents such as initial pleadings and responses. Students are provided with an overview of discovery and civil trial procedures.

Prerequisite: PLS 101.

#### PLS 211 Legal Research and Writing II

3-0-3 Credit Hours: 3

Provides in-depth practice in legal analysis of primary and secondary legal sources, drafting of a wide variety of legal documents and instruction in the use of computer databases in legal research. Course limited to Paralegal Studies degree and Paralegal Studies proficiency certificate candidates only.

**Prerequisites:** <u>PLS 111</u> and <u>ENGL 102</u>.

Fulfills Writing Intensive requirement.

#### PLS 215 Electronic Discovery

3-0-3 Credit Hours: 3

This course will provide an in-depth treatment of both the theoretical and practical aspects of the electronic discovery lifecycle, including the preservation, collection, review, production and analysis of electronically stored information in litigation and investigations. The course will examine aspects of electronic discovery case law and federal and state procedural rules, as well as the ethical guidelines relevant to this evolving field.

Prerequisite: PLS 121.

## PLS 221 Civil Litigation II

3-0-3 Credit Hours: 3

An advanced course in civil litigation and trial preparation in which analytic skills are refined and experience is acquired by practicing as a litigation paralegal. **Prerequisites:** <u>PLS 101</u> and <u>PLS 121</u>.

## PLS 231 Family Law

3-0-3 Credit Hours: 3

An in-depth, overall introduction to the practice of family law in which practical and analytical skills are developed. Areas studied include legal ethics, marriage, divorce, division of property, alimony, child custody, child support, protection from abuse, premarital and separation agreements, adoption and other topics.

Prerequisites: PLS 111 and PLS 121.

#### PLS 241 Tort Law

3-0-3 Credit Hours: 3

This is an advanced course in tort law. It involves personal injury litigation and trial practice, and includes principles of tort law such as negligence, intentional torts, strict liability, product liability and limited tort options in automobile insurance.

Prerequisite: PLS 121.

#### PLS 251 Real Estate Law for Paralegals

3-0-3 Credit Hours: 3

Introduction to various tasks performed by paralegals as part of the legal profession's role in the conduct of real estate transactions.

Prerequisite: PLS 111.

#### PLS 255 Business Organizations for Paralegals

3-0-0-3 Credit Hours: 3

This course examines the legal concepts relating to the different business formats such as sole proprietorships, partner-ships, limited liability companies and corporations. The course will specifically focus upon the skills such as drafting, legal research and analysis, which are critical to success in this specialty field.

Prerequisites: ENGL 101 and PLS 111.

#### PLS 261 Wills, Trusts and Estate Administration

3-0-3 Credit Hours: 3

This course provides an in-depth introduction to the tasks performed by paralegals in estate planning and probate of a decedent's estate.

Prerequisite: PLS 111.

## PLS 265 Intellectual Property

S-0-3 Credit Hours: 3

This is an advanced course for paralegals in the area of intellectual property. The course considers the legal protection of all forms of intellectual property by means of patents, copyrights and trademarks. Students are provided with an understanding of the legal processes involved in the protection of intellectual property and the paralegal's role in those processes.

Prerequisite: PLS 111.

#### PLS 271 Bankruptcy Law

3-0-3 Credit Hours: 3

This course examines the legal concepts relating to creditor and debtor rights under Title 11 of the United States Code, commonly referred to as the Bankruptcy Code. Students will learn about the various chapters of the Bankruptcy Code and its major sections, specifically focusing on consumer bankruptcy cases and the analysis of client interviews. Students will develop skills necessary to prepare a bankruptcy petition and its accompanying schedules and statements as well as other documents and motions commonly filed with the court in bankruptcy practice.

Prerequisite: PLS 121.

## PLS 275 Employment Law

3-0-3 Credit Hours: 3

An in-depth introduction to the laws governing the employer-employee relationship and the tasks performed by paralegals in employment law.

Prerequisite: PLS 111.

#### PLS 281 Environmental Law

3-0-3 Credit Hours: 3

An introductory analysis of federal, state and local environmental laws and regulations and their application in the practice of environmental law.

Prerequisite: PLS 111.

#### PLS 285 Immigration Law

3-0-3 Credit Hours: 3

Immigration Law will provide an overview of immigration law in the United States, with an emphasis on the practical application of that law in a law firm or corporate environment. Students will learn the skills needed to deal with a deadline-oriented caseload for a diverse clientele. Topics will include the basics of immigration employment and family-based immigration, refugee law and the procedures for applying for citizenship and asylum.

Prerequisites: PLS 101 and PLS 121.

## PLS 295 Legal Internship

.5-10-3 Credit Hours: 3

This course provides students with practical experience by applying the knowledge learned throughout the Paralegal program in a work environment for a minimum of 120 hours during a semester. In weekly seminars and individual meetings with the course instructor, students explore career options, develop confidence as professionals and acquire job hunting and career development skills.

Prerequisites: Completion of at least 36 credits toward the degree, including PLS 101, PLS 111 and PLS 121, and a grade point average of 2.5 or better.

## **Physics Courses**

NOTE: The Physics Department offers three sequences in physics. All include an appropriate laboratory.

PHYS 101 is a non-mathematical college transfer or general elective science course open to all students. It is suitable for students in Liberal Arts, Communications and Education or for those who want to take physics as a general elective.

<u>PHYS 105</u> is a one-semester course using only elementary high school mathematics, intended for Business, Fire Science, Respiratory Therapy and Construction Technology students. This course is for students desiring a minimally mathematically-based physics course. This course is also suggested for students in Chemical Technology, and is suitable for Liberal Arts and Business students who need a laboratory science.

PHYS 111-112 is a two-semester college physics sequence for students with a good background in algebra and trigonometry. It is suitable for students in pharmacy, pre-dental and pre-medical programs who do not need a calculus-based physics course, mathematically able technology students and Liberal Arts students who plan to teach mathematics and sciences.

The <u>PHYS 140-241</u> sequence is a calculus-based, classical physics sequence for students interested in biology, chemistry, engineering, mathematics or physics, pre-dental or pre-medical programs.

PHYS 242 is a calculus-based course in modern physics for students in the Engineering Science curriculum. It is also suitable for students who wish to take additional physics beyond PHYS 140 and 241, such as those interested in biology, chemistry, mathematics or physics.

## PHYS 101 Revolutionary Concepts in Physics

3-2-4 Credit Hours: 4

The study of scientific concepts which have had a revolutionary impact on Western civilization from early Greek ideas on planetary motion to the Newtonian Syntheses. By the selection of key topics from mechanics and astronomy, the student will gain an acquaintance with the historical development, methodology and philosophy of our understanding of the physical universe of classical physics. Treatment will be mostly non-mathematical. A two-hour laboratory per week is required. This is a general elective course suitable for students who have a laboratory science requirement, except for students in curricula which specify a different physics course.

\*\*Additional course fee: \$105.\*\*

#### PHYS 105 Survey of Physics

4-2-4 Credit Hours: 4

Mechanics, heat, sound, electricity, magnetism, light and optics. Suitable as a science elective for college transfer students planning to major in fields outside the natural sciences or mathematics. Also suitable for some students in career programs. A two-hour laboratory per week is required.

**Prerequisites:** FNMT 118 (or higher) placement or a passing grade in FNMT 017 (or higher) are required.

Additional course fee: \$105.

#### PHYS 106 Matter and Energy

3-2-4 Credit Hours: 4

An optional continuation of <u>PHYS 105</u>. The structure of matter, chemical energy, nuclear energy, energy conversions, energy resources of the world, relationships between pollution and energy utilization. A two-hour laboratory per week is required.

**Prerequisite:** PHYS 105 or permission of the department head.

Additional course fee: \$105.

### PHYS 107 Matter and Energy

3-0-3 Credit Hours: 3

The course content is the same as that of PHYS 106, but without the laboratory. A general elective course suitable for students who do not require a laboratory science.

#### PHYS 108 Descriptive Astronomy

3-0-3 Credit Hours: 3

Introduces students to discoveries of astronomy and physics, from ancient times to the present day. More specifically, the course focuses on the history of astronomy and science. Students learn about the birth of the universe; the stars, planets, galaxies and constellations; the possibility of life on other heavenly bodies; as well as radiation, magnetism, nuclear reactions, and other aspects of physics. Topics such as relativity, gravity, quantum mechanics and statistical mechanics, black holes, supernovas, gamma-ray bursters, quasars,

neutron stars, spectroscopy, light, heat and heat transfer, dark energy and dark matter, string theory and conceptual physics are also discussed.

#### PHYS 111 General Physics I

4-2-4 Credit Hours: 4

Introduction to mechanics, heat and sound. This is an algebra-trigonometry based course suitable for college-transfer students in pharmacy, pre-dental and pre-medical programs who do not need a calculus-based physics course. It is also suitable for college transfer students in arts, business, education, humanities and technology programs.

**Prerequisite:** MATH 162 or Math 171 or Math 171 placement.

Additional course fee: \$105.

#### PHYS 112 General Physics II

4-2-4 Credit Hours: 4

Continuation of PHYS 111. Introduces electricity, magnetism, light, optics, atomic and nuclear physics.

**Prerequisite:** PHYS 111 or permission of the department head. *Additional course fee:* \$105.

## PHYS 125 Musical Acoustics

2-2-3 Credit Hours: 3

Designed primarily for students concentrating in music; may be taken by others. The nature of sound, the hearing process, wave motion, architectural acoustics and their application to musical instruments and performance by musicians.

Additional course fee: \$105.

## PHYS 140 Mechanics, Heat and Sound

5-2-5 Credit Hours: 5

Calculus-based introduction to mechanics, heat and sound suitable for college transfer students who plan to major in engineering, life sciences, mathematics or physical science. **Prerequisite:** MATH 171. (It is suggested that students who have never had a physics course take PHYS 111 before PHYS 140.)

Additional course fee: \$105.

## PHYS 241 Electricity, Magnetism and Light

4-2-5 Credit Hours: 5

Continuation of PHYS 140. Includes electricity, magnetism, geometric and physical optics.

Prerequisites: PHYS 140, MATH 172 or permission of the department head.

Additional course fee: \$105.

#### PHYS 242 Modern Physics

3-2-4 Credit Hours: 4

Is a calculus-based course in modern physics for students in the Engineering Science curriculum. It is also suitable for students who wish to take additional physics beyond PHYS 140 and 241, such as those interested in biology, chemistry, mathematics or physics.

**Prerequisite:** <u>PHYS 241</u>. *Additional course fee:* \$105.

# **Political Science Courses**

# POLS 101 Introduction to Political Science

3-0-3 Credit Hours: 3

The science of politics and of the major institutions, processes and theories of modern government. Comparison of democratic and totalitarian systems. Focuses on the United States and selected foreign political systems.

#### POLS 111 American Government

3-0-3 Credit Hours: 3

The Constitution, the federal system and democracy, the presidency, Congress and the Supreme Court, political parties and special interest groups: how they work, and the decisions they make.

#### POLS 112 Introduction to International Relations

3-0-3 Credit Hours: 3

The course will cover the theories of international relations (IR) and apply them to the broader context of global politics. Students will learn key concepts and ideologies. They will make comparative analyses of the types of political systems and ideologies found in both the developed and developing countries and identify patterns of political behavior. These patterns can then be linked to theories, concepts and ideologies that have been studied. The contents of this course will be placed in historical and socio-cultural contexts.

### POLS 117 City and State Government and Politics, with Cases from Philadelphia and Pennsylvania

3-0-3 Credit Hours: 3

Using a case study and problem solving approach, this course introduces students to the institutions and complex processes of city and state government and politics, with special attention to Philadelphia and Pennsylvania. By examining rules, practices and issues in Philadelphia and Pennsylvania, students learn basics about how city and state governments are structured, financed and managed; how political power is sought, maintained and allocated; and how services are organized and delivered to citizens. The course surveys the governmental structures as well as the parties and other organizations involved in Philadelphia and Pennsylvania politics, and examines their constituencies, agendas and modes of operation. Students also study and discuss current major local issues and the policies that are being proposed to address them. Comparisons are made to similar and contrasting features and issues in other American cities and states.

# **Process Technology Courses**

# PTEC 103 Introduction to Process Technology and Plant Equipment

3-2-4 Credit Hours: 4

This course provides an overview of process technology in various industries, including the responsibilities of process control technicians, and a description of the equipment and processes used across multiple industries.

Prerequisites: CHEM 110 or CHEM 121 with a grade of 'C' or higher.

Additional course fee: \$175.

#### PTEC 111 Process Control I

3-2-4 Credit Hours: 4

Process Control I introduces students to the theory and application of process instrumentation and to the variables that affect industrial processes. Students become acquainted with concepts such as process variables, measuring devices, control loops, control valves, and process diagrams. Building on the knowledge from previous courses, students learn how plant equipment is controlled.

Prerequisites: PTEC 103 and ASET 110.

Additional course fee: \$85.

#### PTEC 115 Process Control II

3-2-4 Credit Hours: 4

Feedback control is a critical topic in process technology. Building on material students learned in Process Control I, PTEC 115 covers the concept of feedback loops in greater depth, including control dynamics and digital control systems such as programmable logic controllers (PLCs) and distributed control. This course will also increase knowledge of instrumentation troubleshooting.

**Prerequisites:** <u>PTEC 111</u>. *Additional course fee:* \$85.

# PTEC 125 Fluid Power and Controls

3-2-4 Credit Hours: 4

The course explores practical applications related to the transport, storage, control, processing and flow of fluids. It includes measurement of flow, compressible and incompressible fluids, and pumping of liquids and gases. The course is intended to prepare students to work alongside engineers as part of an engineering team, as well as prepare students to work as technicians in a manufacturing setting where they might be responsible for the smooth operation of fluid systems.

Prerequisites: PTEC 103, ASET 110, PHYS 105, FNMT 118 or MATH 118.

Additional course fee: \$85.\*

# PTEC 135 Unit Operations

3-2-4 Credit Hours: 4

This course provides students with an opportunity to integrate learning from previous courses in Process Technology and to synthesize an overall understanding of production processes. Students will gain an understanding of how the principles of fluid mechanics, heat transfer and mass transfer are coordinated in an actual production process.

Prerequisites: PTEC 111, ASET 130 and PTEC 115 and PTEC 125 both of which may be taken concurrently with PTEC 135.

Additional course fee: \$85.\*

# **Psychology Courses**

NOTE: All prerequisite courses listed must be passed with a grade of "C" or better.

# PSYC 101 Introduction to Psychology

3-0-3 Credit Hours: 3

In this course students survey the research and theories of the science of human behavior with a particular focus on human mental processes. Among the topics discussed are development, learning, memory, perception, personality, motivation, social behavior, abnormal behavior and therapy. Also included is an introduction to the various careers associated with psychology. Key to the study of psychology is the scientific method and how it is applied to the analysis and measurement of individuals and groups.

## PSYC 101H Introduction to Psychology (Honors)

3-0-3 Credit Hours: 3

An introduction to Psychology. This course focuses on the scientific study of human and animal behavior, including mental process. Among the subjects studied are the effect of the body on behavior, how people think and learn, what motivates individuals, how children grow and develop, and what makes people behave abnormally. In addition, the course requires participation in seminars, the close interpretive reading of primary texts, and the writing of academic essays that focus on the interpretation of primary texts. May be taken concurrently with any Honors course.

Fulfills Interpretive Studies requirement.

## PSYC 110 Descriptive Research Methods in Psychology

3-0-3 Credit Hours: 3

This course will introduce students to the scientific method as it applies to answering questions about human behavior through non-experimental research methods such as survey and observation. Topics include the ethical and practical limitations of collecting data in applied settings via surveys, interviews, and observation. Students will be introduced to basic descriptive statistics which they will use to evaluate data.

### PSYC 167 Foundations of Statistical Methods for Social and Behavioral Sciences

3-0-3 Credit Hours: 3

Introduction to statistical concepts and methods used in the field of psychology, including quantitative description, probability, inferential methods, and hypothesis-testing. Specific topics covered include central tendency, variability, correlation, t-tests, analysis of variance, and non-parametric tests. The course emphasizes a conceptual understanding of statistics applied in the context of psychological research and trains students to use statistical software.

**Prerequisite:** FNMT 118 or MATH 118

Additional Course Fee: \$85

# PSYC 201 Child Psychology

3-0-3 Credit Hours: 3

Students examine the development of the child from conception through middle childhood. The influences of heredity as well as developmental processes such as physical maturation, cognitive changes, personality and social growth are studied.

Prerequisite: PSYC 101.

# PSYC 202 Human Sexuality

3-0-3 Credit Hours: 3

Explores sexual behavior and sexual attitudes of individuals throughout the lifespan. It examines ways in which an individual's perceptions, learning, motivation and personality, along with cultural factors such as gender, ethnicity, religion and socioeconomic status shape his or her sexual attitudes and behaviors. Students will learn to critically analyze, reflect upon and evaluate different theoretical perspectives from psychology as well as from the related sciences.

Prerequisite: PSYC 101.

Fulfills American/Global Diversity requirement.

# PSYC 205 Psychopathology/Abnormal Psychology

3-0-3 Credit Hours: 3

The course examines the characteristics of psychological disorders. For each disorder, multiple theoretical explanations are examined, including the psychoanalytic, behavioral,

cognitive, biological, socio-cultural and humanistic. Secondary consideration is given to the treatments derived from the theories examined.

Prerequisite: <u>PSYC 101</u>.

Fulfills Writing Intensive requirement.

# PSYC 209 Adolescent Psychology

3-0-3 Credit Hours: 3

This course studies physical, cognitive, social and emotional development, during the period from childhood to maturity known as adolescence. Students will explore various psychological theories and perspectives related to adolescent development.

Prerequisite: PSYC 101.

# PSYC 210 Experimental Research Methods in Psychology

3-0-3 Credit Hours: 3

This course will introduce students to the scientific method as it applies to answering questions about human behavior through the use of experimentation. Topics include the ethical and practical limitations of experimental design, issues of validity and reliability, sample selection and assignment, and variations of experimental design. Students will read and interpret literature in psychology and learn APA style of report writing. Students will analyze data with a commonly used statistical analysis program.

Prerequisites: ENGL 101, PSYC 101, PSYC 110, PSYC 167.

Additional Course Fee: \$85

Fulfills Interpretive Studies and Writing Intensive requirements.

## PSYC 211 Personality Theory

3-0-3 Credit Hours: 3

This course examines the major theories of personality with emphasis on psychological growth and development. Theories representing the psychodynamic, behavioral, cognitive and humanistic perspectives are reviewed and the implications of these theories are discussed

Prerequisite: <u>PSYC 101</u>.

Fulfills Writing Intensive requirement.

# PSYC 215 Developmental Psychology

3-0-3 Credit Hours: 3

This course explores current research findings and significant theoretical perspectives related to the cognitive, socioemotional and physical domains of human development across the lifespan. A major theme of the course is the interaction between nature and nurture in human development.

**Prerequisites:** <u>PSYC 101</u> or <u>BIOL 109</u>.

Fulfills American/Global Diversity and Writing Intensive requirements.

## PSYC 215H: Developmental Psychology (Honors)

3-0-3 Credit Hours: 3

This course explores current research findings and significant theoretical perspectives on the biosocial, psychosocial and cognitive domains of human development across the life span. A major theme of the course is the interaction between nature and nurture in human development. In addition, the Honors course requires participation in seminars, the close interpretive reading of primary texts, and the writing of academic essays that focus on the interpretation of primary texts.

Prerequisites: <u>PSYC 101</u> or <u>BIOL 109</u>.

Corequisite: One Honors Writing course (ENGL 101H, ENGL 102H, ENGL 195H, or ENGL 196H).

Fulfills the Interpretive Studies, Writing Intensive requirements.

## PSYC 221 Social Psychology

3-0-3 Credit Hours: 3

Examines the behavior of the individual in the social environment. Topics include attitudes, conformity, persuasion, prejudice, aggression and attraction.

Prerequisite: PSYC 101.

# Real Estate Courses

NOTE: All courses and instructors are approved by the Pennsylvania State Real Estate Commission.

## RE 101 Real Estate Fundamentals

3-0-3 Credit Hours: 3

Economic, legal and social aspects of real estate under private ownership in the U.S. Among the topics to be discussed will be the agreement of sale, mortgage financing, title and title insurance, settlement, leasing and landlord-tenant relations, planning, zoning, regulations governing land use, Fair Housing legislation and the various aspects of the real estate business. Required by Pennsylvania Real Estate Commission for all candidates for a sales license.

## RE 105 Real Estate Practice

3-0-3 Credit Hours: 3

Introduction to all facets of the real estate business, including a survey of fields of specialization. Emphasis will be on the role of a real estate agent in the field of residential brokerage. This course will acquaint the student with the basic techniques, procedures, regulations and ethics involved in a real estate transaction along with a working knowledge of the forms and documents used, including the related mathematics. This course, together with RE 101 (Real Estate Fundamentals).

# Respiratory Care Technology Courses

NOTE: Courses open to Respiratory Care Technology students only.

# RESP 100 Introduction to Respiratory Care Technologies

3-3-0-4 Credit Hours: 4

Introduction to Respiratory Care Technology is an introductory course focusing on professionalism, medical terminology, and medical math with an emphasis on drug calculations, ethical and legal implications of healthcare, comprehensive patient assessment, respiratory anatomy, and evaluation of diagnostic studies as they relate to cardiopulmonary procedures, gathering patient information, and documentation of patient information

Additional course fee: \$105.

## RESP 101-102 Fundamentals of Respiratory Care (Techniques I and II)

3-3-0-4 Techniques I Credit Hours: 4

2-4-8-4 Techniques II Credit Hours: 4

The history, chemistry and physics of medical gases and their application and therapeutic use. Lecture and laboratory presentations of the theory and use of all currently employed modes of respiratory care, including rationale for use, proper administration, theory of operation, maintenance and preparation for reuse.

Prerequisite for RESP 101: RESP 100, which may be taken concurrently; for RESP 102: RESP 101.

Additional course fee (RESP 101): \$105. Additional course fee (RESP 102): \$175.

# RESP 103 Fundamentals of Respiratory Care Techniques III

2-4-0-3 Credit Hours: 3

Lecture and laboratory presentation of respiratory and cardiovascular anatomy, physiology, pathology, pharmacology, chest physical therapy and pulmonary rehabilitation, emphasizing theory and application to clinical respiratory care.

**Prerequisite:** RESP 102.

Additional course fee: \$105.

# RESP 104 Clinical Practicum I

0-3-17-1 Credit Hours: 1

Requires systematically planned observations and applications of skills in a variety of clinical settings including routine patient care areas and intensive care units. Skills include routine respiratory care procedures such as oxygen delivery, aerosolization of bronchoactive medications, postural drainage and chest physical therapy, incentive spirometry airway management, suctioning, electrocardiography, venipuncture and arterial blood gas acquisition. Activities will include performance of skills mastered in Respiratory 100, 101, 102 and 103.

**Prerequisites:** RESP 103 with a grade of "C" or better and other first year prerequisites.

Additional course fee: \$175.

# RESP 210-211 Cardiopulmonary

3-3-0-4 Pathophysiology I Credit Hours: 4

3-3-0-4 Pathophysiology II Credit Hours: 4

Medical sciences as they pertain to the practice of respiratory care. Pulmonary physiology, pathology, cardiology, radiology, chest disease, neonatology, pediatrics, anesthesiology. **Prerequisite:** RESP 104.

Corequisite: RESP 220-221

Additional course fee (RESP 210 and RESP 211): \$175.

# RESP 220-221 Advanced Respiratory Care

4-3-0-5 Procedures I Credit Hours: 5

3-6-8-5 Procedures II Credit Hours: 5

Lecture and laboratory presentation of sophisticated modes of pulmonary disease diagnosis and respiratory care. Pulmonary and cardiac function testing, blood gas analysis,

continuous mechanical ventilation, patient monitoring.

Prerequisite: <u>RESP 104</u>. Corequisite: <u>RESP 210-211</u>.

Additional course fee (RESP 220): \$105. Additional course fee (RESP 221): \$345.

# RESP 299 Clinical Practicum II

0-3-17-1 Credit Hours: 1

Requires systematically-planned observations and applications of skills in a variety of clinical settings, specifically adult intensive care units, neonatal (newborn) and pediatric units, and sub-acute care facilities. Skills include routine respiratory care procedures such as oxygen and aerosolized medications delivery, postural drainage and chest physical therapy maneuvers, and arterial blood gas acquisition. Advanced skills, such as management of the patient on life support, will be emphasized, including variations in approach to care depending on the venue. Students will also complete three mock examinations in preparation for their board exams. RESP 299 is the terminal course in the Respiratory Care curriculum.

Prerequisites: RESP 211 and RESP 221.

Additional course fee: \$175.

# Science, Technology and Society Courses

STS 101 Introduction to Science, Technology and Society

3-2-4 Credit Hours: 4

Topical lecture series supported by laboratory experiences to expose students not enrolled in science curricula to the scientific method and the application of technology. Scientific and technical areas including astronomy, biology, chemistry, electronics, physics and others will be introduced.

Prerequisite: MATH 118 or higher placement.

Additional course fee: \$85.

# Sociology Courses

# SOC 101 Introduction to Sociology

3-0-3 Credit Hours: 3

Understanding the social nature of humans and the social world in which they live. Analysis of such topics as culture, socialization, social groups and social institutions, stratification, the family, gender relations, race and ethnicity, minorities, social deviance, social change and technology, the urban community, population and the environment. Both Western and non-Western cross-cultural comparisons are provided throughout the course.

Fulfills American/Global Diversity, Interpretive Studies and Writing Intensive requirements.

# SOC 101H: Introduction to Sociology (Honors)

3-0-3 Credit Hours: 3

This course explores the social nature of humans and the social world in which they live and includes an analysis of such topics as culture, socialization, social groups and social institutions, stratification, the family, gender relations, race and ethnicity, minorities, social deviance, social change and technology, the urban community, population and the environment. Students will examine current theoretical debates within sociology, competing theoretical perspectives, and research methods that sociologists use to explain how social systems function. Both Western and non-Western cross-cultural comparisons are provided throughout the course. As an Honors course, there is particular emphasis on interpretation of texts and writing.

Fulfills American/Global Diversity, Interpretive Studies and Writing Intensive requirements.

### SOC 105 Health and Society

3-0-3 Credit Hours: 3

This course focuses on the analysis of health, disease, and the health care delivery system in the United States. It examines the relationship between health and various social factors, the interaction between patients and health care professionals, as well as some contemporary biomedical and health care issues. Continuing attention is given to the role of technology in the nature and definition of health, illness and health care in our society.

## SOC 115 Women and Men in American Society

3-0-3 Credit Hours: 3

This course takes a sociological approach to the study of gender within the United States. Students will explore basic theories of gender and examine gender as it operates in various areas of social life, including, but not limited to, the family, work, the economy, medicine, education and sexuality. Attention will be given to both historical changes and cross-cultural variations in gender, as well as how gender is experienced in relation to race, ethnicity, social class and sexual orientation.

Prerequisite: ENGL 101.

Fulfills American/Global Diversity, Interpretive Studies and Writing Intensive requirements.

#### SOC 212 Sociology of Marriage and Family

3-0-3 Credit Hours: 3

Critical, sociological analysis of intimate, personal interactions, relationships, roles and social selves as major features of the dominant patterns of marriage and family in the United States. Cross-cultural comparisons and the historical development of marriage and family structures are also discussed.

**Prerequisite:** SOC 101 or ANTH 112.

Fulfills American/Global Diversity requirement.

## SOC 215 Criminology

3-0-3 Credit Hours: 3

Examination of the contemporary and historical nature and extent of crime. Specific attention is given to various forms of crime in our society, including white collar crime, delinquency, organized crime and violent crime. Contemporary theories and research related to crime causation and the methods, past and present, of dealing with offenders; the police, courts and prisons also are discussed.

Prerequisite: SOC 101 or ANTH 112.

# SOC 231 Social Problems

3-0-3 Credit Hours: 3

delinquency, family dissolution, drug and alcohol abuse, physical and mental health, population dynamics, environment, education, urban conflicts and work.

**Prerequisite:** SOC 101 or ANTH 112.

Fulfills Interpretive Studies and Writing Intensive requirements.

# SOC 233 The Sociology of Ethnic and Minority Group Relations

3-0-3 Credit Hours: 3

Examination of the historical and present position of various minorities within our society including African-Americans, Hispanics, Asians, as well as women and other minority groups. Emphasis is on the diversity of American minorities and the description and explanation of historical, social, economic and structural inequalities that exist within and among them. General attention is also given to the analysis of the social and cultural causes of prejudice and discrimination.

Prerequisite: SOC 101 or ANTH 112.

Fulfills American/Global Diversity, Interpretive Studies and Writing Intensive requirements.

# Women's Studies Courses

## WS 101 Introduction to Women's Studies

3-0-3 Credit Hours: 3

This course explores the dramatic changes in our society as women have moved into career areas and political offices once almost exclusively male. Students will analyze the impact of changing gender roles on their sense of personal identity, their families, educational institutions, the workplace, and the civic and political world. The course will focus on the diversity of women's experience in our society and on feminist thinking and activism from the 1960s to the present day. The course is interdisciplinary in nature; readings will be drawn from the academic areas of psychology, social thought, educational theory, political theory and cultural studies.

Fulfills American/Global Diversity requirement.

# Youth Work Courses

YW 110 Family and Community Engagement

3-0-3 Credit Hours: 3

This course teaches the basics of family and community assessment and engagement for youth work students. Students learn to recognize and understand key concepts of family dynamics and structure including roles, rituals and relationships. Additionally, students learn how to utilize community resources to foster positive development for youth.

# Full-Time Faculty, Visiting Lecturers, Instructional Aides

#### ABCDEFGHIJKLMNOPQRSTUVWXYZ

A

Osvil Acosta-Morales

Associate Professor, History, Philosophy and Religious Studies and Head, Department of History, Philosophy and Religious Studies

B.A., University Of Miami

M.A., University Of Miami

A.B.D., University Of Miami

Edward S. Adolphus

Instructional Aide "B," Student Academic Computing Center (SACC)

A.A.S., Community College of Philadelphia

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M.S.L.I.S/M.S.I.S., Drexel University

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M.F.A., New Mexico State University

Ph.D., University of Houston

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 $\mathbf{O}$ 

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Ed.D., Indiana University, Bloomington

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Ardemiss Ayanian

Instructional Aide "A"

A.A.S., Community College of Philadelphia

<u>Top ^</u>

B

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M.S., Carnegie Mellon University (Math)

Ph.D., University of Michigan

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# Caron Guillory

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M.A., American University

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# Liberal Arts - Course Selection Guide

American Diversity – select one of the following:

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ADC 176
AH 116
ASL 101, 102, 201, 202
BHHS 103
ENGL 118, 221, 222, 250, 251, 260, 298H
HIST 101, 102, 103, 150, 170 (RS 170), 176, 180, 220, 221
PSYC 202, 215
RS <u>170</u> (<u>HIST 170</u>)
SOC <u>101</u>, <u>101H</u>, <u>115</u>, <u>212</u>, <u>233</u>
WS <u>101</u>
Global Diversity – select one of the following:
ANTH 101, 112, 124, 202, 211, 215
ART 103, 103H, 104, 104H, 120
ENGL 211, 212, 230, 241, 245, 246, 256
Foreign Language courses (American Sign Language may not be used for Global Diversity)
GEOG 103, 180, 222
HIST 121, 122, 142, 297H
HUM 101, 101H, 102, 120, 130, 150, 170, 180, 190
JUS 251
MUS 103, 120
PHIL <u>151</u> (RS <u>151</u>)
RS <u>151</u> (PHIL <u>151</u>), <u>175</u>, <u>180</u>
The Arts– select one of the following:
ART 101, 103, 103H, 104, 104H, 105, 109, 111 115, 120, 125, 150, 151
ENGL\ \underline{120,131,135,137,141,190,205,211,212,221,222,230,232,241,245,246,250,251,256,260,265,271,272,299}
MUS 100, 103, 105, 106, 115, 120, 121
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## **Humanities and Social Science Requirements**

PHOT <u>101</u>, <u>104</u>, <u>111</u>

# Humanities Pair - select two courses from within the same or related discipline(s):

In order to assure sufficient depth, students are required to take at least two courses from a defined set of courses within the same humanities discipline (in some cases closely related disciplines are used to fulfill this requirement as indicated below).

- Architecture, Design, and Construction: ADC <u>176</u> (with any History course listed below)
- Art History: Any two of ART 101, 103 or 103H, 104 or 104H, 120, 205
- English: Any two of 107, 137 190 and 200 level courses except 280, 281, 282, 283, 285
- Language/Foreign Language: Two courses in the same foreign language or two courses in American Sign Language (ASL)
- History: Any two of HIST 101, 102, 103 or 103H, 121, 122, 142, 150, 160, 170 (or RS 170), 176 (or ADC 176), 180, 220, 221, 297H, 298H, IDS 150
- Humanities: Any two of HUM 101 or 101H, 102, 120, 130, 150, 170, 180, 190, IDS 150, IDS 297H, IDS 298H
- Music History: Any two of MUS 103, 105, 106, 120, 121
- Philosophy: Any two of PHIL <u>101</u>, <u>111</u>, <u>151</u> (or RS <u>151</u>), <u>152</u> (or RS <u>152</u>), <u>202</u>, <u>211</u>, <u>215</u>, <u>297H</u>, <u>298H</u>
- Religious Studies: Any two of RS 101, 151 (or PHIL 151), 152 (or PHIL 152), 170 (or HIST 170), 175, 180

# Social Science Pair - select two courses from within the same or related discipline(s):

In order to assure sufficient depth, students are required to take at least two courses from a defined set of courses within the same social science discipline (in some cases closely related disciplines are used to fulfill this requirement as indicated below).

- Architecture, Design, and Construction: ADC <u>176</u> (with any History course listed below)
- Anthropology: Any two of ANTH <u>101</u>, <u>112</u>, <u>124</u>, <u>125</u>, <u>202</u>, <u>211</u>, <u>215</u>

- Earth Science: Any two of EASC 111 or 111H, GEOG 101, 103, 180, 222 (EASC 111 may be used as either a natural science or social science elective, but not for both)
- Economics: Any two of ECON <u>112</u>, <u>114</u>, <u>181</u>, <u>182</u>
- Geography: (See Earth Science)
- $\bullet \quad \text{History: Any two of HIST} \ \underline{101, 102, 103} \ \text{ or} \ \underline{103H, 121, 122, 142, 150, 160, 170} \ \text{ (or RS} \ \underline{170}), \underline{176} \ \text{ (or ADC} \ \underline{176}), \underline{180, 220, 221, 297H, 298H}, IDS \ \underline{150} \ \underline{150}$
- Philosophy: PHIL<u>151 (RS 151)</u> (with any Religious Studies course listed below)
- Political Science: Any two of POLS <u>101</u>, <u>111</u>, <u>112</u>, <u>117</u>
- Psychology: Any two of PSYC <u>101</u> or <u>101H</u>, <u>110</u>, <u>167</u>, <u>201</u>, <u>202</u>, <u>205</u>, <u>209</u>, <u>210</u>, <u>211</u>, <u>215</u> or <u>215H</u>, <u>221</u>
- Religious Studies: Any two of RS <u>101</u>, <u>151 (PHIL 151)</u>, <u>170</u> (or HIST <u>170</u>), <u>175</u>
- Sociology: Any two of SOC 101 or 101H, 105, 115, 212, 215, 231, 233, ANTH 101, 112, JUS 171, WS 101

**Interpretive Studies** – Select <u>one course</u> from this category.

Writing Intensive – Select one course from this category.