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ESSEX COUNTY COLLEGE

CATALOG 2010-2012

ESSEX COUNTY COLLEGE
OFFICE OF PUBLICATIONS

303 University Avenue
Newark, NJ 07102
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ESSEX COUNTY COLLEGE
CATALOG 2010-2012



ESSEX COUNTY COLLEGE

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Main Campus
303 University Avenue
Newark, NJ 07102
(973) 877-3100

West Essex Campus
730 Bloomfield Avenue
West Caldwell, NJ 07006
(973) 877-6590

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This catalog and updates of information it contains can be found on the ECC website: www.essex.edu



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ACCREDITATION AND LICENSURE

Essex County College is accredited by the Middle States Association of Colleges and Schools. It is licensed by the New Jersey Commission on Higher Education to operate and award associate degrees and certificates. All professional licensure programs offered by the College are accredited by their appropriate accrediting agencies.

NON-DISCRIMINATION POLICY STATEMENT OF ASSURANCE

It is the policy of Essex County College not to discriminate on the basis of race, creed, color, national origin, age, marital status, familial status, affectional or sexual orientation, disability, gender identity or expression, genetic information, liability for military service, or any other category protected by applicable law. This policy applies to all terms, conditions, and privileges of student recruitment/enrollment, staff employment and vocational opportunities. Further, the College conforms to all federal and state statutes, executive orders, regulations, guidelines and amendments concerning equal opportunities.

MESSAGE

PRESIDENT'S MESSAGE

Welcome to Essex County College (ECC), a progressive and inclusive learning community dedicated to student success. We are delighted you are taking this next step to achieve your academic and career goals.

Our college was conceived on the ideal that academic and career success is within the reach of any individual with the aspirations, energy and zeal to go forward. The faculty, staff and administration at Essex County College are committed to that legacy and to doing their utmost to make your dream a reality.



At ECC, you'll find everything you're looking for to pursue your goals. You'll find quality instruction, innovative curricula, the latest technology, and a wealth of programs and services. You can choose from more than 600 credit courses and a wide range of associate degree transfer and career programs. You can also enroll in ESL and adult literacy classes, obtain customized job training, and pursue numerous programs for professional development and personal enrichment.

Essex County College is the conduit through which you can secure a meaningful career or the education you need to seamlessly transfer to four-year institutions. Moreover, it is a vibrant college community committed in every way to helping you develop your abilities, enrich your life, and become successful in this global information age.

ECC will provide you with excellent teaching and an unsurpassed student success and guidance system that will allow you to successfully complete college and meet new challenges. You'll learn from faculty who know you by name, respect your needs, and care about your success. You will also enjoy an inviting collegiate environment at campuses and centers offering a rich array of student life experiences.

Whether you are new to college, returning to update your skills, or an avid lifelong learner, Essex County College is ready, willing and able to assist you on your pathway to success. We are honored to serve you.

Congratulations on your decision to be a part of the Essex County College community! We invite you to learn more about us from this catalog and our website at www.essex.edu.

Best wishes,

A handwritten signature in black ink, appearing to read "Edith M. Aduele". The signature is fluid and cursive.

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TATEMENT

Mission & Values Statement

MISSION

Essex County College, an open access community college dedicated to academic excellence, serves the dynamic needs of diverse constituencies through comprehensive educational programs and services.

VALUES STATEMENT

Essex County College reaffirms the following principles, values, and beliefs:

TEACHING AND LEARNING: We affirm teaching and learning as our primary purpose. The College seeks to instill in students general and specialized knowledge, an ability to think critically, a commitment to civic responsibility, and an appreciation of complex, ethical, and scholarly traditions. We value academic freedom and support the open exchange of ideas and experiences.

EXCELLENCE AND ACCOUNTABILITY: We believe in creating a learning environment that fosters high expectations for achievement. The College is committed to rigorous academic standards, faculty excellence, and responsive support services that enable students to reach their full potential. We provide excellent programs that utilize technology, demonstrate innovation, and undergo evaluation to ensure consistent and outstanding performance.

COMMUNITY: We support programs that enhance the economic and social development of Essex County. The College welcomes its role as a vital community resource and is dedicated to forging effective linkages with its many constituencies. We take pride in our outreach and continually strive to enhance life-long learning opportunities for personal and professional growth.

DIVERSITY AND ACCESS: We embrace the rich diversity of our student population and our employees. We recognize the historical, intellectual, and artistic contributions of all people, and promote an atmosphere in which distinct cultural viewpoints are accepted and encouraged. We believe all people should have access to affordable, quality higher education that will prepare them to succeed in an ever-changing world.

LEGACY: We honor our history and valued traditions. We also welcome progress and change. Building upon our past achievements, we eagerly embrace the future by pursuing innovations in teaching, administration, and student services.





ESSEX FACTS

Essex County College, a dynamic open access community college dedicated to academic excellence, serves the dynamic needs of diverse constituencies through comprehensive educational programs and services.



ECC was established in 1966 as the public, two-year, open access community college of Essex County, admitted its first students in temporary quarters in downtown Newark in 1968, and moved to its current permanent site in the heart of the University Heights district of the city in 1976. Newark is New Jersey's largest city, 10 miles west of New York City.

- Around 25,000 people enroll each year in ECC's various degree and non-degree programs, including students from over 70 foreign countries.
- The curriculum features close to 80 majors and 600 courses as part of a wide range of transfer and career programs.
- ECC is adjacent to Rutgers University-Newark and the New Jersey Institute of Technology and within walking distance of the University of Medicine and Dentistry of New Jersey.
- ECC sends more transfer students to Rutgers-Newark, New Jersey Institute of Technology (NJIT), and Bloomfield College than any other two-year college in New Jersey, many with full scholarships.
- Tuition and fees for an ECC student are significantly lower than at a state college or state university in New Jersey.
- The main Newark campus is accessible via rail and bus lines and the suburban campus in West Essex, within close proximity to major highways, is accessible via bus lines.

OUTSTANDING FACILITIES

The 22-acre main campus in Newark features a multilevel megastructure covering three city blocks, a two-level multipurpose Physical Education Building/Child Development Center complex, the Center for Technology, and the Clara E. Dasher Student Center. Among the resources of the 502,000-square-foot megastructure are state-of-the-art laboratories, high tech classrooms with advanced teaching modalities, the Mary B. Burch Theater for the Performing Arts, a newly renovated Media Production and Technology Center enhanced with two new HD television studios and high-end labs, a one-stop Enrollment Services Express Center, a new Department of Evening & Weekend College, a state-of-the-art Learning Center, the Africana Institute, and a renovated library, equipped with online public access catalog stations, a computer lab offering instruction in information literacy, and extensive resource materials.

New facilities at the main campus include a 30,000 square foot state-of-the-art Center for Health Sciences which is attached to the college megastructure. The Center houses ECC's Nursing, Physical Therapist Assistant, and Radiography programs. The campus also has a new five-level Parking Deck that is adjacent to the megastructure.

The **West Essex Campus** of ECC in West Caldwell meets the education and training needs of people who live and work in the western part of Essex County. The facility includes advanced computer labs, science labs, a library, a student center, and the same student support services that are offered at the main campus. Students attending this branch campus may complete degree requirements for associate degrees in the following majors:

Accounting, Business, Social Sciences, Liberal Arts, Education, Criminal Justice, and Technical Studies: Uniform Construction Code Technology Option. On-site parking and access to public transportation make the campus an ideal location for students.

SMALL CLASSES

At ECC most of the classes are small, usually with no more than 25 to 30 students, ensuring that students receive personal attention. Faculty not only have outstanding mastery of their subject areas but are also known for their personal commitment to their students.



Facts



WIDE RANGE OF TRANSFER AND CAREER PROGRAMS

At ECC students can earn Associate in Arts (A.A.) and Associate in Science (A.S.) degrees for transfer to four-year colleges, or they can pursue Associate in Applied Science (A.A.S.) degrees and certificates to prepare for immediate employment. Some A.A.S. programs also transfer; academic advisors and our Transfer Advisement Office can provide additional information on the transfer process. Transfer/articulation agreements exist with many institutions; these ensure that all approved courses students take at ECC will transfer to the four-year colleges of their choice. Special dual admission agreements have been implemented through which freshmen at ECC are simultaneously admitted to Rutgers University and St. Peter's College.

CONTINUING EDUCATION OPPORTUNITIES

Community and continuing education programs include intensive basic skills training; multilingual outreach programs; customized corporate training programs; career advancement and personal enrichment courses; youth programs; seminars; workshops; and public forums on diverse topics of interest to local residents. Employees can earn continu-

ing education credits (CEUs) that document newly acquired or upgraded skills that often lead to new job opportunities.

CONVENIENT SCHEDULES AND ACADEMIC SUPPORT

Working adults, recent high school graduates, and others can pursue full- or part-time study for educational or career advancement or personal enrichment. ECC offers convenient day, evening, and Saturday classes and a comprehensive support system that includes counseling, tutoring, computer services, financial assistance, bilingual classes, and career planning. Developmental programs are offered to students who require remediation before taking college-level courses. The academic year is divided into two 15-week semesters (fall and spring) and two summer terms. The College has also introduced a new two-week intersession during Winter Break.

ATHLETICS AND OTHER EXTRACURRICULAR ACTIVITIES

ECC student-athletes excel in the classroom as well as in athletics. Eleven former ECC track standouts participated in the 2008 Beijing Olympics and three of them won medals - a gold, a silver, and two bronze. The college has also had other Olympians in

the past. Many ECC students have won district and national championships.

Students may also choose to participate in a variety of student clubs and organizations, the Student Government Association, and the ECCO student newspaper.

OPPORTUNITY TO DEVELOP WORK-RELATED SKILLS WHILE IN COLLEGE

Internship opportunities with area businesses are made available to students while enrolled in a number of ECC programs. The opportunities are designed to develop real-world experience and work-related skills to enhance employability.

URBAN ISSUES INSTITUTE

The mission of the Urban Issues Institute is to explore urban problems and provide objective solutions. Areas of interest include, but are not limited to, urban education, housing and homelessness, nonprofit support, health care and community awareness, sustainable growth, crime and unemployment, immigration, poverty, veterans' benefits, green technology, and hip hop culture. The UII is uniquely positioned to channel the positive work of our scholars, nonprofits, civic leaders, and artists toward common initiatives that promote lasting change.

Gold, Silver, and two Bronze for ECC Alumnae at the Beijing Olympics.



AFRICANA INSTITUTE

The Africana Institute, established in 2001 at the Main Campus, serves as a research, education, and communication center for the study of the history and life of people of African, African-American, and Caribbean descent. The institute's educational and cultural programs and resources are designed to raise the awareness of students and the greater community about the African Diaspora, and to increase and improve intra and interracial dialogue and relations. The institute brings to the college world renowned African and African Diaspora scholars, performers, activists, and others for lectures, exhibits, and performances. In 2008, the institute started a summer study program which includes trips to places in the Diaspora within the U.S. and abroad. The inaugural trip was to South Africa. The goal of the program is to provide student participants the opportunity to learn through travel and direct experiences with scholars they meet.

Sample of institutions to which recent ECC graduates have transferred to pursue baccalaureate and graduate studies:

- | | |
|---------------------------------------|--|
| Auburn University | New Jersey City University |
| Bard College | New Jersey Institute of Technology |
| Bethune-Cookman College | New York University |
| Bloomfield College | Norfolk State University |
| Brown University | Ohio State University |
| Caldwell College | Pace University |
| Carnegie-Mellon University | Parsons – New School |
| Centenary College | Penn State University |
| College of New Jersey | Pratt Institute |
| College of Saint Elizabeth | Ramapo College |
| City University of New York | Rider University |
| Clark Atlanta University | Rowan University |
| Columbia University | Rutgers University |
| Cornell University | Saint Peter's College |
| Drew University | Seton Hall University |
| Drexel University | Smith College |
| East Stroudsburg University | Springfield College |
| Fairleigh Dickinson University | Stanford University |
| Felician College | Stevens Institute of Technology |
| George Washington University | Temple University |
| Georgia Tech University | Thomas Edison State College |
| Georgian Court University | University of Medicine and Dentistry of New Jersey |
| Hofstra University | University of Nevada at Las Vegas |
| Howard University | University of North Carolina at Chapel Hill |
| Hunter College | University of Pennsylvania |
| Johns Hopkins University | University of Pittsburgh |
| John Jay College of Criminal Justice | University of Texas at Austin |
| Kean University | University of Virginia |
| Kent State University | Wesleyan College |
| Long Island University | Westminster Choir College at Rider University |
| Louisiana State University | William Paterson University |
| Massachusetts Institute of Technology | Yale University |
| Montclair State University | |

verview

Great Careers Begin at Essex County College Overview of Academic Programs

ECC offers a wide range of associate degree and certificate programs through the following academic divisions:

Division of Bilingual Studies	pg 7
Division of Biology and Chemistry	pg 8
Division of Business	pg 8
Division of Engineering Technologies and Computer Sciences	pg 9
Division of Humanities	pg 9
Division of Mathematics and Physics	pg 10
Division of Nursing And Allied Health: Allied Health Programs	pg 10
Division of Nursing and Allied Health: Nursing Programs	pg 11
Division of Social Sciences	pg 11
Community & Continuing Education	pg 12

ECC GRADUATES

Recent survey findings indicate that approximately 67% of ECC graduates are pursuing baccalaureate studies at four-year institutions. Many of the others are finding professional positions in the New York-New Jersey metropolitan area with such employers as Atlantic Health Systems, Brookhaven Health Care Center, East Orange Board of Education, East Orange General Hospital, Essex County Division of Welfare, Gateway Security, Hackensack University Medical Center, Horizon Blue Cross & Blue Shield, Irvington High School, Montclair State University, Mountainside Hospital, Newark Beth Israel Medical Center, Newark Liberty International Airport, Orange Board of Education, PSE&G, Saint Barnabas Health Care System, and University of Medicine and Dentistry of New Jersey.

Associate in Arts (A.A.) and the **Associate in Science (A.S.)** degree programs are specifically designed to prepare students for transfer to four-year colleges and universities.

Associate in Applied Science (A.A.S.) degree programs are designed to prepare students for immediate employment upon program completion, although

students in some majors may be able to transfer most or all of their credits to baccalaureate programs.

The **Certificate Programs** are designed to provide employment skills in one year or less of full-time study. They enhance or supplement existing skills or offer preparation for a new career path. The certificate programs include those that are offered through the College's Division of Community and Continuing Education.

The **Office of Cooperative Education**, established in 2003, offers experiential learning opportunities for students in degree and certificate programs. Students test career choices and enhance employment skills by participating in work experiences that are related to their majors or career goals. To learn more about cooperative education opportunities, refer to the Academic Support Services section of this catalog.

The following lists the programs available through the various divisions. For detailed information on specific degree and certificate programs, go to ECC's website at www.essex.edu and access the on-line catalog.

DIVISION OF BILINGUAL STUDIES

LOCATION: Level I, Red Area

CHAIRPERSON: Eida Berrio

FACULTY: Mila Bruan, John Hills, Maria Ibanez-Polixa, Samuel Lumbsden, Evelyn Cline Marquéz, Angel Millán, Michael Pekarofski, Milena Rubinstein, Luis J. Salgado,

The Division offers an A.A. degree program in Spanish, designed to prepare students for transfer to four-year institutions, and non-degree programs in English as a Second Language (ESL). The Division also offers courses in world languages. To supplement the classroom experience, the Bilingual Studies faculty participate in, develop, and support cultural events, organizations, and activities designed to promote feelings of positive cultural awareness among students and the bilingual communities of Essex County. Counseling, tutoring, cooperative education, computer-assisted language learning, and other support services are also available to students.

DEGREE PROGRAM

- Liberal Arts: Spanish Language Option (A.A.)

ESL PROGRAMS

The following are designed for students whose first language is not English:

- English as a Second Language (ESL) Academic Program
- Accelerated English as a Second Language
- ESL -- Intensive Experience

ENGLISH AS A SECOND LANGUAGE (ESL)

ACADEMIC PROGRAM

Students work on improving their proficiency in English through a series of three courses:

ESL 095	ESL Reading & Writing I	6 credits
ESL 103/104	ESL Reading & Writing II	6 credits
ESL 105/106	ESL Reading & Writing III	6 credits

In addition to the three ESL academic courses, we offer supplemental courses which are designed to augment the academic English language skills development process:

ESL 080	Basic Academic Grammar	4.5 credits
ESL 100	Form and Function of English	3 credits
ENG 108	Voice & Diction	3 credits

Students may register for a limited number of additional courses taught in Spanish or English while they are taking ESL courses. The idea is to give students more opportunities to improve their proficiency in English while fulfilling college requirements and electives. The program is only available through placement by the Division of Bilingual Studies.

ACCELERATED ENGLISH AS A SECOND LANGUAGE

This is an intensive 15-credit, one-semester immersion program for students who possess a high degree of literacy in their primary language as well as high or intermediate level of proficiency in English. It builds on skills students already possess in reading, writing, speaking, and listening.

Program Requirements		15 credits
ESL 108	Accelerated ESL – Writing	3 credits
ESL 109	Accelerated ESL – Reading	3 credits
ESL 110	Accelerated ESL – Speaking	3 credits
ESL 111	Accelerated ESL – Listening	3 credits
ESL 112	American Culture and Diversity	3 credits

In many cases, students in this program are professionals or college graduates seeking to improve their English as rapidly as possible. A variety of cultural and educational activities serve to enhance and reinforce the learning experience. The goal is to prepare students to enter college-level courses directly or to successfully compete in the job market. This program is only available through placement by the Division of Bilingual Studies.

ESL – INTENSIVE EXPERIENCE

This program is intended for students who demonstrate some literacy in their first language and some prior exposure to English. The program meets fifteen hours a week and all classes are conducted in English. Lab work and participation in off-campus activities are required.

Program Requirements

Program Requirements		15 credits
ESL 073	ESL Inten. Exp. - Culture	3 credits
ESL 074	ESL Inten. Exp. - Lstng/Comp	3 credits
ESL 075	ESL Inten. Exp. - Speaking	3 credits
ESL 076	ESL Inten. Exp. - Reading	3 credits
ESL 077	ESL Inten. Exp. - Writing	3 credits

The program develops language skills as well as academic and study skills. Topics and themes related to American culture and cultural diversity are explored. The program is only available through placement by the Division of Bilingual Studies.

WORLD LANGUAGE COURSES

Through courses in Spanish, French, Arabic, & Italian, students are able to fulfill foreign language requirements, earn transfer credits, and foster their personnel growth and development. While learning a foreign language, students also have the opportunity to develop cultural awareness and sensitivity to meet the demands of an increasingly global culturally diverse society.



DIVISION OF BIOLOGY AND CHEMISTRY

LOCATION: Level II, Blue Area

CHAIRPERSON: Scott Mittman

FACULTY: Ezdehar Abu-Hatab, Martin Asobayire, Bagher Bagheri, Jose Chestnut, Brendan M. Doyle, Pamela Doyle, Frank Duroy, David Eaton, Michael E. Frank, Byron M. Johnson, Eunice Kamunge, John Kozic, Jeffrey N. Lee, Lawrence R. Pitts, Norman Scherzer, Jill C. Stein, Natalie Toran, Lynn Wilson, Anthony Zuppardi

LABORATORY COORDINATOR: Alberta Marbley

The Division offers A.S. degree programs designed to prepare students to transfer to four-year institutions and A.A.S. and certificate programs designed to prepare students for employment immediately upon graduation. The faculty hold advanced degrees in biology and chemistry and are experienced teachers. In addition, most faculty have extensive research experience in their fields. The programs utilize state-of-the-art biology and chemistry laboratories, and students have access to multi-media computer laboratories with Internet access.

Choose from the following degree and certificate programs:

- Biology/Pre-Medicine (A.S.)
- Biotechnology (A.A.S.)
- Biotechnology (Certificate)
- Chemical Technology (A.A.S.)
- Chemical Technology (Certificate)
- Chemistry (A.S.)
- Environmental Science (A.A.S.)
- General Science (A.S.)

DIVISION OF BUSINESS

LOCATION: Level III, Green Area

CHAIRPERSON: Michael C. King

FACULTY: Matilda Abavana, Harry V. Bernstein, Augustine Boakye, Shelby Hawkins, Nathan Himelstein, Daxay Patel, Rachel Pernia, Carlos Rivera, Gerald Savage, Karen Scuorzo, Doris Tori

The Division offers A.S. degree programs designed to prepare students to transfer to four-year institutions and A.A.S. and certificate programs designed to prepare students for business careers immediately upon graduation or to develop technical skills in specialized areas. The faculty have diverse academic and professional backgrounds including years of practical experience in the business field. Cooperative education credits are offered to students in a number of program areas to develop real-world experience and to enhance employability skills.

Choose from the following degree and certificate programs

- Accounting (A.A.S.)
- Accounting (A.S.)
- Business Administration (A.A.S.)
- Business Administration (A.S.)
- Business Administration: Business Administration & Microcomputer Applications Option (A.A.S.)
- Business Administration: Financial Services Option (A.A.S.)
- Business Administration: Hospitality Management Option (A.A.S.)
- Business Administration: Office Administration & Computer Technology Option (A.A.S.)
- Business Career Development (Certificate)
- Business Paraprofessional (Certificate)
- Information Systems Office Operations (Certificate)
- Internet – Web Page Design Specialist (Certificate)
- Microcomputer Systems Applications (A.A.S.)
- Office Assistant Program (Certificate)
- Retail Sales Specialist (Certificate)
- Word Processing Program (Certificate)



DIVISION OF ENGINEERING TECHNOLOGIES & COMPUTER SCIENCES

LOCATION: Center for Technology

CHAIRPERSON: Ladylease Goodridge White
(Interim Chairperson)

FACULTY: Theophilus Acquaye, Salah Aly, Hossein Assadipour, Alkis Dimopoulos, John Gribbin, Jinsoo Park, Ned M. Wilson, Jianping Yue

LABORATORY TECHNICIAN: Staci Outerbridge

The Division offers A.S. degree programs designed to prepare students to transfer to four-year institutions to pursue advanced degrees in science and technology, and A.A.S. and certificate programs designed to prepare students to enter the workforce immediately upon graduation. The Center for Technology has 30,000 square feet of classrooms, laboratories, and office space on two levels. It houses the existing programs and has space for new programs in emerging technologies. The courses utilize cutting-edge equipment in spacious laboratories designed for training the next generation of engineers, technicians, and scientists. The faculty have diverse backgrounds in the applied sciences in both educational and industrial settings. Most have earned doctorates or professional engineering licenses in their field of specialty.

Choose from the following degree and certificate programs:

- Applied Computer Science (A.S.)
- Architectural Technology (A.A.S.)
- Civil Construction Engineering Technology (A.A.S.)
- Civil Construction Engineering Technology: Land Surveying Option (A.A.S.)
- Computer Aided Design Technology (Certificate)
- Computer Information Systems (A.S.)
- Computer Science (A.S.)
- Electronic Engineering Technology (A.A.S.)
- Energy Utility Technology (A.A.S.)
- Engineering (A.S.)
- Geographic Information Systems (Certificate)
- Internetworking Technology (Certificate)
- Mechanical Engineering Technology (A.A.S.)
- Mechanical Engineering Technology: Manufacturing Engineering Technology Option (A.A.S.)
- Network Technology (Certificate)
- Technical Studies (A.A.S.)
- Technical Studies: Uniform Construction Code Technology Option (A.A.S.)



DIVISION OF HUMANITIES

LOCATION: Level I, Red Area

CHAIRPERSON: João Sedycias

FACULTY: Richard Alston, Patricia A. Bartinique, David A. Berry, Richard Bogart, Niki Chukunta, Laura Cruz, Jeffrey Curtis, Eileen DeFreece, Enid Friedman, Kevin Hayes, Rita Higgins, Nessie Hill, Carol Kushner, Paulette Longmore, Mikal Naeem Nash, Sean O'Connell, Barbara Pogue, Herbert C. Schlager, Robert C. Spellman, Margaret Stevens, Jennifer Wager, Rebecca Williams

The Division encompasses art, cinema, communications, dance, drama, English composition, English literature, history, journalism, music, new media technology, philosophy, reading, and speech. The Division offers A.A. and A.S. degree programs transferable to four-year institutions; an A.A.S. and a certificate program in preparation for immediate employment upon graduation; general education courses in art, English, history, and music required for all degree programs; and also developmental courses in reading and writing to assist students who are not yet fully prepared for college-level courses.

Choose from the following degree and certificate programs:

- Art (A.A.)
- Art Certificate
- Digital Media and Electronic Publishing (Certificate)
- Liberal Arts (A.A.)
- Liberal Arts: Africana Studies Option (A.A.)
- Liberal Arts: Journalism Option (A.A.)
- Liberal Arts: Communications Option (A.A.)
- Music (A.S.)
- New Media Technology (A.A.S.)

DIVISION OF MATHEMATICS AND PHYSICS

LOCATION: Level II, Blue Area

CHAIRPERSON: Carlos de la Torre

FACULTY: Eman Aboelnaga, Norbert Aminzia, Shohreh Andresky, Ronald Bannon, Carlos Castillo, Kathleen Christie-Powell, Ines Figueiras, Susan Gaulden, Nadezhda Lvov, Mingyon McCall, Naser Moheb, Brooke Orosz, Soraida Romero, Maria Cecilia Rozak, Barbara Satterwhite, George Skea, Timothy Stafford, Chengwen Wang, Martin Weissman, Alvin Williams

STEM COORDINATOR: Lei Shi

The Division offers an A.S. degree program in Mathematics, designed to prepare students to transfer to four-year institutions to pursue advanced degrees in math or physics; general education courses in math required for all degree programs; and also developmental math courses which, upon completion, enable students to perform successfully in math and science courses required in their major area of study. Faculty of the Division are experienced educators with extensive scientific and mathematical backgrounds, who are well qualified to impart the knowledge necessary to prepare students for a wide variety of careers. Most mathematics and physics courses are sequential in nature; therefore, care should be taken to register for courses in their proper order and without long time delay between courses. The College offers tutoring in mathematics and physics at each of its campuses.

Degree Program:

- Mathematics (A.S.)

DIVISION OF NURSING & ALLIED HEALTH: ALLIED HEALTH PROGRAMS

LOCATION: Center for Health Sciences

CHAIRPERSON: Prisca Anuforo

COORDINATORS

PHYSICAL THERAPIST ASSISTANT: Christine Stutz-Doyle

RADIOGRAPHY: Mary Ellen Carpenter

VISION CARE TECHNOLOGY: Richard Palumbo

FACULTY: Tom Donofrio, Charles Harrison, John Marfo

CLINICAL SUPERVISOR: Barbara Fogler

The Division offers A.S. degree programs designed to prepare students to transfer to four-year institutions, and A.A.S. and certificate programs designed to prepare students for health careers immediately upon graduation. The faculty are licensed to practice in their respective fields and have diverse academic and professional backgrounds. Most hold advanced practice credentials in their professional field. The programs utilize state-of-the-art on-campus laboratories to facilitate student learning.

Choose from the following degree and certificate programs:

- Dental Assisting (Certificate)
- Dental Hygiene (A.A.S.)
- Dietary Management (Certificate)
- Health Science (A.S.)
- Physical Therapist Assistant (A.A.S.)
- Radiography (A.A.S.)
- Respiratory Care (A.S.)
- Vision Care Technology (A.A.S.)



DIVISION OF NURSING & ALLIED HEALTH: NURSING PROGRAMS

LOCATION: Center for Health Sciences

CHAIRPERSON: Prisca Anuforo

FACULTY: Michael Ajayi, Janet Czermak, Marlene Dey, Mavis Doozie, Gail Gage, Vickie Grosso, Mariellen Hess-Christian, Anandakumar Lakshmanan, Patricia Lowry, Chinyere Obiakwatai, Lola Oyedele, Amini Simon, Majuvy Sulse

The Division offers the A.A.S. degree program designed to prepare students for entry level positions in hospitals and other health care facilities immediately upon graduation. Upon completion of the program, students are eligible to take the certification exam (NCLEX) to be a registered nurse. The Division also offers the opportunity for Licensed Practical Nurses (LPNs) to gain credit for previous LPN education and license toward the completion of an A.A.S. degree in Nursing. The Nursing program utilizes state-of-the-art on-campus laboratories, including a nursing simulation laboratory and a multimedia computer laboratory, to facilitate student learning. Many colleges have upper division nursing programs which allow associate degree graduates to transfer most or all of their credits toward a Bachelor of Science degree program in Nursing (B.S.N.). Currently Essex County College has such articulation agreements with New York University, New Jersey City University, St. Peter's College, Felician College, Kean University, Rutgers University, Seton Hall University, and William Paterson University.

Choose from the following programs:

- Nursing (A.A.S.)
- Nursing: LPN Articulation Option (A.A.S.)
- LPN Certificate
- Vision Care Technology Apprentice (Certificate)

All nursing applicants are admitted to the College as General Science (0603 code) students with a major in Nursing and will complete a prescribed program of study. Admission to the nursing program is competitive. Specific admissions criteria must be met to qualify. Completion of the admission requirements does not guarantee program admission. For detailed information on admission standards, application deadlines, and application procedures for nursing programs, go to the ECC website (www.essex.edu) and access the individual programs in the on-line catalog. Also, review the Fact Sheets for the individual programs on the website.

An individual who has charges pending or has ever been convicted of a felony or misdemeanor and/or has been found guilty of professional misconduct or negligence may not be eligible to be licensed as an RN. These matters should be cleared with the New Jersey Board of Nursing before applying to the Nursing program.

DIVISION OF SOCIAL SCIENCES

LOCATION: Level III, Yellow Area

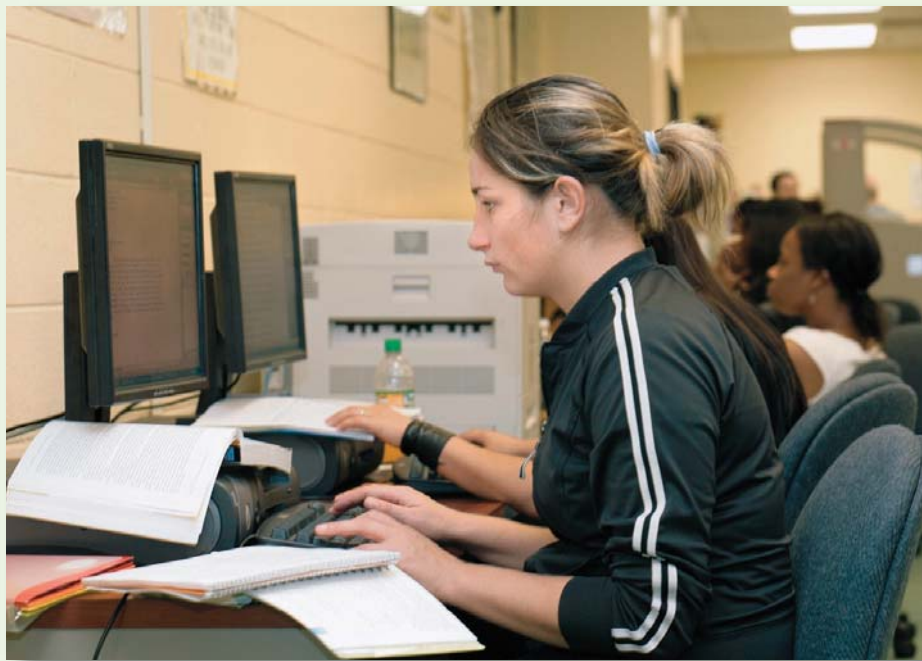
CHAIRPERSON: Mamie Bridgeforth

FACULTY: Linda McDonald Carter, Patrice Davis, Johanna Foster, Gerald Freedman, Frederic Halper, Linda Harvest, Akil Khalfani, Velile Notchulwana-Mqota, Charles Reid, Margarita Roig, Arzelia Said, Martin Schulman, Paul Tandoh

The Division offers A.S. degree and A.A. degree programs designed to prepare students to transfer to four-year institutions, and A.A.S. degree and certificate programs designed to prepare students for careers in the social sciences immediately upon graduation. For students majoring in Human and Social Services and Education, internship experience is mandatory. Students in select programs may earn cooperative education credits for work experience related to academic or career interests. Students who wish to take specific career courses for employment advancement are encouraged to meet with the chairperson of the Division or coordinators of respective programs for assistance in selecting courses that will meet their special needs. The faculty hold advanced degrees, are professionally active, and are also involved in research and publication. They serve on numerous boards and committees, and many are leaders in human service fields, frequently organizing training events for agency networks in the region.

Choose from the following degree and certificate programs:

- Childhood Development Associate (Certification)
- Criminal Justice (A.S.)
- Education (A.A.)
- Human and Social Services (A.A.S.)
- Human and Social Services (Certificate)
- Paralegal Studies Program (A.S.)
- Paralegal Certificate Program (Certificate)
- Legal Secretary (Certificate)
- Massage Therapy (Certificate)
- Nurse Paralegal Certificate Program (Certificate)
- Physical Education (A.S.)
- Psychosocial Rehabilitation and Treatment (A.A.S.)
- Social Sciences (A.S.)



COMMUNITY AND CONTINUING EDUCATION

LOCATIONS: Main Campus and the West Essex Campus

DEAN: Charles G. Lovallo

ASSOCIATE DEAN: Elvira Vieira

ASSOCIATE DEAN: Keith Kirkland

The Division of Community and Continuing Education offers a wide range of non-credit and credit courses and programs, including certificate programs to enhance the professional and vocational needs of area residents. Four such certificate programs are those pertaining to the New Jersey Uniform Construction Code. The regulations for the Uniform Construction Code, adopted by the New Jersey Department of Community Affairs, require candidates for licensure to complete specified educational programs to prepare them to administer and interpret the code's standards. ECC's West Essex Campus in West Caldwell offers four educational programs in Uniform Construction Code that meet the inspector licensing requirements regulated by the New Jersey State Uniform Construction Code.

Choose from the following degree and certificate programs:

- Building Code Technology (Certificate)
- Electrical Code Technology (Certificate)
- Fire Code Technology (Certificate)
- Plumbing Code Technology (Certificate)

ECC also offers an A.A.S. degree in Technical Studies with a Uniform Construction Code Technology Option.

Joint Admission and Transfer Agreements

Essex County College has entered into joint and/or dual admission agreements with Rutgers, the State University, New Jersey Institute of Technology (NJIT), New Jersey City University, Kean University, Montclair State University, Seton Hall University, St. Peter's College, and Thomas Edison State College. These admission agreements provide guaranteed admission with junior status to qualified students. To gain the full benefit of these agreements, students must graduate from their ECC degree program and continue their major course of study at the four-year institution. Students are urged to consult with ECC's Office of Transfer Advisement, located in the Career Resource Center, to review specific requirements.

ECC also has joint admission agreements with the University of Medicine and Dentistry of New Jersey in selected allied health disciplines under which qualified students enroll at UMDNJ during the course of their associate degree program. Transfer/articulation agreements with the colleges listed below allow students who complete their associate degrees to transfer with full junior standing:

Bloomfield College
Centenary College
Clark Atlanta University
Drexel University
Fairleigh Dickinson University
Felician College
Georgian Court University
John Jay College of Criminal Justice
Kean University
Mercy College
Montclair State University
New Jersey City University

New Jersey Institute of Technology
New York University
Rutgers, the State University
Seton Hall University
St. Peter's College
Thomas Edison State College
William Paterson University

Joint admissions and transfer agreements are frequently updated. Students should consult with the Transfer Advisement Office and/or appropriate faculty advisors.



Academic Calendar 2010-2011

FALL 2010

SEPTEMBER

6	Labor Day	College Closed
7	First Day of Fall Semester Classes	
10	First Day of Weekend College Semester Classes	
24	First Day of Late Start Semester Classes	

OCTOBER

11	Columbus Day	No Classes
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NOVEMBER

8	Mid-Term Grades Due	
25, 26	Thanksgiving Holiday	College Closed
27	No Classes	

DECEMBER

18	Last Day of Late Start Semester Classes	
19	Last Day of Weekend College Semester Classes	
20	Last Day of Fall Semester Classes	
22	Grades Due	
Dec. 21 -	Winter Break	No Classes
Jan. 3		

27	First Day of Winter Intersession 2010 Classes	
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JANUARY

8	Last Day of Classes for Winter Intersession	
9	Grades Due to the Registrar (Winter Intersession)	

SPRING 2011

JANUARY

10	First Day of Spring Semester Classes	
14	First Day of Weekend College Semester Classes	
17	Martin Luther King Jr. Birthday	College Closed
28	First Day of Late Start Semester Classes	

FEBRUARY

21	Presidents' Day	College Closed
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MARCH

4	Mid-Term Grades Due	
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APRIL

15	Last Day of Late Start Semester Classes	
16	Last Day of Weekend College Semester Classes	
22 & 23	Spring Holiday	No Classes
25	Last Day of Spring Semester Classes	
27	Grades Due	



SUMMER TERM I 2011

MAY

2	First Day of Summer I Term Classes	
30	Memorial Day	College Closed

JUNE

TBA	Commencement	
20	Last Day of Summer I Term Classes	
22	Grades Due	
June 27 -		
July 4	Summer Recess	

SUMMER TERM II 2011

JULY

4	Independence Day	College Closed
11	First Day of Summer II Term Classes	

AUGUST

18	Last Day of Summer II Term Classes	
22	Grades Due	

Academic Calendar 2011-2012

FALL 2011

SEPTEMBER

5	Labor Day	College Closed
6	First Day of Fall Semester Classes	
9	First Day of Weekend College Semester Classes	
23	First Day of Late Start Semester Classes	

OCTOBER

10	Columbus Day	No Classes
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NOVEMBER

4	Mid-term Grades Due	
24, 25	Thanksgiving Holiday	College Closed
26	No Classes	

DECEMBER

16	Last Day of Late Start Semester Classes	
17	Last Day of Weekend College Semester Classes	
19	Last Day of Fall Semester Classes	
21	Grades Due	
Dec. 20– Jan. 2	Winter Break	No Classes
26	First Day of Winter Intersession 2011 Classes	

JANUARY

7	Last Day of Winter Intersession Classes	
9	Grades Due to the Registrar	

SPRING 2012

JANUARY

9	First Day of Spring Semester Classes	
13	First Day of Weekend College Semester Classes	
16	Martin Luther King Jr. Birthday	College Closed
27	First Day of Late Start Semester Classes	

FEBRUARY

20	Presidents' Day	College Closed
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MARCH

2	Mid-Term Grades Due	
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APRIL

6 & 7	Spring Holiday	College Closed
20	Last Day of Late Start Semester Classes	
21	Last Day of Weekend College Semester Classes	
23	Last Day of Spring Semester Classes	
25	Grades Due	

SUMMER TERM I 2012

APRIL

30	First Day of Summer I Term Classes	
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MAY

28	Memorial Day	College Closed
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JUNE

TBA	Commencement	
18	Last Day of Summer I Term Classes	
20	Grades Due	
25 - 29	Summer Recess	

SUMMER TERM II 2012

JULY

4	Independence Day	College Closed
9	First Day of Summer II Term Classes	

AUGUST

16	Last Day of Summer II Term Classes	
21	Grades Due	



Admission

Qualifications for Admission

Essex County College admits any person who is at least 18 years of age or who has earned a high school diploma or General Education Development (GED) certificate. This open admissions policy does not apply to persons seeking degrees or certificates from the Nursing and Allied Health programs.

- New, first-time applicants can apply online at www.essex.edu. Also, application can be obtained by calling the Main Campus at (973) 877-1941, or the West Essex Campus at (973) 877-6590.
- Applicants who previously submitted an application to Essex County College but did not attend and need to activate their status should print and complete an application available at www.essex.edu.
- Students previously enrolled at Essex County College but has not been in attendance for three or more years must apply for readmission by printing and completing an application available at www.essex.edu.

General Application Procedure

Step 1 Apply for Admission

Complete the Essex County College application and submit it with the non-refundable \$25.00 fee.
Application deadlines are posted on the website.

- Request that your high school and prior colleges send official transcripts to Enrollment Services at either the Main or West Essex Campus. If you earned a GED, submit official documentation to Enrollment Services at the main campus.

Please note that an application is valid for one year (4 terms). You will be required to re-apply after one year if you do not register during this time.

If you are applying as an international student, see the International Student Admission section in this catalog.

Step 2 Apply for Financial Aid

All financial aid applicants (including NJSTARS) are encouraged to complete the Free Application for Federal Student Aid (FAFSA) at www.fafsa.ed.gov.

Applicants for financial aid must have a high school diploma, GED, or demonstrate the ability to benefit from programs offered at Essex County College. For more information, contact the Financial Aid Office at (973) 877-3200.

Step 3 Take the placement test

All new students seeking a degree or certificate are required to complete a pre-enrollment placement test given by the Enrollment Services Express Center. This test is used to determine placement in college-level or developmental courses.

If you took a placement test at another New Jersey college in the last three years; the scores should be sent to the Enrollment Services Express Center for evaluation. The test must have been taken within the last three years.

Exemptions from Placement Testing

The following circumstances qualify a student for exemption from the placement test. Students who met these requirements will receive college-level placement.

Possession of an associate or higher degree from a U.S. college; appropriate documentation must be provided to the Enrollment Services Express Center.

Transferring college-level credits in English composition and/or mathematics. With grade "C" or better.

SAT scores of 540 or higher on critical reading and 530 or higher on mathematics within 5 years of the original test date.

ACT scores of 21 or higher in English/Reading and 21 or higher in Math. Within 5 years of the original test date.

Successful completion of the complete series of development courses in English & mathematics at a NJ college or university. Appropriate documentation must be provided.

Step 4 Register for classes

Students will be notified about advisement and registration. You will meet with an advisor to develop a schedule and register for classes.

Step 5 Pay tuition and fees

Students will receive a bill for tuition and fees immediately following registration. Payments can be made at the Bursar's Office or online at www.essex.edu.

Proof of Immunization

All full-time students are required to provide proof of immunization for measles, mumps, and rubella. Your official immunization record from your high school or health care provider should be mailed to:

The Health Care Management Office
Room 5114
Essex County College
303 University Avenue
Newark, NJ 07102

Be sure to include your name and social security number on all documents.

Transfer Student Admissions

Students who have completed courses at another accredited post-secondary institution and want to transfer credits to Essex County College must have their official transcripts sent to The Enrollment Services office. Please note that these documents become the property of ECC and will not be released to a third party or to the student.

As transcripts are received, credits are evaluated on a course by course basis. Credit may be granted provided that the course is comparable to a course required in the applicant's chosen major field of study. A minimum grade of "C" is required for a course to be transferable. A grade of "D" may be transferable in some general education courses taken at a NJ college or university in accordance with the statewide agreements. Students will be notified in writing as to the specific courses and credits that were accepted. To graduate with an Associate Degree, transfer students must complete a minimum of 30 credits toward their degree and at least half of their major course requirements at Essex County College. The same guidelines pertain to students who wish to transfer courses into the college's certificate programs; half of the credits for such programs must be completed at ECC.

Readmission

A student previously enrolled at Essex County College who has not been in attendance for three or more years must apply for readmission. The student must complete and return an application for readmission to the Enrollment Services Express Center at the main campus or Enrollment Services at the West Essex Campus. A \$25.00 non-refundable readmission fee is required. The student may be required to re-submit an official copy of high school transcript showing receipt of high school diploma or official documentation that a GED has been received. A re-admitted student who has not completed developmental courses is recommended to re-take the college placement test.

International Student Admissions

International students are admitted to the College through the International Student Office.

Applicants interested in obtaining an F-1 (full-time student) visa must complete an application for a Form I-20 as well as the International Student application for admission. Application deadlines as well as sponsorship requirements are posted on the website. Please note that international students are not admitted for the Summer terms.

Supporting Documents (International Students)

All international student applicants must submit to the Essex County College Enrollment Services Express Center the following documents in addition to the application for admission:

- Application for Form I-20;
- Educational credentials, which indicate the equivalence of high school degree in the United States;

- Affidavit(s) of financial support and required financial evidence;
- Affidavit of room & board (if applicable) and required evidence;
- All documents must be current and in English. International students transferring from another U.S. institution must submit the following additional documents:
 - International Student Advisor's Report Form;
 - Passport, visa, and Form I-94;
 - All previously issued Form I-20s;
 - Official college transcript.

For more information, contact the International Student Office or visit our website at www.essex.edu.

Enrollment Status and Student Categories

The College recognizes the following categories of students as either full-time (registered for 12 or more credits per semester) or part-time (registered for less than 12 credits per semester).

Matriculated Students:

Students officially enrolled in programs of study leading to a degree or certificate.

Non-matriculated Students:

Students enrolled in course(s), but are not pursuing a degree or certificate.

Non-matriculating, Non-degree, Visiting Applicants

Non-Matriculating, Non-degree applicants are defined as individuals who have neither declared a major, taken the placement test, nor received a placement test waiver.

NON-MATRICULATED STUDENTS ARE NOT ELIGIBLE TO RECEIVE FINANCIAL AID.

It is recommended that non-matriculated students enroll in no more than two courses a semester. Please note that the college has the right to hold non-matriculating students to the same pre-requisite requirements as the matriculating population.

Non-matriculating students must bring a college transcript or written permission from the home school to verify course pre-requisites. Course pre-requisites information is available online at www.essex.edu.

Changing to Matriculated Status

At the completion of 13 credits, non-matriculated students are advised to meet with an academic counselor to review the requirements and complete the necessary paperwork for matriculation. Request to change a matriculated status should be submitted to the Enrollment Services Offices before the first day of classes of a semester or term.

Declaration of a Major

Students declare their major by indicating the appropriate curriculum code for their major field of interest on the application for admission. Only students pursuing a degree or certificate are required to declare a major.

Students interested in Nursing, LPN and Allied Health may apply to the General Science program or any other major and complete the pre-major requirements before being considered for admission to the program.

Admission to Nursing and Allied Health Programs

Admission to the following specialized programs is subject to additional criteria.

Dental Assisting
Dental Hygiene
LPN
Nursing
Physical Therapist Assistant
Radiography
Respiratory Care

Applicants to these Allied Health and Nursing programs must meet special admission requirements. Students are admitted to the Nursing and Allied Health programs only on the approval of program admission committees and after satisfactorily completing specified pre-major requirements. For information on the requirements, go to the ECC website (www.essex.edu) and access the following:

- Degree & Certificate Programs by major or
- The on-line catalog or
- The Guide to Allied Health Programs or
- The Guide to Nursing Programs

Registration

Registration dates will be announced in advance by the College. New students will receive appointment for advisement and registration. Returning students are expected to register online via web services or in-person during designated registration dates.

Hold

A “Hold” may be placed against the records of any student who does not provide a valid address, pay all bills by specified deadlines, return library books, complete immunization requirements, return athletic equipment or other College property, respond to official College correspondence, or comply with other College regulations. A “Hold” prevents a student from registering for classes or receiving grades or a transcript. Students should satisfy their holds prior to registration in order to save time during the busy enrollment periods.

Course Schedule

A schedule of classes listing the days and times for each course will be published and are generally available prior to registration. The course schedule can also be viewed online at www.essex.edu

The College reserves the right to change or cancel any course or courses if this is deemed necessary by departmental or College needs.

Courses Needing Pre-approval

Students enrolling in classes requiring pre-approval by department must obtain permission from the division chair-person prior to registration. Courses requiring approval are noted in the course listings.

Pre-requisites

Course pre-requisites could include any one or more of the following:

Completion of other courses with a minimum grade; reading, writing, and/or math levels; other placement test and/or requirements; major restrictions; co-requisite courses (which must be taken with the course) and/or department approvals. Students are advised to check the requirements for the course before registration. Students who do not meet the indicated course prerequisites will be unable to complete the registration process. Students who have met the requirements for the course and/or placement scores should contact Enrollment Services to request a waiver. Course prerequisite information is available online at www.essex.edu

Registration Procedures

New Students

1. Complete an application for admissions; be admitted to the college.
2. Apply for financial aid, if applicable
3. Complete the pre-enrollment test (college placement test), or receive a test waiver if eligible.
4. Attend new students advisement session and complete the advisement and registration process.
5. Make a payment, either on-line or at the Bursar’s Office.

Returning Students

1. Report to your major academic division/department at the main campus or the multipurpose room at the West Essex Campus for advisement

Before the beginning of each semester or term, each matriculated student is required to meet with a faculty advisor in his/her major area to select appropriate courses. Students are urged to meet with their advisor during each semester, to review their academic plans and progress-to-date, as well as course load and schedule. Curriculum check sheets (list of required courses for each program) are available in the academic departments. Students are responsible for ensuring that they complete all requirements for their degrees and certificates listed in departmental handouts and the official College catalog.

2. Register online via web services, or in-person on designated registration dates.
3. Make a payment, either on-line or at the Bursar’s Office.

Non-matriculating Students

1. Apply and be admitted to the college.
2. Report to the academic division/department where the course is being offered.

Non-matriculating students must bring a college transcript or written permission from the home school to verify course prerequisites for the course or have permission from the department. Course prerequisite information is available online at www.essex.edu

3. Register in-person on designated registration dates.
4. Make payment to the Bursar's Office.

Adding and/or Dropping Courses

Registered students can drop or add courses anytime during the registration and add/drop period. Courses dropped during the add/drop period will not appear on the student's permanent transcript.

Cross Registration

Essex County College students may register under certain conditions for a course at Rutgers-Newark or New Jersey Institute of Technology through the cross registration process. Courses taken at the host school must fulfill degree requirements for your major at ECC. Approval will be granted only if the required courses are not offered at ECC. Students must obtain prior approval from the division chairperson of their major, and report to the host school Registrar to complete the registration process. Tuition will be charged at the Essex County College rate and is payable to the home school. Cross registration is not available during the summer terms. Students must adhere to the registration, add/drop, and withdrawal procedures of both the home and the host school.

Auditing a Course

Auditing a course provides students with the opportunity to explore academic areas of interest. Students wishing to audit must meet all prerequisite requirements for the course and indicate their intention to audit by submitting an audit request form to Enrollment Services by the specified deadline date. No credit is granted for audited courses. Audited courses cannot be applied toward a degree or certificate and cannot be used to meet prerequisite. Financial aid funds will not pay for course audits. Once a student declares intent to audit, the audit grade cannot be changed to a letter grade.

FINANCIAL REQUIREMENTS AND FINANCIAL SERVICES

Tuition and Fees

Tuition and fees at Essex County College are established by the College's Board of Trustees. Those presented here are for the 2010-2011 academic year only.

Students should also consider other expenses (meals, books, transportation, etc.), which will vary widely from student to student. Book charges for some full-time students may be as high as \$500. per semester. A student whose funds are limited must plan carefully for a workable budget.

The College recognizes that many students need financial assistance in order to attend college. To help them, the Financial Aid Office administers various types of federal and state aid. Counselors also have information and can give advice concerning employment opportunities and methods of handling personal finances.

Tuition

Tuition is based on the total number of credit hours or instructional hours for which a student registers. Essex County College reserves the right, with no prior notice, to restructure tuition and fee rates.

Tuition and Fees Schedule

Item	In County	Out of County
Tuition per credit hour . . .	\$108.50 . . .	\$217.00 . . .
Non-credit tuition per instructional hour	9.75	9.75
Application Fee	25.00	25.00
Audit Fee Per Credit Hour	108.50	217.00
CEU Certificate Fee	8.00	8.00
CLEP Fee Per Session	15.00	15.00
Course Change Fee Per Transaction	15.00	15.00
Deferred Payment Default Fee	100.00	100.00
Deferred Payment Plan (Enrollment Fee)	50.00	50.00
Degree Audit Fee (Initial Degree or Certificate)	50.00	50.00
Degree Audit Fee (Additional Degree or Certificate)	25.00	25.00
Dishonored Check Fee	35.00	35.00
General Fee per Credit Hour	26.50	26.50
ID Card Replacement Fee	6.00	6.00
Late Payment Fee	25.00	25.00
Late Registration Fee	25.00	25.00
Medical Insurance Fee Per Year	30.00	30.00
Medical Insurance Fee Spring Only	25.25	25.25
Non-Credit Computer Lab Fee Per Instructional Hour	1.00	1.00
Non-Credit Tuition Per Instructional Hour	9.75	9.75
Off-Campus Registration Fee Per Course	10.00	10.00
Parking Key Fee	25.00	25.00
Readmission Fee (Non-Refundable)	25.00	25.00
Registration Reinstatement Fee	100.00	100.00
Student Activity Fee Per Credit Hour	6.00	6.00
Student Class Schedule Bill Replacement Copy	1.00	1.00
Testing-Out Fee Per Credit Hour-Letter Grade	108.50	217.00
Transcript Fee Official Copy	5.00	5.00
Transcript Fee Unofficial Copy	5.00	5.00
Tuition Per Credit Hour	108.50	217.00

Laboratory Fees

A laboratory fee is charged in addition to tuition for specific courses identified in the Course Descriptions section. This fee helps defray the costs of additional class hours, special instruction, special equipment and materials, special facilities, and/or expendable supplies required in the indicated course. The fee varies depending on the course.

Essex County Residents

To qualify for the in-county tuition rate, students must have continuously resided in the State of New Jersey for at least one year and must have established permanent residency in Essex County before the first day of the semester. Students moving from out of county to in county, and in county residents who have met the one year state residency requirement, must submit a Change of Address form and a tuition rate adjustment request form with supporting documents to the Enrollment Services Express Center before the first day of the semester.

Out-of-County Residents

All other students who have not established permanent residency in Essex County are charged at the “Out-of-County Resident” tuition rate. These include students with F-1, H-1, or J-1 Visa, Temporary Residents, and those with Employment Authorized status. Please note that in accordance with N.J.S.A. 18A:64A-23, pursuant to the Chargeback Laws of 1968, out of county residents who are eligible for chargeback assistance must apply to their home County College and home County Treasurer for a tuition chargeback. The chargeback forms should be presented to the ECC Bursar’s office by the end of the second week of class to obtain a 50% credit against tuition.

Tuition Payment Methods

Full Payment

Full payment of registration bills may be made in cash, by check (certified or personal), by money order, by credit or debit card (American Express, Visa/Master Card or Discover Card), or via web services (webservices.essex.edu). Any student who has previously presented a dishonored check to the College cannot pay tuition with a personal check. Full payment by cash or credit card will be accepted at the Cashier window at the Fourth Level in the main campus and at the Bursar’s Office in the West Essex Campus.

Tuition Payment Mail Drop System

If you are paying your bill by money order, cashier check, certified check, or personal check, it is not necessary to wait on line. You can mail your full payment to the Bursar’s Office or use the tuition payment mail drop system available for your convenience in Room 4121 (Bursar’s Office) at the Main Campus and at the Bursar’s Office window at the West Essex Campus. Simply follow the instructions imprinted on the envelopes provided to ensure proper

payment. If any of your previous personal checks were returned to the College for insufficient funds, you can still use the tuition payment mail drop system, but you must pay by money order, cashier check, or certified check.

Deferred Payment Option

For students who are unable to pay the full amount of their bill at registration, the College makes available a deferred payment plan. The plan allows the student to pay the tuition bill in a number of installments. Contact the Bursar's Office at (973) 877-3099 to obtain a detailed description of the plan.

Tuition Refund Policy

All cash paying students (non-financial aid) who officially withdraw from the College (by completing and submitting a withdrawal form to the Enrollment Services Express Center), or officially drop a course or courses, may receive a tuition refund based on a refund schedule available at the Bursar's Office. Students who withdraw after the dates listed in the schedule will be responsible for payment of the entire bill. Students who are on a deferred payment plan must also follow the schedule and arrange to pay any outstanding balance if the recalculation of tuition and fees is larger than the amount already paid.

To be eligible for a refund or adjustment, a student must officially drop or withdraw from the class. **Non-attendance does not constitute an official withdrawal and is not covered by the refund policy. A withdrawal becomes effective the day the individual gives written notice to his/her academic division counselor. Written notice by mail becomes effective the day after the letter is postmarked.** The processing of refunds takes approximately 30 days. Refund checks are made available through the Bursar's Office.

Note: Fees are non-refundable except for course cancellations and for withdrawals prior to the first day of the semester.

Consequences of Not Meeting Payment Obligations to ECC

- Students who do not make the required first payment by the scheduled due date may have their registration canceled.
- Students who enrolled in the deferred payment plan will be charged a \$100.00 deferred payment default fee if their account is not paid in full by the end of the semester. This fee is in addition to any late fee assessments.
- ECC's collection policy is to forward past due accounts to a designated collection agency. If your account is forwarded, you will incur the cost of collection and it may have a detrimental effect on your ability to obtain credit in the future.

Tuition Waivers

Senior Citizens

Tuition and fees will be waived in credit courses for senior citizens under certain conditions. In order to qualify, individuals must be:

1. Residents of Essex County;
2. Sixty (60) years of age or older; and
3. Registered in courses on a space available basis, subsequent to the determination that the minimum enrollment of tuition-paying students has been met.

Unemployment

Tuition may be waived for students who are unemployed. Students must be referred by their local unemployment office. Students must declare a major. Students must apply for financial aid.

Student Health Insurance

The State of New Jersey requires health insurance for all full-time students (12 or more credits). All Essex County College full-time students will automatically be charged for health insurance once each academic year, either during the Fall or Spring semesters. Students are responsible for filing any insurance claims. Students who produce documentation indicating existing health coverage can complete a waiver card to drop the College plan and receive a credit equal to the premium charged on their bill. Waiver cards must be completed by the second week of classes and submitted to the Bursar's Office. Further details can be found in the Health Insurance brochure in the home page of the ECC website.

Financial Aid

The Financial Aid Office administers funds from federal and state sources in the form of grants, scholarships, and employment, or a combination of all three. ECC's financial aid program is designed to assist students who seek an education but lack the means to finance it. Applicant eligibility and program guidelines are determined by federal and state regulations. Students interested in applying for financial aid must file the Free Application for Federal Student Aid (FAFSA) which is used to determine eligibility for all federal and state funds. File your FAFSA on the Internet at www.fafsa.ed.gov; it is the fastest and most accurate way to apply. You must include Essex County College's Federal School code: 007107 to have your FAFSA sent to our school. If you need a paper FAFSA, you can call the Federal Student Aid Information Center to request a copy at 1-800-4-FED-AID (1-800-433-3243). If you are hearing impaired, call the TTY line at 1-800-730-8913. Assistance in completing the FAFSA is available by appointment in the Financial Aid Office.

Applicants for financial aid must demonstrate the ability to benefit from the programs offered at ECC by having either a

high school diploma or GED, or by successfully passing a test approved by the U.S. Department of Education. Essex County College participates in the following financial aid programs.

- Federal Pell Grant
- Federal Supplemental Educational Opportunity Grants (SEOG)
- Tuition Aid Grant (TAG)
- Educational Opportunity Fund Grant (EOF)
- Garden State Scholarship (GSS)
- Part-time Pilot TAG Program (PPTG)
- Edward J. Bloustein Distinguished Scholars Program
- Federal Work-Study Program (FWS)
- Academic Competitiveness Grant (ACG)
- New Jersey Class Loan Program
- Alternative Loans - Private Educational Loans
- NJ Student Tuition Assistance Rewards Scholarship (NJ Stars)

All students interested in applying for these financial aid programs should review the financial aid information available on our website at www.essex.edu/finaid.

Returning or registered students must log on to myecc.essex.edu for general information about financial aid, to view your award status, or to check for information required to complete your application for aid.

Financial Aid Checklist

To ensure your aid is processed on time, please use this checklist as your guide for completing the financial aid process.

New Students – (Check all items that apply to you)

- ___ 1. Applied and accepted for admission to ECC.
- ___ 2. Taken the College's Placement Test.
- ___ 3. Taken the Ability to Benefit Test, if a Non-High School graduate.
- ___ 4. Submitted all required documents and forms to complete your application for aid by: **May 1** for Summer II Term and Fall Semester or by: **October 1** for Spring Semester and Summer I Term.
- ___ 5. Registered for 12 or more credits, if you want to receive State Aid (TAG, EOF and NJ Stars).
- ___ 6. Once registered for classes, log on to myecc.essex.edu to check your email and award status for the semester/term.
- ___ 7. Book Vouchers are available to students who have funds remaining after the registration bill is paid in full. Students receiving NJ Stars funding only are not eligible for a book voucher.
- ___ 8. If you answered "No" to No. 6 above, have you signed up with the College's Deferred Payment Plan to maintain your class enrollment?
- ___ 9. Register for 6-11 credits to receive aid from the Part-Time Pilot TAG (PPTG) Program.

Returning Students: (Check all items that apply to you)

- ___ 1. Taken and passed the Ability to Benefit Test, if a Non-High School graduate.
- ___ 2. Registered for 12 or more credits, if you want to receive State Aid (TAG and EOF).
- ___ 3. Submitted all required documents and forms to complete your application for aid by: **April 1** for the Summer II Term and Fall Semester or by **September 1** for the Spring Semester and Summer I Term.
- ___ 4. Once registered for classes, log on to myecc.essex.edu for announcements, email, financial aid updates, and your award status for the semester/term.
- ___ 5. Picked up a Book Voucher from the Financial Aid Office, if you have funds remaining after tuition and fee charges were deducted from your financial aid award.
- ___ 6. If your answer is "No" to No. 3, have you signed up with the College's Deferred Payment Plan to maintain your class enrollment?
- ___ 7. Register for 6-11 credits to receive aid from the Part-Time Pilot TAG (PPTG) Program.

Satisfactory Academic Progress

Federal and state regulations require students receiving financial aid to maintain satisfactory academic progress. Satisfactory academic progress is evaluated once per year. For specific information, go to our website at www.essex.edu/finaid.

Financial Aid Tuition Adjustment

The U.S. Department of Education has established a regulation for the Return of Title IV Funds to students who totally withdraw from all their classes. This policy applies to students receiving funds from the Pell and Supplemental Educational Opportunity Grant Programs. Awards will be adjusted for students who totally withdraw from all classes during an academic semester. Students are required to complete 60% of the semester to earn all aid awards. If the amount disbursed is greater than the amount the student has earned, unearned funds must be returned to the Department of Education by the College and/or the student. Please contact the Financial Aid office for specific information.

Financial Aid Refund Policy

Students receiving financial aid who totally withdraw or are reported for not attending classes will be subject to an award adjustment. This may result in all or part of the refund being returned to the student financial aid programs.

NJ STARS - Free Tuition

NJ STARS (Student Tuition Assistance Reward Scholarship) program covers tuition (for up to 18 credits) and most fees for up to five semesters for qualified first-time college students.

To qualify, you must:

- Graduate in the top 15% of your high school class
- Be a United States citizen or permanent resident
- Apply for state and federal financial aid
- Enroll in 12 or more college level credits at the college

Scholarships

Essex County College awards many scholarships to both returning and graduating students. There are three types of scholarships for returning students: presidential, international, and external donor scholarships.

Returning students may apply for international or external donor scholarships. Presidential scholarships are awarded by the President of Essex County College. International scholarships are open to students with F1 visa status. Criteria for external donor scholarships vary from one type to another. Students receiving financial aid are not eligible for international or presidential scholarships. External donor scholarships may be awarded based on a student's unmet financial need. Students must apply for scholarships 15 days prior to the last day of classes. Application forms for Fall are available during the first week of April and those for Spring are available during the first week of October.

Graduating students may apply for transfer scholarships. Every year, over 20 organizations provide scholarships to graduating students from Essex County College who have been accepted as transfer students at four-year colleges and universities. This category of scholarships does not exclude students on financial aid. Applications are mailed to all students eligible for graduation during the first week of February.

The college also offers a limited number of book scholarships every semester to returning students. Details of the criteria, application procedures, and deadlines are available in the Office of the Dean of Student Affairs, Room 5105, and in the Scholarship Handbook posted on the college website at www.essex.edu.

Academic Policies

Academic Calendar and Course Load

Semesters, Summer Terms, and Winter Intersession

The Fall and Spring semesters are 15 weeks long.

The two summer terms are seven and six weeks long, respectively. Winter Intersession runs for 10 days between the fall and spring semester. Students must enroll in at least one academic semester or term within a three-year period to maintain active enrollment.

Academic Program Course Load

A normal course load for full-time students is 12 to 16 credits during a semester, six to nine credits during a summer term. Foreign students and students receiving state financial aid must be enrolled full-time, i.e., 12 or more credits per semester. A student who wishes to take 16.5-18 credits in a given semester must have a grade point average of 3.0 or higher. A student who wishes to take 19-21 credits in a given semester must have a grade point average of 3.5 or higher; any such course load must be approved by a divisional chairperson. An academic dean must approve requests in excess of 21 credits.

Academic Standing

Transfer Credit

Credits transferred from other regionally accredited colleges and universities will be included in the total number of credits earned at ECC. In order to transfer, such credits must relate to courses and programs offered by ECC. Courses transferred from other institutions of higher learning must carry grades of "C" or higher. Transfer students must complete a minimum of 30 credits, including half their major course requirements, at ECC. Credits from institutions not accredited by regionally accredited agencies (e.g., Middle States) will not be accepted; however, credit may be granted to students who "test out" (i.e., demonstrate mastery of subject content via examination), when such tests are available. The same guidelines pertain to students who wish to transfer courses into the College's certificate programs; half of the credits for such programs must be completed at ECC.

Testing Out – Letter Grade

The College has initiated a "testing out" procedure in some courses to allow students to receive credit for a course when they can demonstrate the level of proficiency necessary to satisfy the requirements for the course. Students must register and pay for the course. Students must consult with the academic division where the course is offered.

Credit by Examination

ECC's Credit by Examination Program enables students with appropriate knowledge and experience to secure college credit. Credit will be granted to students admitted to ECC who pass examinations approved by Enrollment Services and appropriate academic departments. In some instances it may not be possible to offer credit by examination because no relevant test exists in certain disciplines. When granted, a grade of "CR" will be entered as transfer credit on each student's transcript.

Credit by examination may be granted for the Defense Activity for Non-traditional Educational Support (DANTES) and the College Level Examination Program (CLEP).

Students interested in applying for credit by examination should contact either the Enrollment Services Express Center or the appropriate academic division.

Change of Major

To change a major or to add a second major, a student should discuss the proposed change with a counselor or faculty advisor, complete a Change of Major form, and return the signed form to the Enrollment Services Express Center. Graduation requirements will be those in effect on the date the student matriculates in the new major.

Repeating a Course

When a student earns a "D" or "F," he or she may repeat the course in an attempt to earn a higher grade. Although the "D" or "F" remains on the transcript, the higher of the two grades will be counted in the cumulative grade point average. When a student earns a "D" or "F" in a remedial/developmental course (i.e., a course below the 100-level), the student must repeat the course before enrolling in the next course in the sequence. A student may not repeat a course more than once except with the written permission of a counselor.

Academic Progress

Guidelines for academic progress and good academic standing include the following:

- Good Academic Standing is defined as a cumulative grade point average (GPA) of 2.0 or above. Students must attain an overall GPA of 2.0 or above to graduate from ECC's degree or certificate programs.
- Probation is defined as a cumulative combined GPA of less than 2.0. A student whose

cumulative combined GPA goes below 2.0 is placed on probation.

- Suspension (for one academic period) occurs when a student with a cumulative combined GPA of less than 2.0 earns a GPA of less than 2.0 in a successive term.
 - a. A student who is suspended from the College may appeal for reinstatement or may remain suspended for one semester before applying for reinstatement. Students returning after suspension are not eligible for financial aid until they have successfully completed nine credits with grades of "C" or above.
 - b. A student who is reinstated after suspension must complete a minimum of nine credits with a GPA of 2.0 or higher to be considered as making satisfactory academic progress.
 - c. A previously suspended student who is readmitted and who attains a cumulative GPA of less than 2.0 two terms after being readmitted will be dismissed.
- Dismissal from the College for two years occurs when a student who has been reinstated after suspension receives an academic period GPA of less than 2.0. Students returning after dismissal are not eligible for financial aid until they have successfully completed nine credits with grades of "C" or above.
- Academic probation is defined as a cumulative combined GPA of less than 2.0 followed immediately by a semester GPA of 2.0.

Students are responsible for ensuring that they complete all requirements for their degrees and certificates listed in departmental handouts and the official College catalog.

Financial Aid Students: visit our website at www.essex.edu/finaid/ to review the Academic Progress Policy for students receiving financial aid.

Appeal Process

A student suspended or dismissed from the College may appeal for reinstatement through the Academic Review Committee (ARC) by submitting an appeal letter to the Dean of Student Affairs. The Review Committee will meet with the student and review the appeal. A reinstated student will not be eligible for financial aid until he or she has successfully completed nine credits with grades of "C" or higher.

Financial Aid Students: visit our website at www.essex.edu/finaid/ to review the Academic Progress Policy for students receiving financial aid.

Attendance

Regular and prompt attendance is essential for academic success. Faculty members take attendance at each scheduled class session. Students are expected to attend and be on time for all classes. Individual faculty members may establish specific attendance policies. It is the responsibility of the student to know and follow the attendance policy as required for each course. Students with excessive absences may be referred to a counselor. Insufficient attendance at regularly scheduled classes may result in failure or removal.

A student who is absent from all classes during the first ten class days of the fall and spring semesters, or the first five days of summer terms, will be recorded as a “No Show.” A withdrawal will appear on the student’s record and the student will be notified of the “No Show” status by the Registrar’s Office. Students are advised that “No Show” status in one or more courses may affect their eligibility for financial aid and veterans’ benefits.

Students who stop attending classes without officially withdrawing will be recorded as “Not in Attendance” and will receive grades of “F.” This status may also affect their eligibility for financial aid and veterans’ benefits.

Academic Forgiveness

The College’s academic forgiveness policy provides previously enrolled students who have been away from the college for at least three years and have successfully completed a minimum of 12 college-level credits with grades of “C” and above with an opportunity to pursue a single “fresh start” at ECC. Under this policy, all courses together with grades earned prior to readmission will remain on the student’s transcript but will not be used in computing the student’s overall grade point average; neither can any of the previously taken courses be used to fulfill degree or certificate requirements.

Applications must be made through an academic counselor who will review and discuss it with the student before submitting it to the chairperson of the division or department in which the student intends to pursue a major. If approved by the chairperson, it is forwarded to the appropriate dean.

Grades

Grading System		Grade Points Per
Letter Grade	Description	Credit Hour
A	Superior	4.0
B+	Very Good	3.5

B	Good	3.0
C+	Above Average	2.5
C	Satisfactory	2.0
D	Passing	1.0
F	Failing	0.0
I	Incomplete	0.0

Grade denotes student has completed 75% of assigned course work with a grade of C or better but did not complete all course requirements. The faculty member must attach a completed Essex County College Grade Form to the final grade sheet. After six months, the original “I” will be recorded as an “F” unless it is changed by the instructor.

NG	No grade received	0.0
T	Tutorial	0.0
W	Withdrawal	0.0

Grade denotes official withdrawal from a course or from the college.

AU	Audit	0.0
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Grade denotes student was not enrolled in the course for credit.

CR	Credit	0.0
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Grade reserved for courses passed by examination or accepted as transfer credit and indicates satisfactory completion of a course.

Grades of “D” may not fulfill certain course prerequisites and major course requirements and will not transfer to other institutions.

Grades of “W,” “AU,” “CR,” and “I,” are not counted in the computation of grade point.

Withdrawal

Students who wish to withdraw totally from the College must contact a counselor to discuss financial aid and other important implications. Failure to attend classes or merely notifying one’s faculty member(s) is not an official notice of withdrawal. In cases of emergency, written notice may be mailed to the counselor. Such written notice becomes effective one day after the letter is postmarked.

Students may apply for and receive a grade of “W” up to the week following the mid-term grade reporting period. The last day for withdrawals shall be posted for each semester and term in the College calendar.

Grade Point Average

Academic achievement during a semester or term is measured by a student’s grade point average (GPA).

The measure of academic achievement for all work completed is referred to as the Cumulative Grade Point Average (CGPA).

A semester GPA is determined in the following way:

1. Allowing 4 points for an A, 3.5 points for a B+, 3 points for a B, 2.5 points for a C+, 2 points for a C, 1 point for a D, and 0 points for an F, multiply the number of points equivalent to the letter grade received in each course by the number of semester hours for the course, thus arriving at the grade points earned for each course.
2. Add the grade points in each course to obtain the sum of grade points for the semester's work.
3. Divide the total grade points by the total number of semester hours attempted. The result is the grade point average.

The following example illustrates the GPA of a student with grades in five courses.

Course	Grade	Semester Hours	Point Equivalents	Grade Points
Biology	B	4	x 3.0	12
Math	C	3	x 2.0	6
English	C+	3	x 2.5	7.5
Sociology	C	3	x 2.0	6.0
Business	B	3	x 3.0	9
		16		40.5

40.5 (total grade points) divided by 16 (semester hours attempted) = 2.53 GPA

The CGPA is calculated in the same way as the semester GPA except that all attempted semester hours are taken into account. The student's CGPA will include only those courses taken at Essex County College.

Grade Reports

Final grades are recorded as part of each student's permanent academic transcript.

Mid-term grade warnings are issued to students whose work is unsatisfactory. Warning grades are for advisory purposes only and are not part of students' permanent academic transcript.

Students can view grades online.

Grade Changes – Time Limit

All approved grade changes must be submitted to the Enrollment Services Express Center (Registrar's Office) within one year of the original grade assignment.

Class Standing

A freshman is defined as a matriculated student working toward a degree who has earned 29.5 or fewer college-level credits. A sophomore is defined as a matriculated student working toward a degree who has earned 30 or more college-level credits.

Dean's List

A Dean's List is published every semester. Full-time students named to this list must have earned a grade point average of 3.5 or higher in that semester and have no "I" grades or any grade lower than "C" for the semester in which the student is named. Only college-level courses are computed. Part-time students are also eligible. To qualify, part-time students must also have earned a 3.5 or higher grade point average, no grade of "I," no grade lower than "C," and at least 12 college-level credits within a given academic year (e.g., 2001-02, 2002-03).

Transcripts

A Transcript is the student's permanent academic record. Students can access their transcript online.

Official Transcripts are directly sent to other colleges or third parties, upon written request and authorization by the student.

A Student Copy Transcript is issued upon written request and authorization by the student.

A Transcript Fee is charged to current and former students for each transcript that is generated.

Transcripts will not be issued until all outstanding obligations to the College are satisfied.

Graduation

Degree Students

Upon completion of 40 college credits, all currently enrolled matriculated students will receive degree compliance report to track progress in their primary major.

Students wishing to pursue a second degree should meet with an advisor in the major department and complete a second degree request form. Request must be approved by the division chairperson and the academic dean. Second degree students must complete a Degree Audit Request form in the Enrollment Services Office immediately during their final semester.

Certificate Students

Students in Certificate programs should file a Certificate Audit Request form at the Enrollment Services Office during their final semester.

Graduation Requirements

Students who have successfully completed all requirements for degrees and certificates will be graduated from the College. Students are governed by the graduation requirements in effect at the time of their matriculation.

In order to graduate, students must have cumulative GPAs of 2.0 or better. Additionally, students must earn grades of “C” or better in all major courses. Credits transferred from other regionally accredited colleges and universities or earned via examination or Advanced Placement will be included in the total number of credits earned. To graduate with an Associate Degree, transfer students must complete a minimum of 30 credits toward their degree and at least half of their major course requirements at Essex County College.

Transfer students in a certificate program must complete at least half of their total required credits at Essex County College, including half their major course requirements.

Second Degrees and Certificates

Students may earn a second degree if certain conditions are met. Students interested in declaring an additional major should do so through their academic chairpersons using a college-provided form (“Application for Second Degree”), indicating which major is primary and which major is secondary. Students must submit this form before they have accumulated 45 college credits. All requirements in both majors must be met in full. Students **may not earn** two separate degrees in the same discipline – e.g., accounting (A.S., A.A.S.), computer science/applied computer science. The “Application for Second Degree” form will be completed by the student and his or her advisor, approved by the chairperson or director, and then by an academic dean or vice president, who will forward it to the Registrar. The Registrar will notify the student of the status of the application. A student has not been approved for a second degree until the Registrar issues an official notification.

Students may also earn multiple certificates – academic

certificates (30 or more credits) and/or certificates of completion (less than 30 credits). Courses used to satisfy the requirements for one certificate can be used to satisfy requirements for other certificate programs and degrees. However, it should be noted that a student who earns a degree in a given program cannot subsequently earn a certificate in that same program without taking additional course work.

Graduation with Honors

Students who have completed requirements for a degree will be graduated with honors as follows:

Highest Honors	CGPA	3.85 to 4.00
High Honors	CGPA	3.65 to 3.84
Honors	CGPA	3.50 to 3.64

These honors will be noted on students’ transcripts.

Commencement

An annual commencement (graduation) ceremony is held at the conclusion of the spring semester. Students who have completed degrees or certificates with 30 or more credits will be invited to participate in the annual commencement ceremonies.

Students who are completing their degree or certificate requirements during the first summer term will be permitted to participate in the annual commencement.

Academic Integrity

Essex County College’s trustees, faculty, and administrators are dedicated to mutual respect and the free exchange of ideas in classroom, laboratory, and other academic settings. Students who enroll at ECC join with these other individuals to observe guidelines regarding free inquiry, academic honesty, and civility in the classroom and related forums.

The College’s administration recognizes the common interest of faculty and students in the pursuit of truth and understanding. This includes the right to present and the obligation to receive divergent views when legitimate intellectual differences exist.

Students are advised that their obligations in this respect include but are not limited to the following:

- To present only such homework assignments, term papers, examination papers, etc. that are the results of their own work;
- To honestly pursue research and scholarship by acknowledging sources used in term papers and other assignments;

- To refrain from fabricating sources and data;
- To practice fairness in competing with peers through recognition of others' rights to gain access to information and materials, respect for others' right of access to facilities and equipment, and adherence to rules governing their use;
- To accurately represent the results of experimental, survey, and other findings; and
- To respect the rights of others to hold differing views based on reason, research, and recognized standards of evidence.

Moreover, any theft or alteration of academic materials, or the destruction of the academic work of others, constitutes a serious breach of academic integrity.

In the case of an alleged infraction, the appropriate divisional or departmental chairperson will handle the matter and if necessary initiate formal charges with an academic dean.

Student Right-to-Know

Students are advised that graduation rates are available from the Office of Institutional Research. Graduation rates for student athletes on scholarships are available from the office of the Dean of Student Affairs.

STUDENT SERVICES

Essex County College has qualified faculty and staff to help both day and evening students. We invite you to tour our Main Campus or West Essex Campus.

Enrollment Services Express Center

The Enrollment Services Express (ESX) Center, located on the 4th floor of the main campus, was established to provide quality enrollment services to current and prospective students. The Center provides a one-stop service in admissions, testing, registration, graduation, grades, and transcripts. Tests administered by the Center are: Placement test, College Level Examination Program-(CLEP), the General Education Development-(GED) test, and Nursing and Allied Health Entrance Test. The Center operates-Monday through Thursday from 9:00 a.m. to 6:00 p.m., and Friday, 11:30 a.m. to 4:00 p.m.

To contact the Center, please write or call:
 Essex County College
 Enrollment Services Express Center - Main Campus
 303 University Ave.
 Newark, NJ 07102
 (973) 877-3100

Essex County College
 Enrollment Services - West Essex Campus
 730 Bloomfield Ave.
 West Caldwell, NJ 07006
 (973) 877-6590

Parking

Parking is available for students at Essex County College when a valid parking decal is properly displayed on the student's vehicle. Decals can be purchased at the Bursar's Office for \$26.00 per semester. A parking decal is valid only during the semester for which it is purchased. Student parking privileges are on a first-come, first-served basis. Information on student parking can be obtained from Public Safety Department, Room 2250 at the main campus, and the Campus Police at the West Essex Campus.

Food Services

ECC contracts for food services and provides a dining room with a variety of hot and cold meals, sandwiches, and desserts during day and evening hours at the main campus. Limited food services are provided at the West Essex Campus in the Student Lounge.

Bookstore

Essex County College has a bookstore on the main campus on the first level of the megastructure, and also one in the West Essex Campus. The stores carry textbooks and school supplies as well as paperbacks for supplementary classroom assignments and general reading pleasure. Software, computer disks, greeting cards, and many other items are available, as well as a large selection of gift items and apparel bearing the distinctive Essex County College crest.

Student Identification

All I.D. cards are issued free of charge to new students by the Public Safety Department. To obtain an I.D. card, all students must have two pieces of identification (a driver's license and a Social Security card are commonly used). Students must also present proof of tuition and fee payment for current registration. The student's I.D. card authorizes

access to ECC and use of its facilities (e.g., library and computing labs); therefore, it must be retained by the student throughout the student's stay at ECC. Lost or mutilated cards may be replaced upon payment of a \$5.00 fee at the Public Safety Department. Further information regarding I.D. cards can be obtained from the Department.

Counseling

Counselors at Essex County College work with students to help them grow personally and academically. Students maximize their potential through the services of these professionally trained counselors. Counselors provide students information about College requirements and procedures, academic programs, financial services, and transfer and employment matters. Students who need assistance with self-improvement concerns, study and test-taking skills, time management, personal issues, and career decision making can find help through their counselors. Faculty counselors are available to discuss major requirements and counselors are also in particular program areas such as Educational Opportunity Fund (EOF) program and Special Programs. Counselors are located throughout the College in divisional and departmental areas and also at West Essex, FOCUS, and Ironbound Extension Centers. Counselors are available on both an appointment and a walk-in basis during the day and evening, and on Saturdays.

Veterans Affairs

The Office of Veterans Affairs (OVA) provides assistance to the veteran population at Essex County College, both at the main and West Essex Campus locations.

At the main campus, the office is located on the fourth level of the megastructure as a part of the Office of Recruitment and Marketing. The office provides certification services for qualifying veterans and their eligible dependents. Eligibility determination is made by Veterans Administration. Veterans have ten years from their date of separation from active duty to use their entitlement. All of ECC's degree and certificate programs are approved by the New Jersey Department of Military and Veterans' Affairs, the state approving agency under Title 38, U.S. Code, Section 1775, for veterans training. Students receiving VA educational benefits may not withdraw from the College without notification to the Certifying Veterans Officer. The date of withdrawal will be the determining date for benefits.

International Student Services

International students are assigned to a special advisor in the Recruitment/Marketing office. The International Student Advisor is available for direction concerning visas, travel to other countries, and communications from the Immigration and Naturalization Service. Every effort is made to bring international students into the life of the community and to make their stay in the United States a meaningful experience. International understanding is strengthened by the many contacts these students have in the social and cultural organizations of the College community. Housing facilities are not provided by the College.

Child Development Center

The Essex County College Child Development Center, located on the first level of the Physical Education Building, provides a full-day educational program for children between the ages of two and five. The Center is reaccredited by the National Association for the Education of Young Children (NAEYC). Services are available to children whose parents are enrolled or employed at Essex County College. The Center is also open to the Essex County community on a space-available basis. The Center operates Monday through Friday from 7:30 a.m. to 6:00 p.m. During the Fall and Spring Semesters, the Center also offers evening hours.

Career Resource Center

The Career Resource Center, located on the First Floor of the main campus (Red Area), assists ECC students and alumni in all aspects of their career development via career counseling, transfer advisement, vocational counseling, job search skills workshops, and placement opportunities.

Assistance is also provided concerning résumé and cover letter preparation. The Center maintains a six-station internet-ready computer lab with quality texts and videos pertaining to occupational selections and interviewing techniques.

The college Work/Study placements are also done in the Center and Cooperative Education opportunities are available through this program. Employment opportunities are made available through on-campus recruitment by area employers and career fairs. Employer panels and career seminars are also routinely scheduled.

Students are encouraged to visit the Career Resource Center in their first year of attendance and to register in eRecruiting for career employment when they have earned 40 credits toward their degrees.

Disability Support Services

The Office of Disability Support Services, located in the Career Development & Disability Support Services Center in Room 4120 of the megastructure, coordinates and implements services for students with disabilities. The College also networks with various agencies to complement the services. The focus is to help students with disabilities carry out their educational objectives with various forms of assistance.

A student with a “disability” is defined as a student who has any mental and/or physical condition that substantially impairs or restricts one or more major life activities. Disabilities may be in the form of visual impairment, psychological/emotional disabilities, speech and/or hearing impairment, mobility impairment, substance abuse impairment, or other specific learning disabilities. Documentation on the nature of the disability is necessary if a student is to receive accommodations. The student, and no others, must submit his or her own accommodation requests and make disability-related decisions.

Alcohol and Substance Abuse Services

Alcohol and substance abuse services are provided for all members of the College community. For those who require treatment at a specialized agency, referral through the Student and Employee Assistance Program is made to the appropriate detoxification/rehabilitation or outpatient facility and self-help program. Pre-counseling, case management, follow-up, and recovery support are also provided. A comprehensive prevention, education, and outreach program is available and includes seminars and workshops, classroom modules, prevention training, information tables, special events, informal discussions, and a newsletter for concerned students, parents, and community groups. The services are available through the Health Services Office.

Student Records

Essex County College maintains academic and health records of all students enrolled in the College. Additionally, financial records are maintained on all students who receive financial assistance through the College.

Access to Student Records

The Family Educational Rights and Privacy Act (FERPA) of 1974 affords students certain rights with respect to their education records. They are:

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 Dean of Student Affairs, or other appropriate officials, 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.

FERPA was not intended to provide a process to be used to question substantive judgments that are correctly recorded. The rights of challenge are not intended to allow students to contest, for example, a grade in a course because they felt a higher grade should have been assigned.

If the College decides not to amend the record as requested by the student, the College will notify the student of the decision and advise the student of his or her right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.

3. *The right to consent to disclosures of personally identifiable information contained in the student's education records, except to the extent that FERPA authorizes disclosure without consent.*

One exception that 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, collection agent, or official of the National Student Clearinghouse); 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. The College may disclose education records in certain other circumstances:

- to appropriate parties to comply with a judicial order or a lawfully issued subpoena;
- to appropriate parties in a health or safety emergency;
- to officials of another school, upon request, in which a student seeks or intends to enroll;
- to college officials in connection with a student's request for or receipt of financial aid, to determine the eligibility, amount, or conditions of the financial aid, or to enforce the terms and conditions of the aid;
- to certain officials of the U.S. Department of Education, the Comptroller General's office, or to state and local educational authorities, in connection with certain state or federally supported education programs;
- to accrediting organizations to carry out their functions;
- to organizations conducting certain studies for or on behalf of the College;
- to the alleged victim of a crime of violence when the crime was allegedly committed by the student; the College may disclose the results of an institutional disciplinary proceeding with respect to the crime.

4. *The right to file a complaint with the U.S. Department of Education concerning alleged failures by the College to comply with the requirements of FERPA.*

The name and address of the Office that administers FERPA is: Family Policy Compliance Office, U.S. Department of Education, 400 Maryland Avenue, SW., Washington, DC, 20202-4605

Directory Information

The College may disclose the following categories of student information, designated as public "Directory Information": The student's name, address, major field of study, degree sought, expected date of completion of degree requirements and graduation, degrees and awards received, dates of attendance, full- or part-time

enrollment status, the previous educational agency or institution attended, participation in officially recognized activities and sports, weight and height of athletic team members, and other similar information and photographs.

Students may restrict the release of Directory Information, except to school officials with legitimate educational interests. To do so, a student must make the request in writing to the Dean of Student Affairs. Once filed, this request becomes a permanent part of the student's record until the student instructs the College, in writing, to have the request removed. For purposes of compliance with FERPA, the College considers all students independent.

STUDENT LIFE AND ACTIVITIES

Essex County College is committed to providing a well-rounded experience for our students through imaginative and interrelated projects. The Student Life and Activities Office (SL&AO) heightens and enhances the educational processes of the student population by planning and coordinating a variety of social, cultural, intellectual, and recreational programs. The SL&AO publishes and distributes the LIFELINE student handbook, the ECCO student newspaper and other promotional publications. The office also coordinates the sales of discount tickets to area cultural and sporting events, maintains a directory of off-campus housing listings, handles judicial affairs, and operates the Clara E. Dasher Student Center. The Student Life and Activities Office is located in the Dasher Student Center at the main campus and in the Student Lounge at the West Essex Campus.

Clara E. Dasher Student Center

The Clara E. Dasher Student Center provides students with an environment that promotes a sense of community and fosters intellectual, social, and recreational development through a variety of programs and services. Facilities include a game room, TV lounge, cyber-lab with wireless internet, meeting rooms, study lounge, multi-purpose area, offices for the Student Government Association and the ECCO student newspaper, and an area for student clubs and organizations.

Student Government Association

The Student Government Association provides representation in the planning, execution, and evaluation of

actions affecting the ECC student body, serves as a means whereby student opinions, views, suggestions, and aspirations may be properly discussed and acted upon, and provides guidance and financial assistance to student clubs and organizations.

The SGA Executive Board consists of matriculated students who have earned at least a 3.0 GPA. It functions under a constitution approved by the student body. The officers are elected each year.

The Student Government Association is located on the Second Level of the Clara E. Dasher Student Center and in the Student Lounge at the West Essex Campus.

Student Clubs and Organizations

Essex County College offers opportunities for leadership development and civic responsibility through its many clubs and organizations. The purposes and activities of the clubs/organizations shall be clearly related to the mission and goals of the College.

Clubs encompassing cultural, academic, and social issues are recognized by the institution and receive partial funding from the Student Government Association. Complete procedures are outlined in the LIFELINE Student Handbook and in the Clubs/Organizations Procedures Manual.

Student Conduct

ECC students are expected to conduct themselves in a manner that promotes and maintains an educational environment conducive to learning and collegiality. The College has established reasonable standards of behavior for students and reserves the right to take action, including suspension or expulsion, against any student whose conduct is deemed unacceptable.

The College Judicial Committee, comprised of students, faculty, and staff, reviews behavioral grievances brought by a member of the College community against a student and renders a recommendation of action to the Dean of Student Affairs.

Detailed information about the College Code of Student Conduct may be found in the LIFELINE Student Handbook.

Athletics

Essex County College offers a varied program of intercollegiate athletics for men and women. The program includes men and women's soccer, basketball, indoor and outdoor track.

Known as the "Wolverines," Essex County College

teams are represented in the Garden State Athletic Conference (GSAC) and in Region 19 of the National Junior College Athletic Association. The College's teams have produced All-Americans in soccer, men's and women's basketball, and indoor and outdoor track. Essex has won the following championships:

Men's Soccer

1992	Region 19 Champions
1992	NJCAA Division I National Participants
1993	Region 19 Champions
1993	NJCAA Division I National Runners-up
1993	GSAC Champions
1994	GSAC Division I Champions
1994	NJCAA Region 19 Division I Runners-up
1999	Region 19 Champions District Champions
2000	Region 19 Champions District Champions 6th Place NJCAA National Championship
2001	Region 19 Participants
2002-2004	Region 19 Runners-up
2009	Region 19 Champions
2009	North East District Champions
2009	National Tournament 5th Place Finish

Women's Soccer

2000	Region 19 Participants
2001	Region 19 Participants
2003	Region 19 Champions
2006	Region 19 Participants

Men's Basketball

1992	Division I/II GSAX Co-Champions
1993-1994	Blue Division GSAC Champions
1993-1994	Division I/II GSAC Co-Champions
1994-1995	Blue Division I Champions
1997-1998	Blue Division I Champions
1998-1999	Blue Division I Champions
1999	District Division I Champions
1999	NJCAA Division I Participants
2000	Region 19 Participants
2000-2004	Region 19 Participants
2007-2008	District 9 Champions
2007-2008	Region 19 Champions
2007-2008	NJCAA Participants
2008-2009	GSAC Champions
2008-2009	Road Runners Classic Tournament Champions

Women's Basketball

1993-1994	Blue Division Champions
1994-1995	Blue Division Champions
2000	Region 19 Runners-Up

2000-2004	Region 19 Participants
2005-2006	Region 19 Runner Up
2006-2007	Region 19 Semi-Finals
2007-2008	Region 19 Semi Finals
2008-2009	Mixer Tournament Champs
2008-2009	Region 19 Semi Finals

Men's Cross Country

1989	GSAC Champions
1989	Region 19 Champions
2007	Region 19 Champions
2009	Region 19 Champions

Men's Indoor Track

1990	2nd Place Region 15/19
1991	District Champions
1992	Region 15/19 Champions
1993	District Champions
1999	NJCAA 3rd Place
1999	Millrose Champions
2004	Millrose Champions
2007	Millrose Champions
2008	Millrose Champions
2008	NJCAA 5th Place

Men's Outdoor Track

1991	District Champions
1992	Region 15/19 Champions
1992	Division I/II GSAC Co-Champions
1993-1994	Blue Division GSAC Champions
1993-1994	Division I/II GSAC Co-Champion
1994-1995	Blue Division I Champions
1997-1998	Blue Division I Champions
1998-1999	Blue Division I Champions
1999	District Division I Champions
1999	NJCAA Division I Participants
2000	District Champions

Women's Indoor Track

1992	District Champions
1993	District Champions
1994	District Champions
1995	District Champions
1996	NJCAA Runners-Up
1996	District Champions
1997	District Champions
1997	National Champions
1998	NJCAA 3rd Place
1999	NJCAA 3rd Place
1999	District Champions
2000	District Champions
2000-2006	NJCAA Runner Up
2007	NJCAA National Champions

Women's Outdoor Track

1990	District Champions
1992	District Champions
1996	NJCAA 3rd Place

1998	Penn Relays Shuttle Hurdle Champions
1998	District Champions
1999	District Champions
2000-2003	NJCAA Participant
2004	NJCAA 2nd Place
2005	NJCAA 4th Place

Women's Cross Country

1989	GSAC Champions
2007	Region 19 Champions
2009	Region 19 Champions

Five ECC student athletes participated in the 2004 Olympics and 11 ECC track student-athletes participated in the 2008 Olympics. ECC student-athletes have won 5 Olympic medals with Melaine Walker taking gold in 2008 with an Olympic record in the 400-meter hurdles. Over the years, the College has had 16 student-athletes participate in the Olympics. A number of junior college, national, and world records have been set by ECC track athletes.

Academic Support Services

Academic Advisement

Before the beginning of each semester or term, each matriculated student is required to meet with a faculty advisor or counselor in his/her major area to select appropriate courses. Students are urged to meet with their advisor or counselor during each semester, as well, in order to review their academic plans and progress-to-date, as well as course load and schedule. A Curriculum Guide for each program, that includes a list of required courses for the program, is available in each academic department. Students are responsible for ensuring that they complete all requirements for their degrees and certificates listed in departmental handouts and the College website.

Learning Center

The Learning Center, a 5,800-square-foot facility located on the Level II Forum at ECC's main campus, provides students with academic support in the areas of accounting, biology, chemistry, math, physics, English, English as a second language, and computer science. Assistance is available to students on an individual basis or as a small group, Monday through Saturday. Schedules are posted at the reception desk to accommodate the needs of both full- and part-time students. The goal of the Learning Center is to assist students in acquiring and maintaining superior skills

and an understanding of their area of study. To achieve this goal, Learning Associates provide new perspectives on course material and instill the study habits needed to succeed. Tutoring services are also available at ECC's West Essex Campus.

Cooperative Education Program

The Cooperative Education Program at Essex County is designed to enrich the educational experience by combining classroom studies with work assignments that are directly related to students' majors or career fields. Qualified students who are already employed or who are placed in internships can earn academic credits towards a degree or certificate. The Cooperative Education Program also offers career education workshops and seminars including Career Development Seminars I and II, Choosing a Major, What Can I Do with My Major? Résumé Writing, Conducting a Successful Job Interview, and Dressing for Success. The program is administered through the Career Resource Center (First Floor, Red Area).

The Transfer Advisement Office

Because transfer admissions requirements vary by institution, students are urged to start planning early for transfer. As we say at Essex, "Transfer Begins With the First Credit Not the Last."

Students are encouraged to visit the transfer office at the Career Resource Center (First Floor, Red Area) in their first year of attendance for information about the transferability of courses and programs taken at ECC. The college has developed articulation (transfer) agreements with a variety of institutions. These agreements are written to maximize the number of credits students will be able to transfer from Essex County College by detailing required curricula and policies that will result in a student's smooth transition from one institution to the other. The articulation agreement serves as a "road map" to get the student from ECC to another institution without loss of credit or time.

Computer stations are accessible at the transfer office for students who wish to download college applications and other information from transferring institutions. Course equivalency information for most New Jersey colleges can be obtained using the transfer equivalency sheets in the office, downloading the online sheets, or by using the office's computers to access www.njtransfer.org. The office also hosts workshops and transfer fairs.

For more information, including admission deadline dates for New Jersey colleges, go to the ECC website at www.essex.edu.

MESA Center

The Mathematics, Engineering, & Science Achievements (MESA) Center, located in the Center for Technology, provides an opportunity for students majoring in engineering, computer science, math, and science to obtain special academic support to help them achieve success in their chosen field of study. Students work with tutors, mentors, and counselors in the MESA Center to enhance their educational experience. Benefits include academic excellence workshops, reference books, academic planning sessions, scholarship opportunities, and membership in professional societies.

STEM Center

A Science, Technology, Engineering, and Mathematics (STEM) Learning Communities project has been established to increase the number of Essex County College students majoring in areas of fundamental importance to the Nation's educational goals. Funded by the U.S. Department of Education, the Project will impact hundreds of students by improving their academic performance and employment opportunities. The Project's innovative instructional and student support methodologies will enable ECC to significantly increase the participation of minorities in STEM careers.

Program components include the following benefits:

- Textbook stipends for certain Mathematics, Science, Engineering, & Technology courses
- Linked Mathematics, Science, Engineering, & Technology courses
- State of the Art Instructional Computer Laboratories
- A private Tutorial Computer Laboratory/Study Center
- Career and Academic Planning Mentoring
- Membership in the Mathematics and Technology Clubs
- Informational and Motivational Seminars
- Research experience opportunities
- A comprehensive Reserve Library containing STEM reference books and software

College Libraries

The College has three libraries and the collection of each can be viewed via the online public access catalog known as the ECC-OPAC.

The Martin Luther King, Jr. Library, located in the center of the megastructure on the main campus, is a two-level facility. It has a collection of more than 100,000 volumes, over 400 periodicals, access to

many periodicals databases, as well as hundreds of microfilms, videocassettes, and DVDs. The West Essex Branch Campus Library has more than 14,000 volumes and a comparable collection of non-print media programs. The Police Academy Library has a reference collection of more than 2,500 titles. Although this collection is not available for general circulation, the titles are listed on the on-line catalog and special requests can be made to the King Library's circulation desk.

The Libraries' collections are designed to meet the academic, informational, cultural, and recreational needs of the students and the college community. Professional librarians assist the needs of all patrons. They teach the rudiments of general research and the use of special indexes and databases.

The libraries have open stacks, photocopiers, and audiovisual hardware for individual use. There is wireless access to the Internet and small group study rooms are available at the King Library. The Library is a member of and active participant in ReBL, the Reciprocal Borrowing Libraries of Essex County, INFOLINK, and the Library Cooperative of the Council of Higher Education in Newark (CHEN).

Media Production and Technology Center

The Media Production and Technology Center, commonly referred to as MPT, provides access and support to faculty and Essex County College students on the uses of instructional media. Located on the 3rd level of the megastructure, the MPT Center maintains and distributes an inventory of audiovisual equipment for use on campus. The MPT staff and/or assistants schedule equipment for pick-up and delivery in response to faculty and student requests. Staff will also set-up and operate equipment or provide training on equipment operation.

The available audiovisual equipment includes LCD projectors with computers, document cameras, DVD/VHS players/recorders, television monitors, slide and overhead projectors, digital video camcorders and still cameras, public address equipment, and video/audio duplication equipment. Additionally, the Center oversees the college's satellite receiving station, multimedia classrooms and mobile carts with audio-visual equipment.

The MPT is also the home of TV77, Cablevision of Newark's Educational Access Channel. ECC's 24-hour station provides a college/community bulletin board, advertising events and activities along with

educational programs. The channel is viewed by more than 85,000 cable subscribers in all of Newark and parts of South Orange.

Department of Evening and Weekend Services

The Department provides and supports diverse programs and services to enhance the social, cultural, and educational growth of evening and weekend students by promoting learning and development outside of the classroom. These programs are designed to promote interaction among and between students, faculty, and staff. Students are encouraged to participate in a variety of activities, special events, and leadership opportunities.

Special Programs

The Department of Special Programs offers a wide range of opportunities and services to eligible individuals. To be eligible, students must be of low-income, first generation college students (neither mother nor father has a bachelor's degree), veterans, or disabled students. Students who meet the eligibility criteria qualify for tuition-free courses and academic assistance sponsored by the Department of Special Programs. The Special Programs course offerings are limited to the main campus. The following special programs, known as TRIO Programs, are funded by the U.S. Department of Education and the New Jersey Commission on Higher Education. Inquiries regarding course offerings and special support services should be addressed to the Department of Special Programs.

• Student Support Services

Student Support Services provides students with support designed to encourage them to develop their potential through higher education. These services may include tuition-free developmental courses, tutoring, counseling, transfer assistance, and enrichment activities. Students interested in participating should contact the Special Programs Department immediately upon admission.

• Talent Search

Talent Search identifies and counsels eligible pre-college students, from sixth grade and up, regarding postsecondary education opportunities. The services are designed to provide opportunities for participants to explore available educational and vocational options. Nationwide college placement assistance, financial aid application assistance, and tutoring are provided.

- ***College Bound Tech***

College Bound Tech provides pre-college academic and cultural enrichment services to high school youth to develop skills necessary for high school graduation and postsecondary enrollment. The program courses focus on language skills, science, math, and technology preparation as well as career exploration and college planning and placement.

Educational Opportunity Fund Program

The Educational Opportunity Fund (EOF) Program provides support services and financial assistance to enhance the educational process of its participants. The EOF program offers counseling and tutorial services, workshops, seminars, cultural activities, and financial grant assistance for educational expenses. To be eligible for program participation, students must be residents of New Jersey for at least 12 months, be enrolled full-time as matriculated students, must demonstrate potential and motivation, and must exhibit a willingness to actively participate in the educational process. Students must also meet financial aid eligibility requirements.

Every summer, incoming students (meeting EOF eligibility criteria) who have never taken a college-level course are invited to apply for the Pre-Freshman six-week summer program. The students take classes to strengthen their basic skills and seminars to enhance their knowledge about college life.

DEGREE AND CERTIFICATE PROGRAMS

General Education Requirements

In addition to courses in the majors, all students enrolled in degree programs must complete the College's general education requirements. The general education requirements are designed to expose students to courses of study beyond those that are normally associated with their major subject areas. Faculty and administrators periodically review the general educational requirements to ensure that they meet the highest standards of academic excellence. The goals of the general education program are as follows:

General Education Goals:

1. Students will communicate effectively in both speech and writing.
2. Students will use appropriate mathematical and statistical concepts and operations to interpret data and to solve problems.
3. Students will use the scientific method of inquiry through the acquisition of scientific knowledge.
4. Students will use computer systems or other appropriate forms of technology to achieve educational and personal goals.
5. Students will use social science theories and concepts to analyze human behavior and social and political institutions and to act as responsible citizens.
6. Students will analyze works in the field of art, music, or theater; literature; and philosophy and/or religious studies; and will gain competence in the use of a foreign language.
7. Students will understand historical events and movements in World, Western, non-Western, or American societies and assess their subsequent significance.
8. Students will understand the importance of global perspective and culturally diverse peoples.
9. Students will understand ethical issues and situations. (Note that this goal does not require a separate list of courses; it is to be part of all general education courses either as a separate topic or a statement against cheating and plagiarism.)

The following is the listing of general education requirements: (following is an explanation of the affirmed courses under A, B, C, D, E and F.)

	A.A.	A.S.	A.A.S.
Communication (A)	9	6	6
Mathematics – Science – Technology (B)	12	12	4
Social Science (C)	6	6	6
Humanities (D)	9	6	0
History (E)	6	3	3
Diversity courses (F)	3	0	0
Unassigned general education credit:			
	0	0	1

General education total: 45 33 20

Communications (A): ENG 101, ENG 102 and ENG 109 for the A.A. programs; ENG 101 and ENG 102 for the A.S. programs; ENG 101 and ENG 102 or ENG 105 for the A.A.S. programs.

Mathematics (B): all students must be proficient in elementary algebra (MTH 092) or its equivalent. General education math courses must be MTH 100 or higher (except MTH 116) and can be chosen from: MTH 100, 101, 102, 103, 109, 113, 114, 119, 120, 121, 122, 127, 136, 141, 213, 221, 222, 239. Additionally, if a specific mathematics course is part of a major requirement for a program, students may elect to take higher level courses to fulfill their general education requirements. Course substitutions are as follows:

Required	Substitution course
MTH 100	MTH 113 or 119
MTH 109	MTH 113
MTH 113	MTH 120
MTH 114	MTH 121
MTH 119	MTH 120 or 121
MTH 120	MTH 121 or 122
MTH 119 & 120	MTH 119 & 121
	MTH 120 & 121
	MTH 121 & 122
MTH 127	MTH 121
MTH 213	MTH 122

- **Science** courses are to be chosen from: BIO 101, 102, 103, 104, 121, 122; CHM 101, 102, 103, 104; PHY 101, 102, 103, 104, 113, 114. For students taking two lab science courses, such courses should be taken in sequence, such as BIO 101-102. In certain programs, students required to take physics may substitute as follows:

Required	Substitution course
PHY 101	PHY 103
PHY 102	PHY 104

Certain programs have specific sequences which must be followed; consult the individual program listing section for specific requirements and course prerequisites.

- **Technology** courses which may be taken are: CIS 104, 107, 131; ILS 101; CSC 100
- Note:** In the A.A. and the A.S. programs students may take two lab sciences and one math course or two math courses and one lab science. In the A.A.S. programs, the course may be lab science, math or technology.

Social Science (C) courses are to be chosen from: SOC 101, 108, 219; ANT 101, 105; ECO 101, 102; POL 101, 104; PSY 101, 102, 219.

Humanities (D) courses are to be chosen from: ART 100, 101, 102, 200; MUS 100, 108, 109. (Note that studio art or music performance courses do not fulfill the Humanities requirement.) ARB 101, 102; CIN 101; ENG 205, 208, 215, 221, 222, 232, 237, 238, 242, 250, 263, 264; FRN 101, 102; ITL 101, 102; PHI 101; REL 105; SPN 101, 102, 201, 202.

History (E) courses are to be chosen from: HST 101, 102, 111, 112, 121, 122, 131, 132, 134, 135, 136, 137, 161, 162.

Note that two individual (unrelated) history courses are not acceptable for programs that require a history sequence. Check requirements in the individual program listing section.

Diversity (F) courses are to be chosen from: ANT 101, 105; ART 100, 101, 102, 200; CIN 103; ENG 205, 215, 232, 237, 238, 242, 263, 264; HST 121, 122, 137; MUS 117; PSY 232; REL 105; SOC 108, 205, 207.

Note that it is possible to combine the requirement for Diversity with another one of the requirements. For example, if a student takes ART 100, this meets both a Humanities requirement and a Diversity requirement.

Honors Program

An Honors Program is available for academically talented and highly motivated students entering college for the first time or who are just completing their first semester of study at ECC. The program includes linked courses with an emphasis on research, an internship experience, and a capstone research project. Students must apply directly to the program. Eligibility criteria include an expected GPA of 3.5 or higher for students already enrolled. For further details, call 973.877.3204.

MAJOR AREAS OF STUDY: ACADEMIC PROGRAMS INDEX

*This index will assist you in picking the right major to achieve your career and educational goals. First, find below the area that interests you under **AREA OF INTEREST**. Next to it, in the column under **MAJOR**, you will find the major(s) or specialization(s) that Essex County College offers in your area of interest. You will find that in some cases the major is broken down into **OPTIONS**. For example, the Human and Social Services major (in the Division of Social Sciences) offers you the opportunity to choose as your specialty one of the following: Alcohol and Substance Abuse Option, Mental Health Option, and Social Work Option. “M” next to the major relates to the Main Campus where the program is offered and “W” refers to the West Essex Campus of ECC. As you can see, many of our programs are offered at both campuses. To learn more about a major, go to the ECC website (www.essex.edu/academics/programs). For a listing of ECC programs by academic division, see “Overview of Academic Programs” (pages 6-12).*

AREA OF INTEREST	MAJOR	LOCATION
ACCOUNTING	Accounting (A.A.S. Degree)	M W
	Accounting (A.S. Degree)	M W
AFRICANA STUDIES	Liberal Arts: Africana Studies Option (A.A. Degree)	M
ALCOHOLISM/SUBSTANCE ABUSE	Human and Social Services (A.A.S. Degree)	M W
	Human and Social Services (Certificate)	M W
ARCHITECTURE	Architectural Technology (A.A.S. Degree)	M
	Civil Construction Engineering Technology (A.A.S. Degree)	M
	Computer-Aided Design Technology (Certificate)	M
	Engineering (A.S. Degree)	M
ART	Art (A.A. Degree)	M W
	Art (Certificate)	
	Digital Media and Electronic Publishing (Certificate)	M
BIOLOGY	Biology, Pre-Medicine (A.S. Degree)	M
	Biotechnology (A.A.S. Degree)	M
	Biotechnology (Certificate)	M
	General Science (A.S. Degree)	M
BUSINESS	Accounting (A.A.S. Degree)	M W
	Accounting (A.S. Degree)	M W
	Business Administration (A.A.S. Degree)	M W
	Business Administration (A.S. Degree)	M W
	Business Administration: Business Administration and Microcomputer Applications Option (A.A.S. Degree)	M W
	Business Administration: Financial Services Option (A.A.S. Degree)	M W
	Business Administration: Hospitality Management Option (A.A.S. Degree)	M
	Business Administration: Office Administration & Computer Technology Option (A.A.S. Degree)	M
	Business Career Development (Certificate)	M
	Business Paraprofessional (Certificate)	M
	Information Systems Office Operations (Certificate)	M
	Internet – Web Page Design Specialist (Certificate)	M
	Legal Secretary (Certificate)	M
	Microcomputer Systems Applications (A.A.S. Degree)	M
	Office Assistant (Certificate)	M
Retail Sales Specialist (Certificate)	M	
Word Processing (Certificate)	M	
CHEMICAL TECHNOLOGY	Chemical Technology (A.A.S. Degree)	M
	Chemical Technology (Certificate)	M
CHEMISTRY	Chemistry (A.S. Degree)	M
	Chemical Technology (A.A.S. Degree)	M
	General Science (A.S. Degree)	M
CHILDREN/YOUTH	Childhood Development Associate Certification	M
	Education (A.A. Degree)	M W
CIVIL ENGINEERING	Civil Construction Engineering Technology (A.A.S. Degree)	M
	Civil Construction Engineering Technology: Land Surveying Option (A.A.S. Degree)	M
COMMERCIAL ART	Internet - Webpage Design Specialist	M
COMMUNICATION	Digital Media and Electronic Publishing (Certificate)	M
	Liberal Arts: Communications Option (A.A. Degree)	M W
	Liberal Arts: Journalism Option (A.A. Degree)	M W
	New Media Technology (A.A.S.)	M
COMPUTERS	Applied Computer Science (A.S. Degree)	M
	Business Administration – Office Systems Technology and Management Option (A.A.S. Degree)	M

	LPN Certificate (Certificate)*	M
	Massage Therapy (Certificate)	M
	New Media Technology (A.A.S. Degree)*	M
	Nursing (A.A.S. Degree)*	M
	Nursing: LPN Articulation Option (A.A.S. Degree)*	M
	Physical Education (A.S. Degree)	M
	Physical Therapist Assistant (A.A.S. Degree)*	M
	Psychosocial Rehabilitations & Treatment (A.A.S. Degree)	M
	Radiography (A.A.S. Degree)*	M
	Respiratory Care (A.S. Degree)*	M
	Vision Care Technology (A.A.S. Degree)*	M
	Vision Care Technology Apprentice (Certificate)	M
HISTORY	Liberal Arts (A.A. Degree)	M W
HOSPITALITY SERVICES	Business Administration: Hospitality Management Option (A.A.S. Degree)	M
HUMANITIES	Art (A.A. Degree)	M
	Digital Media and Electronic Publishing (Certificate)	M
	Liberal Arts (A.A. Degree)	M W
	Liberal Arts: Communications Option (A.A. Degree)	M W
	Liberal Arts: Journalism Option (A.A. Degree)	M W
	Liberal Arts: Spanish Language Option (A.A. Degree)	M
	Music (A.S. Degree)	M
	New Media Technology (A.A.S. Degree)*	M
INTERNET	Internet – Web Page Design Specialist (Certificate)	M
	Internetworking Technology (Certificate)	M
INFORMATION SYSTEMS	Computer Information Systems (A.S. Degree)	M W
	Information Systems Office Operations (Certificate)	M
JOURNALISM	Liberal Arts: Journalism Option (A.A. Degree)	M W
LABORATORY TECHNOLOGIES	Chemical Technology (A.A.S. Degree)	M
	Chemical Technology (Certificate)	M
	Chemical Technology (A.S. Degree)	
LAND SURVEYING	Civil Construction Engineering Technology – Land Surveying Option (A.A.S. Degree)	M
LANGUAGES	Liberal Arts (A.A. Degree)	M W
	Liberal Arts: Spanish Language Option (A.A. Degree)	M W
LAW ENFORCEMENT	Criminal Justice (A.S. Degree)	M W
LEGAL ASSISTANT	Legal Secretary (Certificate)	M
	Nurse Paralegal (Certificate)	M
	Paralegal Certificate	M
	Paralegal Studies (A.S. Degree)	M
LIBERAL ARTS	Liberal Arts (A.A. Degree)	M W
	Liberal Arts: Africana Studies Option (A.A. Degree)	M
	Liberal Arts – Communications Option (A.A. Degree)	M W
	Liberal Arts – Journalism Option (A.A. Degree)	M W
	Liberal Arts – Spanish Language Option (A.A. Degree)	M W
	Music (A.S. Degree)	M
	New Media Technology (A.A.S. Degree)	M
MANAGEMENT	Business Administration (A.S. Degree)	M W
	Business Administration (A.A.S. Degree)	M W
	Business Administration: Hospitality Management Option (A.A.S. Degree)	M
	Business Administration: Office Systems Technology and Management Option (A.A.S. Degree)	M
MECHANICAL ENGINEERING & MANUFACTURING	Mechanical Engineering Technology (A.A.S. Degree)	M
	Mechanical Engineering Technology: Manufacturing Engineering Technology Option (A.A.S. Degree)	M
MASSAGE THERAPY	Massage Therapy (Certificate)	M
MATHEMATICS	Mathematics (A.S. Degree)	M
MEDIA	Digital Media and Electronic Publishing (Certificate)	M
	New Media Technology (A.A.S. Degree)*	M
MEDICAL-RELATED	Dental Assisting (Certificate)*	M
	Dental Hygiene (A.A.S. Degree)*	M
	General Science (A.S. Degree)	M
	Health Science (A.S. Degree)	M
	Massage Therapy (Certificate)	M
	Nursing (A.A.S. Degree)*	M
	Nursing: LPN Articulation (A.A.S. Degree)*	M
	Physical Therapist Assistant (A.A.S. Degree)*	M

	Radiography (A.A.S. Degree)*	M
	Respiratory Care (A.S. Degree)	M
	Vision Care Technology (A.A.S. Degree)*	M
	Vision Care Technology Apprentice (Certificate)	M
MENTAL HEALTH	Human and Social Services (A.A.S. Degree)	M W
	Psychosocial Rehabilitations & Treatment (A.A.S. Degree)	M
MODERN LANGUAGES	Liberal Arts (A.A. Degree)	M W
	Liberal Arts – Spanish Language Option (A.A. Degree)	M W
MUSIC	Music (A.S. Degree)	M
NETWORK TECHNOLOGY	Internetworking Technology (Certificate)	M
	Network Technology (Certificate)	M
NURSING	LPN Certificate	M
	Nurse Paralegal (Certificate)*	M
	Nursing (A.A.S. Degree)*	M
	Nursing – LPN Articulation (A.A.S.)*	M
	General Science (A.S. Degree)	M
NUTRITION	Dietary Management (Certificate)	M
OFFICE ADMINISTRATION	Business Administration: Office Administration & Computer Technology Option (A.A.S. Degree)	M
	Business Administration: Hospitality Management Option (A.A.S. Degree)	M
	Legal Specialist – Secretarial (Certificate)	M
OFFICE ASSISTANCE	Office Assistant (Certificate)	M
	Legal Secretary (Certificate)	M
OPTICIANRY	Vision Care Technology (A.A.S. Degree)*	M
	Vision Care Technology Apprentice (Certificate)	M
PARALEGAL	Legal Secretary (Certificate)	M
	Nurse Paralegal (Certificate)	M
	Paralegal Certificate	M
	Paralegal Studies (A.S. Degree)	M
PHARMACY/PHARMACEUTICAL	Chemistry (A.S. Degree)	M
	General Science (A.S. Degree)	M
PHYSICAL EDUCATION	Physical Education (A.S. Degree)	M
PHYSICAL THERAPY	Physical Therapist Assistant (A.A.S. Degree)*	M
PHYSICS	Mathematics (A.S. Degree)	M
	General Science (A.S. Degree)	M
PLUMBING CODE	Uniform Construction Code Certificate in Plumbing Code Technology (Certificate)*	W
POLITICAL SCIENCE	Criminal Justice (A.S. Degree)	M W
PRE-MEDICAL	Biology, Pre-Medicine (A.S. Degree)	M
PSYCHOLOGY	Social Sciences (A.S. Degree)	M W
PUBLISHING	Digital Media and Electronic Publishing (Certificate)	M
RADIOGRAPHY	Radiography (A.A.S. Degree)*	M
RESPIRATORY CARE	Respiratory Care (A.S. Degree)*	M
SALES	Retail Sales Specialist (Certificate)	M
SECRETARIAL	Office Assistant (Certificate)	M
	Legal Secretary (Certificate)	M
SOCIAL SCIENCES/SOCIAL SERVICES	Criminal Justice (A.S. Degree)	M W
	Human and Social Services (A.A.S. Degree)	M W
	Human and Social Services (Certificate)	M W
	Social Sciences (A.S. Degree)	M W
SOCIAL WORK	Human and Social Services (A.A.S. Degree)	M W
	Human and Social Services (Certificate)	M W
	Social Sciences (A.S. Degree)	M W
SOCIOLOGY	Social Sciences (A.S. Degree)	M W
SPANISH	Liberal Arts – Spanish Language Option (A.A. Degree)	M W
STRUCTURAL DESIGN	Civil Construction Engineering Technology (A.A.S. Degree)	M
	Civil Construction Engineering Technology – Land Surveying Option (A.A.S. Degree)	M
TECHNICAL GRAPHICS	Computer-Aided Design Technology (Certificate)	M W
	Manufacturing Engineering Technology – Mechanical Engineering Technology Option (A.A.S. Degree)	M
TELEVISION	Liberal Arts: Communications Option (A.A. Degree)	M W
	New Media Technology (A.A.S. Degree)	M
UTILITY TECHNICIAN	Energy Utility Technonology (A.A.S. Degree)	M
VISION CARE	Vision Care Technology (A.A.S. Degree)	M
	Vision Care Technology Apprentice (Certificate)	M
WORD PROCESSING	Word Processing (Certificate)	M
WORLDWIDE WEB	Internet Web Page Design Specialist (Certificate)	M
	Internetworking Technology (Certificate)	M

Community & Continuing Education

The College offers a wide range of non-credit and credit courses and programs to help meet the lifelong learning and cultural needs of the community, and enhance advancement opportunities for area professionals. The programs are offered at the main campus, the West Essex Campus, and at sites throughout the county. The programs are offered at conveniently scheduled times — usually in the late afternoons, evenings, and on Saturdays. Courses in career and personal development, computer training, allied health, and one-semester certificate programs are designed to enhance the professional, personal, and vocational needs of area residents. Employees can earn Continuing Education Units (CEUs) that document newly acquired or upgraded skills that often lead to new job opportunities. Faculty have a broad range of academic and business backgrounds.

Extension Center Programs

The College offers credit courses and non-credit enrichment courses, workshops, and seminars at a variety of conveniently located sites throughout Essex County. The College's two major extension centers are FOCUS and Ironbound. Multilingual programs offered at these two sites attract a large number of students who wish to learn English. Once enrolled at these sites, whether it be in non-credit or credit courses, students are apprised of other educational opportunities that exist at the main and West Essex campuses. FOCUS and Ironbound operate during the evening, Monday through Friday, and on Saturdays. Their locations are as follows:

FOCUS
Hispanic Center for Community Development
433 Broad Street
Newark, NJ 07102
(973) 624-2528

Ironbound Community Center
422 Lafayette Street
Newark, NJ 07105
(973) 465-0947

The College has also developed service agreements with other community-based organizations, adult schools, civic groups, and agencies.

Additionally, the College offers classes at senior centers in Irvington, East Orange, Newark, and Orange (The Senior Education Program is also available at the College's main and West Essex campuses). Specific non-credit courses and workshops can be designed and organized through the Community and Continuing Education area if requested by a particular group or agency. The College offers Continuing Education Units (CEUs), a nationally acceptable unit of measurement applicable to non-credit, continuing education courses. A certificate of completion is awarded after successful participation in a CEU certified non-credit course.

Adult Learning Center

The College offers various levels of English as a Second Language (ESL), Adult Basic Education (ABE), and General Education Development (GED) courses. The complete program includes academic instruction integrated with the development of computer literacy and workplace skills, with scheduled hours for tutoring. Counseling and job placement assistance are also essential components of the program. All enrollees are pre-tested and post-tested (after 50 hours of instruction).

College-Yes

College-Yes is an educational and personal enrichment program designed to transition underrepresented 18-24 year old out-of-school youth, ages 18-24, to any post secondary endeavor of their choice. Services include, but are not limited to, one-on-one mentoring/e-mentoring, career counseling, individualized life/lesson plans, and math and English classes to prepare students for the first tier of college or vocational school. To qualify for C-Yes, all students must meet minimum standards through testing.

Workforce Development Programs:

Corporate Training

Corporate training programs, usually offered at the company site for the convenience of its employees, are developed by customizing the company's specific training needs. Training can range from a one-day workshop or seminar to a year-long program leading to state certification. The College responds rapidly to training requests. The College works closely with state and local employment agencies to also secure grants.

A partial list of our clients include:

Anheuser-Bush Corporation
Federal Express
Firmenich
First Financial Bank USA
Horizon Blue Cross Blue Shield
Internal Revenue Service
Local 1199J
United Parcel Service
Verizon
Youth Consultation Services

Uniform Construction Code (UCC)

Technology Certificate Programs

The College offers certificate programs in Building Code Technology, Electrical Code Technology, Fire Code Technology, and Plumbing Code Technology to help individuals meet state-approved licensing requirements of the New Jersey Uniform Construction Code, administered by the Department of Community Affairs. The programs also offer the opportunity for currently licensed code enforcement personnel to upgrade their educational credentials.

Professional Development for Educators

Essex County College is a Professional Development Provider registered with the New Jersey Department of Education. The College offers specific courses for meeting the requirements for New Jersey Standards for Professional Development. These courses enhance knowledge in subject content and enable classroom professionals to help students achieve the New Jersey Core Curriculum Context Standards.

Training, Inc.

Training Inc., Essex County College's Career Training Institute, provides a wide variety of career services to county residents seeking initial entry, reentry, or upward mobility in the workplace. The program is an integrated mix of credit and non-credit courses that lead to eventual job acquisition. Training, Inc. is part of a network of similar programs across the country. It has been commended by national and regional organizations and agencies for its successful contextual approach to preparing individuals for employment. Its unique approach of teaching job skills and interpersonal skills within a simulated work setting eases the transition into the workforce.

WIB One-Stop Center

Essex County College, in collaboration with the Newark Workforce Investment Board, houses a One-Stop Center on its main campus in Newark. The One-Stop Center serves as a central location for providing a wide range of job training and employment

placement services. ECC students, as well as individuals from around the county, are served on a walk-in basis. The Center is staffed by College employees who work closely with counselors assigned to the main campus from the Mayor's Office of Employment and Training and the New Jersey State Employment Services Office.

Community and Cultural Programs

The College provides a broad spectrum of enrichment and recreational activities, public forums, countywide events, and programs in support of youth and the adult community. Cultural events span the arts and reflect the ethnic diversity of Essex County. The College also sponsors major observances during the year to celebrate the rich heritage of the community.

Mary B. Burch Theater

The College's Burch Theater, designed by theater consultant and Broadway designer Ming Cho Lee, is a 440-seat house facing a combination proscenium/thrust stage that is 50 feet deep and 40 feet wide. The stage is equipped with a memory lighting board, a twelve-line counterweight fly system, orchestra shell, sprung dance floor, and a concert-sound system for use with its performing arts programming system. The College presents professional actors, dancers, musicians, and lectures at the theater as part of its mission to educate the student body and the community. The theater provides a training ground for students enrolled in acting and theater design courses. Co-curricular student productions are produced each year by the Burch Theater.

Youth Programs

The College sponsors various programs for area youth that supplement their schoolwork. The programs provide educational, social, and cultural enrichment while integrating career exploration into all instruction. The purpose is to ensure academic success in primary and secondary schools, and to provide academic enrichment and support activities that ultimately result in high school graduation and pursuit of a higher education degree. The youth programs include: College Bound Tech, Talent Search, the Saturday Youth Program, and Summer Youth Enrichment Programs, administered by the Community and Continuing Education Department both at the main and West Essex Campuses. Additionally, ECC Police Academy in Cedar Grove offers youth the Junior Police Academy program every summer.

WISE Women's Center of Essex County College

WISE Women's Center of Essex County College (Women in Support of Essex) serves women and men of the College and the Essex County community-at-large.

The focus of the Center is to assist participants with academic, career, economic, and personal development issues. Recruitment and retention are at the foundation of WISE's work with students. WISE provides support and assistance to those who want to seek new skills, broaden their knowledge, explore values, interests, and strengths.

The primary goal of the Women's Center is to enhance the quality of life for women and their families and ultimately to contribute to the larger community. Workshops, training, and short-term courses on relevant issues are offered on a weekly basis.

The Center provides recruitment and retention counseling, referrals, and other resources through the following programs and services:

- Computer Skills Training
- Division of Youth and Family Services Parenting Skills Training
- Domestic/Relationship Violence Training
- Employment Clinic
- Entrepreneurship Training
- Entry/Re-Entry Women
- Information and Resource Center
- Life Skills/Career Development Program
- Non-Credit Classes
- Non-Traditional Training
- Parenting Skills Training
- Referrals
- Self Employment Assistance (SEA) Training
- Senator Lipman Saturday Seminars for Women/ Minority-Owned Small Business Enterprises
- Special Events
- Support Groups
- Truancy Alternative Program (TAP)
- Urban Women Program
- Youth Build ECC Training Program

Police Academy

On December 31, 1998, Essex County College purchased the Essex County Police Academy and assumed full responsibility for all course offerings at the Academy. The Police Academy is located at 250 Grove Avenue, Cedar Grove, New Jersey 07009.

The Police Academy is certified by the New Jersey Police Training Commission to offer courses that include, but are not limited to the following:

- Basic Course for Police Officers
- Basic Course for County Correction Officers

- Basic Course for Juvenile Detention Officers
- Basic Course for Special Law Enforcement Officers Class One
- Basic Course for Special Law Enforcement Officers Class Two
- Basic Firearms Course
- Firearms Instructor Course
- Methods of Instruction Course
- Sub Gun Instructors Course
- School Resource Officer Course
- RADAR Instructors Course
- RADAR Operators Course
- Emergency Medical Technician

The Academy also offers an alternate route program under which tuition-paying students can qualify to enroll in the Basic Police Training course and thereafter seek employment with any police force in the state.

The Academy offers the following preventative/remedial/career development courses on our Doran 450 Law Enforcement Driving Simulator:

- Emergency and Vehicle Operations scenarios for Police, Firemen, and Ambulance and Bus Drivers
- Driving Simulator: Train the Trainer

Additionally, the Firearms Training Center is available during the day and many evenings for law enforcement agency semi-annual requalifications as mandated by the New Jersey Attorney General's Guidelines.

The Academy's Computer Lab hosts basic and advanced courses in:

- Word
- Excel
- PowerPoint
- Access
- Outlook

Our course catalog and additional information is available on our website at: www.essex.edu/pacademy.

COURSE DESCRIPTIONS

0-099	100-199	200-299
Courses with these numbers may be required for students as a result of testing.	Courses with these numbers are considered freshman year courses.	Courses with these numbers are considered sophomore year courses.

Order of Courses:

The courses are grouped under subject headings that are arranged in alphabetical order. For example, Massage Therapy courses that go by the designation HSC can be found under Massage Therapy and Uniform Fire Code courses that go by the designation FSC can be found under Uniform Fire Code. In most instances, however, there is a similarity between the subject heading and the course designation. For example, under Accounting you will find the courses that go by the designation ACC, under Biology you will find the courses that go by the designation BIO, etc. Cooperative Education courses go by the designation CEE.

The following Index of Course Descriptions by Course Designation will be of further help in locating specific course descriptions.

COURSE DESIGNATION	SUBJECT	COURSE DESIGNATION	SUBJECT
ACC 101 – ACC 232	Accounting	HMM 103 – HMM 264	Hospitality Management
ANT 101 – ANT 105	Anthropology	HSC 101 & HSC 102	Nutrition
ARB 101 & ARB 102	Arabic	HSC 109	Medical Terminology
ARC 101 – ARC 202	Architecture Technology	HSC 151 – HSC 165	Massage Therapy
ART 100 – ART 206	Art	HST 101 – HST 162	History
BIO 100 – BIO 251	Biology & Biotechnology	ITL 101 & ITL 102	Italian
BUS 100 – BUS 253	Business Administration	JRN 141 – JRN 245	Journalism
CEE 298 & CEE 299	Cooperative Education	LPN 101 – LPN 105	Nursing
CET 111 – CET 251	Civil Construction Engineering Technology	MET 201 – MET 250	Mechanical Engineering Technology
CHM 100 – CHM 206	Chemistry	MTH 086 – MTH 239	Mathematics
CIN 101 & CIN 103	Cinema	MUS 100 – MUS 269	Music
CIS 107 – CIS 237	Computer Information Systems	NMT 101 – NMT 202	New Media Technology
CJI 101 – CJI 250	Criminal Justice	NUR 100 & NUR 101	Nursing
CMS 110 – CMS 219	Communication	NRS 106 – NRS 291	Nursing
CSC 100 – CSC 235	Computer Science	NTR 100 – NTR 210	Dietary Management
CSS 101	College Success	OCT 101 – OCT 290	Office Administration & Computer Technology
DAN 161 & DAN 162	Dance	OPH 123 – OPH 273	Vision Care Technology
DAS 103 – DAS 110	Dental Auxiliaries	PHE 101 – PHE 277	Physical Education
DHY 100 – DHY 215	Dental Auxiliaries	PHI 101	Philosophy
DRA 101 – DRA 108	Drama	PHY 101 - 203	Physics
ECO 101 & ECO 102	Economics	PHY 113	Astronomy
ECE 101 – ECE 103	Early Care & Education	PHY 114	Meteorology
EDU 101 – EDU 271	Education	PLS 101 – PLS 225	Paralegal Studies
ELC 115 – ELC 230	Electronic Engineering Technology	PNR 101 – PNR 108	Nursing
ENG 085 – ENG 264	English	POL 101 – POL 210	Political Science
ENG 151	Mass Communications & Popular Culture	PSR 080	Sociology
ENR 100 – ENR 250	Engineering	PSY 101 – PSY 251	Psychology
ESL 073 – ESL 112	English as a Second Language	PTA 101 – PTA 209	Physical Therapist Assistant
FPD 080 & FPD 081	Sociology	RDG 096 – RDG 096T	Reading
FIN 101 – FIN 211	Finance	REL 101 – REL 105	Religion
FRN 101 & FRN 102	French	RST 100 – RST 237	Respiratory Therapy
FSI 105 & FSI 205	Fire Code	RTC 100 – RTC 207	Radiography
GEO 101 & GEO 102	Geology	SOC 101 – SOC 252	Sociology
GIS 101 – GIS 299	Geographic Information System	SPN 100 – SPN 227	Spanish
HLT 101	Health	UCC 109 – UCC 250	Uniform Construction Code Administration
HLS 101	Homeland Security	UTI 101 – UTI 202	Energy Utility Technology

Course Descriptions by Subject:

Accounting

ACC 101 PRINCIPLES OF ACCOUNTING I FINANCIAL 4 Credits

This course introduces the principles of financial accounting while covering the accounting cycle for service and merchandise companies. Emphasis is on analyzing transactions, summarizing through use of the general ledger, and reporting the results through the preparation of financial statements for use by internal and external decision makers such as stockholders, trade creditors, banks, unions, and governmental agencies. The fundamentals of accounting for inventories, receivables, plant assets, long-term liabilities, internal control, and owners' equity for proprietorship and corporate entities are stressed. Students are introduced to computerized accounting applications. Prerequisite: "C" or better in MTH 086.

ACC 102 PRINCIPLES OF ACCOUNTING II MANAGERIAL 4 Credits

This course examines the fundamental managerial accounting concepts and techniques that aid in management decision-making, performance evaluation, and in planning and controlling operations. Emphasis is on the use of accounting data as a management tool rather than on the techniques of data accumulation. The course deals with such topics as corporate equity, cost behavior patterns, budgeting, cost-volume profit relationships, product costing methods, preparation of Statement of Cash Flows, and financial statement analysis. Quantitative methods applicable to managerial accounting are studied, including the use of accounting software applications. Prerequisite: "C" or better in ACC 101.

ACC 201 INTERMEDIATE ACCOUNTING I 4 Credits

This course provides an expanded treatment of the theory and accounting principles underlying the preparation of financial statements, and the proper uses that can be made of financial data. Current asset analysis and valuation methodology, current liabilities, and revenue determination procedures are studied in relation to FASB accounting requirements. A comprehensive review of fundamental accounting processes using microcomputer software is included. Prerequisite: "C" or better in ACC 102.

ACC 202 INTERMEDIATE ACCOUNTING II 4 Credits

This course is a continuation of ACC 201. Accounting for long-lived assets, long-term liabilities, investments in securities and funds, and stockholders' equity are emphasized. The more complex aspects of financial statement presentation and analysis are also covered. Prerequisite: "C" or better in ACC 201.

ACC 211 COST ACCOUNTING 4 Credits

This course examines in depth cost analysis and product costing for both the profit and not-for-profit sectors of the economy. Accounting for labor, materials, and manufacturing overhead emphasizes the use of source documents to analyze and record cost data in both manual and computerized accounting systems. Methods of allocating indirect costs to products are introduced. Budgeting concepts are reviewed with emphasis on capital budget techniques. Reporting for segments and decentralized operations are also covered. Prerequisite: "C" or better in ACC 102.

ACC 231 FEDERAL TAXATION 4 Credits

This course introduces the fundamental accounting procedures for determining tax liabilities for individuals and single-owner businesses. The accurate completion of Form 1040 with the accompanying schedules in compliance with the Internal Revenue Code is emphasized using both manual and computerized systems. The calculation of payroll taxes and maintenance of tax records and other selected tax reports are also studied. Prerequisite: "C" or better in ACC 102.

ACC 232 COMPUTERIZED ACCOUNTING 4 Credits

This course covers small business accounting using Peachtree software and QuickBooks software. Topics include creating a chart of accounts, recording customer and vendor transactions, processing payroll, and printing reports. In addition, setting up a new company is covered as well as advanced topics such as exporting Excel software and using QuickBooks audit trail. Emphasis is given on how such systems safeguard the assets of the firm to insure the integrity of the reporting system. Special journal entries and subsidiary ledgers are covered. Significant out-of-class independent computer laboratory time is required of all students. Prerequisite: ACC 101. Laboratory fee.

Anthropology

ANT 101 CULTURAL ANTHROPOLOGY 3 Credits

This course examines the behavior and customs of all human groups. It describes human universals, as well as how and why human societies differ, drawing on fieldwork performed in a wide variety of tribal, village, and urban societies. Topics covered include kinship and other social systems; the supernatural and sacred; language and nonverbal communication; beliefs and behavior regarding health and curing; myth, art, and music. Pre- or Co-requisites: ENG 096 and RDG 096 (passing grade of "C" or better), or placement.

ANT 105 PHYSICAL ANTHROPOLOGY AND PRE HISTORY 3 Credits

This course examines the origin and emergence of humanity, the early unwritten history of the human race,

physical variations among humans, and prehistoric civilizations. Pre or Co-requisites: ENG 096 and RDG 096 (passing grade of “C” or better for each), or placement.

Arabic

ARB 101 ELEMENTARY ARABIC I 3 Credits

This is the first half of a one-year course for students with little or no background in the Arabic language. Listening comprehension, speaking, reading, and writing are developed within the limits of basic vocabulary, idioms and grammar.

ARB 102 ELEMENTARY ARABIC II 3 Credits

This is a continuation of ARB 101. The student’s knowledge of vocabulary and grammar expands to include multiple tenses and uses of the verb. The four language skills (listening comprehension, speaking, reading, and writing) continue to be developed. Prerequisite: “C” or better in ARB 101 or placement.

Architecture Technology

ARC 101 ARCHITECTURAL DESIGN I 4 Credits

This course is an introduction to architectural design with emphasis on basic design content, including the logical arrangement of elements in space. A series of projects are assigned and reviewed for format, presentation, and completeness. Prerequisite: “C” or better in MTH 092 or placement. Laboratory fee.

ARC 102 ARCHITECTURAL DESIGN II 4 Credits

This course is a continuation of ARC 101. Assigned projects include three-dimensional representations. Students learn how to construct perspectives and build architectural models. Prerequisite: “C” or better in ARC 101. Laboratory fee.

ARC 111 HISTORY OF ARCHITECTURE I 3 Credits

This is a course in the history of architecture, beginning with ancient Egyptian architecture and ending with the Industrial Revolution era architecture of the eighteenth century. Major emphasis is placed on historical periods such as Byzantine, Romanesque, Gothic, Renaissance, and Baroque. Particular works of classical architects are also studied. Pre- or Co-requisites: ENG 096 and RDG 096 (passing grade of “C” or better for each), or placement.

ARC 112 HISTORY OF ARCHITECTURE II 3 Credits

This is a course on historical developments in architecture from the nineteenth century to the present post-modern era. Major emphasis is placed on architectural movements in Europe, namely the Beaux-Arts and Art Nouveau in France, the Arts and Crafts in England, the Bauhaus in Germany, and also the international style of

architecture in both hemispheres. Works of noted architects are given special review. Prerequisite: “C” or better in ARC 111.

ARC 131 CONSTRUCTION METHODS I 3 Credits

This course introduces the concepts of building construction principles and processes including foundations, walls, floors, and roof systems. Materials considered are wood, masonry, steel, and concrete. Also discussed are site preparation and building code requirements. Prerequisite: “C” or better in MTH 113.

ARC 132 CONSTRUCTION METHODS II 3 Credits

This course is a continuation of ARC 131 and focuses on the details of buildings including windows, doors, and specialty construction such as stairs. Also discussed are thermal and moisture protection, finishing, and electrical and plumbing systems. Prerequisite: “C” or better in ARC 131.

ARC 201 ARCHITECTURAL DESIGN III 4 Credits

This is the third course in the architectural design sequence. Projects involve researching and analyzing programmatic requirements of a design problem. Students generate multiple design solutions and present them using graphic methods appropriate to the solution. Prerequisite: “C” or better in ARC 102. Laboratory fee.

ARC 202 ARCHITECTURAL DESIGN IV 4 Credits

This is a design drawing workshop where the student selects an architectural problem and develops the solution by investigating design, structure, costs, and environment. The student then presents his/her solution through two and three-dimensional drawings. Prerequisite: “C” or better in ARC 201. Laboratory fee.

Art

ART 100 ART APPRECIATION 3 Credits

This is an introductory course designed to acquaint the student with the greatest achievements of painting, sculpture, and architecture for a richer understanding and appreciation of art in daily life as well as in the cultures of the world. This course is for non-art majors only.

ART 101 ART HISTORY I 3 Credits

This course is a study of the historical contributions in painting, sculpture, architecture, and the minor arts of all cultures from prehistoric times up to the year 1400. Pre- or Co-requisite: ENG 101 (passing grade of “C” or better.)

ART 102 ART HISTORY II 3 Credits

This course is an historical study of world painting, sculpture, architecture, and the minor arts from 1400 to the present. Cultures from throughout the entire world are covered, as are the contributions of women to the arts. Note:

ART 102 can substitute for the ART 100 or ART 101 core Humanities requirement.

ART 103 FUNDAMENTALS OF ART I 3 Credits

This is the first of two design courses dealing with problems involving the use of shape, line, texture, space, and color (the elements of design) in accordance with the principles of design. Students are introduced to various media in solving the design problems posed.

ART 104 FUNDAMENTALS OF ART II 3 Credits

This course is the second half of ART 103, with a particular emphasis on color theory. Special projects in color and design are done according to individual student interest in consultation with the instructor. Prerequisite: ART 103.

ART 107 DRAWING I 3 Credits

This course is an introduction to drawing techniques, materials, and philosophies with emphasis on the development of observational skills and order and clarity of form in graphic terms. Laboratory fee.

ART 108 LIFE DRAWING 3 Credits

This course features both fundamental and advanced drawing study from life. It uses the skeleton, live models, and a variety of drawing media for both long and short action poses. Basic anatomy and proportion are emphasized. Prerequisite: ART 107.

ART 110 SCULPTURE 3 Credits

This course is an introduction to the three-dimensional fine art medium of sculpture. Its focus is mainly on additive and subtractive media in sculpting, especially the use of clay.

ART 111 FUNDAMENTALS OF PAINTING 3 Credits

This course is a studio exploration of various painting techniques, media, and materials, including the preparation of canvasses.

ART 119 MUSEUMS AND GALLERIES 3 Credits

This course is about how looking can be interesting when it is accompanied by thinking and knowing. Students visit New Jersey's and New York's famous museums and galleries with the instructor. Participants develop sensitivity to the actual work of art so that they can increase their knowledge and enjoyment of the art world. Students pay individual admission to the museums, where required.

ART 140 PHOTOGRAPHY 3 Credits

This course is an introduction to black and white photography. It provides students experience with a 35mm camera and basic darkroom equipment. Topics and assignments covered include photograph composition, film development, enlarging, and photo printing. NOTE:

a 35mm camera is required.

**ART 160 ELECTRONIC MECHANICALS/
PRE-PRESS PRODUCTION 3 Credits**

This is a course in the basic methods and applications of the computer to previously utilized manual paste up and mechanical production now used in digital graphic design, publishing, and advertising art. The course places emphasis upon the student developing a demonstrated proficiency in a number of pre-press procedures, techniques, and applications for making published documents using desktop publishing computer skills. Scanning, digital photography editing techniques, color publication production, and the special use of typography are covered. Laboratory fee.

**ART 161 COMPUTER ENHANCED
LAYOUT AND DESIGN 3 Credits**

The course focuses upon the elements and principles of design with the computer as the major production tool. Line, shape, color, textures, space, light, balance, rhythm, unity, harmony, emphasis, and contrast are applied to the digitally produced documents, presentations, video, Web page designs, and advertisements. Design elements and principles, conceptualization of ideas, and the use of digitally created effects are all featured. Laboratory fee.

ART 163 DIGITAL VIDEO GRAPHIC DESIGN 3 Credits

This course emphasizes the artistic production of hard copy, film, slides, video, and animation created by digital photography, digital video imaging, scanning, and desktop editing techniques. Design elements and principles are combined with computer skills to produce portfolio and production video clips necessary for employment placement or advanced study in the computer graphics field. Prerequisite: ART 161, ART 167, or ART 168.

ART 167 INTRODUCTION TO COMPUTER ART 3 Credits

This introductory course covers the basics of computer graphic applications for design, commercial reproduction of art work, mechanicals, comprehensives, and the use of the computer as a graphic design tool. Scanning line art, copy, half tones, modifying half tones, and techniques for graphic design using the computer are emphasized. The student makes a part of his/her portfolio a multiplicity of design and camera-ready projects, transparencies, four color art, and multilevel drawings. Laboratory fee.

**ART 168 DESKTOP PUBLISHING/
PRESENTATION GRAPHICS 3 Credits**

This is an introductory course focusing on the fundamental theories, practices, and computer applications of presentation graphics. The course places a major emphasis upon computer-generated graphics including project schedules, spreadsheets, financial data, brochures, flyers, effective communications, slides, transparencies, animation, and page design. Prerequisite: Familiarization with keyboarding or permission of instructor. Laboratory fee.

ART 169 ADVANCED COMPUTER GRAPHICS 3 Credits

This course focuses on the continued development of individual design skills using the elements and the principles of design while enhancing individual computer proficiency. Students perfect their ability to creatively use Adobe Photoshop, Adobe Illustrator, Quark Xpress, and other design software to produce original graphic design for print and Web-based media. Instruction is given on Windows or MacIntosh. Prerequisites: ART 167 or ART 168 or portfolio with demonstrated proficiencies, and keyboarding at an acceptable number of words per minute. Laboratory fee.

ART 170 BASIC WEB PAGE DESIGN 3 Credits

This course prepares the novice Web designer for the complex task of Web page design. The course focuses on learning the essential elements and principles of design and applying them to page layout, design of text, and graphics for the Web. Topics covered include simple graphics and links, navigational controls, the basics of HTML, as well as planning cognitive content and artistic effects that would be dynamic in the global marketplace of the World Wide Web. Students are required to create three Web sites: personal, business and educational. Prerequisites: ART 167 or ART 168 or portfolio with demonstrated proficiencies, and keyboarding proficiency. Laboratory fee.

ART 171 CYBERSPACE GRAPHICS AND BEGINNING ANIMATION 3 Credits

Using the elements and the principles of design, this course instructs the student in the principles of creating and preparing GIFs (Graphic Interface Formats) and basic animation for the World Wide Web. Students learn about the two basic graphic types (bit maps and vectors), graphic formats supported by popular software programs, and those used for graphic design on the Web. A variety of software programs for both platforms (Windows and MacIntosh) are used. Prerequisite: ART 167 or ART 169 or ART 170 or portfolio with demonstrated proficiencies. Laboratory fee.

ART 200 THE ART OF THE AFRICAN-AMERICAN 3 Credits

This course is an introduction to and exploration of works and styles of African-American artists with special attention given to values expressed in their art. The course also includes artistic ideas generated by the African diaspora. NOTE: This course can substitute for the ART 100 or ART 101 core Humanities requirement.

ART 205 TWO-DIMENSIONAL DESIGN 3 Credits

This course continues the emphasis on the elements and principles of design found in ART 103 and 104. It assigns students design projects in the fine, commercial, and applied arts. Prerequisite: ART 103.

ART 206 THREE-DIMENSIONAL DESIGN 3 Credits

This course extends the application of the elements and principles of design into an examination of the three-

dimensional aspects of design. Functional as well as aesthetic utilization of space and manipulative skills with tools, new materials, and subjects are emphasized.

Astronomy

PHY 113 ASTRONOMY 4 Credits

The basic concepts of astronomy will be introduced to provide a good understanding of the structure, motion, and evolution of our universe. Students will be taken on a historical path, through description of the Ptolemaic, Brahe, and Kepler models, to the present day conception of the universe. Students will also gain understanding of the nature of light, atomic structure, gravitation, and relativity. Prerequisite: Placement or grade of "C" or better in MTH 092. Laboratory fee.

Biology

**BIO 100 FOUNDATIONS OF BIOLOGY 4 Credits
(Science Majors)**

This is a laboratory science course for students who plan to continue into medical, biological, or related sciences. This course provides background for the student who has never studied biology, or who is "rusty," to succeed in more advanced biology courses including BIO 103 and BIO 121. It is also a helpful science preparation for chemistry, pharmacology, and nursing requirements. Lecture includes anatomical terminology, systems, both organic and inorganic body chemistry, cells and cell membranes, DNA replication and transcription, and tissues. Laboratory introduces measuring instruments and metric system, microscope, and dissection techniques. BIO 100 will not fulfill any part of the science requirement toward graduation for either science majors or non-science majors. Pre- or Co-requisites: ENG 096 and RDG 096 or ESL 105/106, or placement. Laboratory fee.

**BIO 101 COLLEGE BIOLOGY I 4 Credits
(Non-Science Majors)**

This course is designed to develop, from a conceptual approach, meaningful understanding of some fundamental principles of the living world. Particular emphasis is placed on the unity and diversity of life forms and their relationship to each other and to their environment. This course can be taken to satisfy the science requirement of a non-science major, and can be taken independent of, before, or after BIO 102. Pre- or Co-requisites: ENG 096 and RDG 096 (passing grade of "C" or better for each), or placement. Laboratory fee.

**BIO 102 COLLEGE BIOLOGY II 4 Credits
(Non-Science Majors)**

Using a conceptual approach, this course places emphasis on human biology and human ecology. Basic principles concerning the structure and function of human body systems in both health and disease conditions are studied. This course can be taken to satisfy the science require-

ments for non-science majors, and can be taken independent of, before, or after BIO 101. Pre- or Co-requisites: ENG 096 and RDG 096 (passing grade of “C” or better for each), or placement. Laboratory fee.

BIO 103 GENERAL BIOLOGY I 4 Credits
(Biology Majors Only)

This course explores the basic principles which govern the behavior of living matter on the molecular and cellular level. Topics covered include: characteristics of important biological macromolecules, cell metabolism and energetics, cell structure, cell division, and fundamentals of modern genetics. Prerequisites: MTH 092, ENG 096, RDG 096 or ESL 105/106 (passing grade of “C” or better for each or placement). High school biology or BIO 100 strongly recommended. MTH 100 strongly recommended. Laboratory fee.

BIO 104 GENERAL BIOLOGY II 4 Credits
(Biology Majors Only)

A continuation of BIO 103, this course covers nucleic acid and protein synthesis, evolution, and organization of cells into tissues, organs, and organ systems. Prerequisites: “C” or better in BIO 103 and MTH 100 or higher. Laboratory fee.

BIO 117 FUNDAMENTALS OF ANATOMY AND PHYSIOLOGY I 4 Credits

This is a course in basic anatomy and physiology. Lecture topics include: basic science fundamental to the understanding of the body’s structure and function, the cell, tissues, water compartments, skeletal system, muscular system, and nervous system. Prerequisites: MTH 092, ENG 096, and RDG 096 or ESL 105/106 (passing grade of “C” or better for each or placement). High school biology or BIO 100 strongly recommended. Laboratory fee.

BIO 118 FUNDAMENTALS OF ANATOMY AND PHYSIOLOGY II 4 Credits

This course in basic anatomy and physiology includes the following lecture topics: the respiratory system, digestive system, metabolism and nutrition, the urinary system, and the lymphatic, cardiovascular, and reproductive systems. Prerequisite: “C” or better in BIO 117. Laboratory fee.

BIO 121 ANATOMY AND PHYSIOLOGY I 4 Credits

This course on human anatomy and physiology covers integration and regulation of physiological processes with emphasis on the structural and functional interrelationships. Lecture topics include: chemical and physical constituents of living material; cell structure and function; tissues, their arrangements and their contributions to systemic function; development and functions of the skeletal system; muscle anatomy and physiology; and the nervous system. The laboratory work serves to enhance the lectures through detailed discussions, hands-on examination of specimens, and problem solving. Prerequisites: MTH 092,

ENG 096, RDG 096, or ESL 105/106 (passing grade of “C” or better for each or placement), High school biology or BIO 100 are strongly recommended. Laboratory fee.

BIO 122 ANATOMY AND PHYSIOLOGY II 4 Credits

This course builds on Anatomy and Physiology I. Lecture topics include: structure and function of the special sense organs, circulatory system, respiratory system, and digestive system, basic concepts of metabolism, excretory system, water and salt metabolism, and endocrine and reproductive systems. The laboratory experience serves to enhance the topics covered in lectures. Prerequisite: “C” or better in BIO 121. Laboratory fee.

BIO 125 ANATOMY AND PHYSIOLOGY OF THE EYE (Ophthalmic Dispensing Program Majors Only) 3 Credits

This course starts with a basic overview of human anatomy and physiology and then focuses on the anatomy and physiology of the eye. Emphasis is placed on embryological development of the eye, the normal structure and function of ocular tissues, and their interrelationships with other systems. Consideration is given to anatomical abnormalities and the pathophysiology of the visual system. Laboratory work includes dissection of an eye. Laboratory fee.

BIO 211 MICROBIOLOGY 4 Credits

Microbiology is the study of microorganisms. Topics covered include: eucaryotic cells, protozoans and fungi, pro-caryotic cells, bacteria, rickettsiae and mycoplasmas, and viruses. Lectures and laboratory sessions consider techniques in culturing, studying, and identifying microorganisms. Also covered are nutritional and environmental needs, biochemical activity, genetic makeup and expression, and the interrelations between microorganisms and human or animal hosts during health and disease. Additional topics are pathogenicity, virulence, immunology, natural defense, and environmental control factors. Prerequisites: “C” or better in CHM 101 or CHM 103 and also in BIO 104 or BIO 122. Laboratory fee.

BIO 220 INTRODUCTION TO ENVIRONMENTAL SCIENCE 4 Credits

BIO 220 is the study of humans and their interactions with the environment. Topics include fundamental aquatic and terrestrial ecology, air and water pollution, and world population problems and their solutions. Laboratory sessions include measurements of various environmental pollutants, fundamental lab exercises in ecology, analysis of environmental parameters, and descriptive and practical reinforcement of lecture material. Prerequisite: “C” or better in BIO 103. Pre- or Co-requisite: BIO 104. Laboratory fee.

BIO 222 KINESIOLOGY 4 Credits
(Physical Therapy Assistant Majors Only)

The principles of force and leverage are emphasized in this course. The kinematics and kinetics of human movement are also covered. The course will include aspects of the skeletal, muscular, and nervous systems as they apply to human movement. Goniometry, ROM, and lever systems are revisited in the laboratory. These above principles are discussed in the context of practical application by a Physical Therapist Assistant. Prerequisites: "C" or better in BIO 121, PTA 101, and PTA 102. Co-requisites: PTA 201, PTA 203, and PTA 209. Laboratory fee.

BIO 228 MOLECULAR BIOLOGY 4 Credits

BIO 228 is a study of the fundamental principles that guide cellular and molecular organization and function. Topics include membranes and cell signaling, the cytoskeleton and cell motility, the cell cycle, and regulation of gene expression. Laboratory sessions include the measurement of toxic effects of various chemicals on membrane integrity, practical applications of biotechnology to everyday problems, and the use of recombinant DNA technology to perform an authentic cloning experiment.

* This course has also been approved as an elective for Biology/Pre-Med majors (0601). Prerequisite: "C" or better in BIO 103. Pre- or Co-requisite: BIO 104. Laboratory fee.

BIO 237 GENETICS WITH LABORATORY 4 Credits

This is an introductory course in genetics for biology majors. The course follows a lecture/laboratory format to cover traditional topics in transmission genetics (Mendelian and Non-Mendelian), gene mapping, molecular genetics, organization of viral, prokaryotic, and eukaryotic genes, regulation of gene expression, recombinant DNA technology, and population genetics. The laboratory component introduces students to techniques and instrumentation that are used to manipulate and to investigate the structure, function, and transmission of inheritable information. Pre- or Co-requisite: BIO 104. Laboratory fee.

BIO 241 PATHOPHYSIOLOGY 3 Credits

This course emphasizes disease mechanisms, the various responses of the body to restore homeostasis, and the effect of these responses on normal function. Pathogenesis is viewed at the molecular, cellular, tissue, and systemic levels and correlated with signs and symptoms. Diagnostic procedures and the rationale for treatment modalities are covered for model diseases. Prerequisite: "C" or better in BIO 104 or BIO 122.

BIO 251 PHARMACOLOGY FOR HEALTH PROFESSIONALS 3 Credits

This is an introductory course in pharmacology. Students utilize the physical and social sciences as a framework for developing an understanding of drug action and usage. Selected classifications and families of drugs are

introduced. The names, indications, mechanisms, dosage range, side effects, and adverse effects of individual drugs are discussed. The format of the course is lecture, discussion, and case presentation. Prerequisite: "C" or better in BIO 121 or BIO 103. Pre-requisite: "C" or better in BIO 104 or BIO 122.

Biotechnology

BIO 228 MOLECULAR BIOLOGY 4 Credits

BIO 228 is a study of the fundamental principles that guide cellular and molecular organization and function. Topics include membranes and cell signaling, the cytoskeleton and cell motility, the cell cycle, and regulation of gene expression. Laboratory sessions include the measurement of toxic effects of various chemicals on membrane integrity, practical applications of biotechnology to everyday problems, and the use of recombinant DNA technology to perform an authentic cloning experiment.

* This course has also been approved as an elective for Biology/Pre-Med majors (0601). Prerequisite: "C" or better in BIO 103. Pre- or Co-requisite: BIO 104. Laboratory fee.

BIO 229 BIOTECHNOLOGY LABORATORY 4 Credits

BIO 229 is a study of the basic laboratory methods needed for employment in the Biotechnology industry. Students will learn the foundations of scientific method, basic lab safety and lab documentation, and maintenance and calibration of basic laboratory equipment. Laboratory sessions will include measurement and separation utilizing centrifugation, chromatography, electrophoresis, spectrophotometry, and Polymerase Chain Reaction. Prerequisite: "C" or better in BIO 103. Pre- or Co-requisite: BIO 104. Laboratory fee.

BIO 230 BIOTECHNOLOGY INTERNSHIP 4 Credits

BIO 230 is a work experience program where students are employed in a technical position in an industrial, government, academic, or organizational laboratory for the purpose of gaining practical experience in Biotechnology. Supervision of this departmentally approved position is provided by the college through on-the-job visits and individual progress review sessions. Students attend a weekly one hour seminar on campus and work a minimum of 180 hours per semester. Individuals must be recommended by the faculty of the Division of Biology and Chemistry, approved by the Chair of the Division, and, where necessary, registered with the Department of Cooperative Education.

BIO 237 GENETICS WITH LABORATORY 4 Credits

This is an introductory course in Genetics for biology majors. The course follows a lecture/laboratory format to cover traditional topics in transmission genetics (Mendelian and Non-Mendelian), gene mapping, molecular genetics, organization of viral, prokaryotic and

eukaryotic genes, regulation of gene expression, recombinant DNA technology, and population genetics. The laboratory component introduces students to techniques and instrumentation that are used to manipulate and to investigate the structure, function, and transmission of inheritable information. Prerequisite: "C" or better in BIO 103. Pre- or Co-requisite: BIO 104. Laboratory fee.

Business Administration

BUS 100 BUSINESS WORKSHOP 3 Credits

This course offers an introduction to contemporary business principles and practices, raises economic awareness, and also reinforces study skills. Topics that are covered include business career opportunities, successes in business, reading comprehension, writing about business subjects, listening and taking notes, vocabulary development, and improvement of the student's learning processes. Prerequisite: "C" or better in ENG 086/087.

BUS 101 BUSINESS ORGANIZATION AND MANAGEMENT 3 Credits

This course offers a concise overview of the world of business. Emphasis is placed on the following topics: ownership, risk, production, finance and the financial system, marketing, human resources, and the effect of government on business. Pre- or Co-requisites: ENG 096/097 and RDG 096/097 (passing grade of "C" or better for each), or placement

BUS 141 BUSINESS MATHEMATICS 3 Credits

Emphasis is on the application of fundamental mathematic principles to business: ratio and proration, percentage, discounts, interest, graphs and measurements. Prerequisite: "C" or better in MTH 092/093.

BUS 201 PRINCIPLES OF MANAGEMENT 3 Credits

This course offers an introduction to the major functions of management: planning, staffing, organizing, controlling, direction, and financing. The technical tools of management are considered in relation to their social and psychological implications in management decision making. Prerequisite: "C" or better in BUS 101.

BUS 204 INTRODUCTION TO ORGANIZATIONAL BEHAVIOR IN BUSINESS 3 Credits

This course traces the foundation and development of behavioral science as applied to business, and analyses organizational and human needs. Topics emphasized include: organizational design and development, formal and informal work groups, communication and group processes, motivation theory, leadership, and the relationship between the work environment and the community and the urban setting. The course includes a review of selected behavioral research findings. Prerequisite: "C" or better in BUS 201.

BUS 207 LEADERSHIP AND SUPERVISION IN ORGANIZATIONS 3 Credits

This course offers students the opportunity to learn about leadership and supervision in modern organizations. Students are introduced to a variety of behavioral and managerial leadership theories and research findings including the Ohio Studies, participative leadership, and charismatic leadership. Case studies, experiential exercises, and print and electronic media are used to enhance classroom discussion. Prerequisite: "C" or better in BUS 201.

BUS 211 PRINCIPLES OF MARKETING 3 Credits

This course examines those business activities that are paramount in affecting the sale and distribution of goods and services. Consideration is given to market research and analysis, the place of the consumer in our economic system, and the functions of retailing and wholesaling. Prerequisite: "C" or better in BUS 101.

BUS 212 PRINCIPLES OF RETAILING 3 Credits

This course deals with the organization of retail stores with emphasis placed on management and merchandising policies, the world of fashion, color, design, textiles, and non-textiles. Planning and control are studied, particularly the use of pricing techniques, gross margin, markup and markdown, discounts, inventories, and open to buy. Constant reference is made to the economic and social forces which affect retail distribution. Prerequisite: "C" or better in BUS 211.

BUS 213 PRINCIPLES OF SELLING 3 Credits

Students study the techniques of successful selling. Topics covered include: the location and selection of prospects, the approach, the sales presentation, meeting objectives, and closing the sale. These techniques are applied through student sales presentations and use of videotape evaluations. Prerequisite: "C" or better in BUS 211.

BUS 215 ADVERTISING PRINCIPLES 3 Credits

Advertising and other promotional methods are studied from the perspective of communication with the market. Topics covered include advertising's place in the marketing mix, media selection, advertising research and production, and sales promotional strategies. Student creativity is encouraged and developed. Prerequisite: "C" or better in BUS 211.

BUS 221 HUMAN RESOURCES MANAGEMENT 3 Credits

This course focuses on the background and operating concepts underlying the management of human resources in business and public organizations. It examines the critical issues in human resources including employment, wage and salary administration, training and development, employee and labor relations, and accident prevention. Emphasis is placed on the findings of the behavioral sciences as applied to personnel administration. Prerequisite: "C" or better in BUS 201.

BUS 231 GLOBAL BUSINESS 3 Credits

This course is an introduction to the theory and practice of international business. Topics covered include global organization, principles of international trade, international management, marketing, finance, foreign exchange, balance of payments, trade deficits, international agreements, NAFTA, GATT, trade barriers, international investment, U.S. International Trade Zones, European Union, and the global environment of business. Prerequisite: "C" or better in BUS 201.

BUS 251 BUSINESS LAW I 3 Credits

This course provides an introduction to the principles, rules, and scope of business law. Topics covered include sources of law, contracts, and the law of sales under the Uniform Commercial Code. Major antitrust, administrative, and environmental laws are reviewed. Current issues in consumer affairs and legal challenges are discussed. Prerequisite: "C" or better in BUS 101.

BUS 252 BUSINESS LAW II 3 Credits

This course further explores legal topics governing business operations including agency, personal property and bailments, negotiable instruments, corporations, and partnerships. The Uniform Commercial Code is referenced, as are other relative sources of law. Prerequisite: "C" or better in BUS 251.

BUS 253 THE LEGAL, ETHICAL, AND GLOBAL ENVIRONMENT OF BUSINESS 3 Credits

This course focuses on the interrelationship of social policies, the legal system, and global business practices in society, with emphasis on the rapidly changing business and legal environments. Relationships among governmental, ethical, social, and business interests will also be examined. The course will provide students with a comprehensive legal foundation to enable them to understand the impact of law on business decisions. Prerequisite: Grade of "C" or better in BUS 101.

Chemistry**CHM 100 INTRODUCTION TO CHEMISTRY 4 Credits**

A broad survey of the basic principles of chemistry is provided with a laboratory section for non-science, pre-science, and allied health students. Pre- or Co-requisites: ENG 096, RDG 096, and MTH 092 (passing grade of "C" or better for each), or placement. Laboratory fee.

CHM 101 COLLEGE CHEMISTRY I 4 Credits

This course covers the major concepts of general chemistry which includes states and properties of matter, atomic structure, mole concept and stoichiometry, solutions, acid base chemistry, equilibrium, and kinetics with laboratory sessions. This course is designed to provide appro-

appropriate chemistry background for nursing and health science students. Prerequisites: ENG 096, RDG 096 or ESL 105/106, and MTH 092 or higher (passing grade of "C" or better for each or placement). High school chemistry strongly recommended. Laboratory fee.

CHM 102 COLLEGE CHEMISTRY II 4 Credits

This course is an introduction to organic and biological chemistry for students preparing for careers in health care. Course content includes hydrocarbons, alcohols, carbohydrates, amines, lipids, amino acids and proteins, enzymes, biochemical energy transfer, metabolism, and nutrition. The course is taught via lecture and laboratory sessions. Prerequisite: "C" or better in CHM 101. Laboratory fee.

CHM 103 GENERAL CHEMISTRY I 4 Credits

This is a transfer course in chemistry for chemistry, biology, pre-med, and engineering students. Principles and concepts of stoichiometry, thermochemistry, ionic and molecular equilibria, and kinetics are covered. Also included is a brief introduction to organic nomenclature. Emphasis is on problem solving. Laboratory work is coordinated with lectures and numerous problem-solving sessions. Prerequisites: ENG 096, RDG 096 or ESL 105/106, and MTH 092 (passing grade of "C" or better for each or placement). High school chemistry or CHM 100 strongly recommended. MTH 100 strongly recommended. Laboratory fee.

CHM 104 GENERAL CHEMISTRY II 4 Credits

This is a continuation of CHM 103. Atomic theory and bonding, elementary thermodynamics, electrochemistry, and nuclear chemistry are discussed. Theory and practice of ionic equilibria in qualitative analysis are also covered. Laboratory introduces students to theory and practice of semimicroqualitative analysis. Prerequisite: "C" or better in CHM 103. Laboratory fee.

**CHM 107 TECHNICAL CHEMISTRY I 3 Credits
(TTP Program Majors Only)**

This course offers an introduction to the science of chemistry. It covers major concepts in chemistry, with emphasis placed on inorganic chemistry. Topics covered include atomic structure, periodic law, states of matter, acid-based equilibrium, solutions, and oxidation-reduction.

**CHM 108 TECHNICAL CHEMISTRY II 3 Credits
(TTP Program Majors Only)**

Organic chemistry and industrial processes are covered. Prerequisite: "C" or better in CHM 107.

**CHM 109 TECHNICAL CHEMISTRY LABORATORY 2 Credits
(TTP Program Majors Only)**

This is a course in chemical laboratory techniques.

Gravimetric and volumetric methods of chemical analysis are emphasized along with preparations, extractions, types of chromatography, and distillation.

CHM 111 CHEMISTRY SEMINAR 3 Credits
(TTP Program Majors Only)

Students are introduced to the chemical industry and its impact on society and job opportunities. The course includes tours of chemical plants and labs. Students also receive help in resumé writing.

CHM 112 CHEMICAL CALCULATIONS 3 Credits
(TTP Program Majors Only)

This is a practical course on methods of presenting data and performing chemical calculations using logarithms, algebra, graphical methods, and electronic calculators. Typical industrial problems are studied.

CHM 203 ORGANIC CHEMISTRY I 4 Credits

The fundamental synthesis and reactions of various organic molecules and the role these molecules play in our everyday lives are covered. The theory behind the reactions is also covered along with topics such as resonance and mechanisms. The lab includes experiments in polymers, flavoring, dyes, perfumes, analgesics, and food colors where the methods employed in the synthesis and purification of the product are emphasized. Prerequisite: "C" or better in CHM 104. Laboratory fee.

CHM 204 ORGANIC CHEMISTRY II 4 Credits

This is a continuation of CHM 203. The fundamental synthesis and reactions of still other organic molecules are covered. The laboratory includes experiments in chemiluminescence, natural products, local anesthetics, sulfa drugs, proteins, carbohydrates, and artificial sweeteners. Prerequisite: "C" or better in CHM 203. Laboratory fee.

CHM 206 INSTRUMENTAL METHODS 4 Credits
(TTP Program Majors Only)

This course covers modern analytical techniques. Emphasis is on spectral methods (infrared, ultraviolet, visible), polarimetry, refractometry, interpretation, and reporting of results.

Cinema

CIN 101 INTRODUCTION TO THE ART OF FILM 3 Credits

This is an introductory course designed to acquaint students with the art of film and to enable them to gain a greater understanding and appreciation of this important medium. The course covers the history of cinema, various cinematic theories and genres, and profiles of the industry's most influential directors. Pre- or Co-requisites: ENG 096 and RDG 096 (passing grade of "C" or better), or placement.

CIN 103 HISTORY OF AFRICAN-AMERICAN FILM 3 Credits

This is an introductory course designed to acquaint students with the history of African-American film and to develop in them a greater understanding and appreciation of African-American film history. The course develops chronologically, starting with the inventors and African-American film pioneers and ending with the resurgence of African-American films in the 1980s. Much of the course content is analyses of theories, film facts, and people. Pre- or Co-requisites: ENG 096 and RDG 096 (passing grade of "C" or better), or placement.

Civil Construction Engineering Technology

CET 111 CONSTRUCTION METHODS AND MATERIALS 3 Credits

This course is an introduction to construction practices and materials used in construction. Emphasis is placed on the basic materials including concrete, steel, asphalt, masonry, and wood. Portland cement concrete is mixed in the lab and tested for strength. Other topics covered include site preparation and grading, foundations, and framing systems. A research paper is presented orally in class. Pre- or Co-requisite: ENG 096 and RDG 096 (passing grade of "C" or better for each), or placement.

CET 211 SURVEYING I 3 Credits

This is an introductory course that includes the use, care, and adjustment of modern digital surveying instruments, the measurement of distance, and differences in elevation, angles, directions, lines, and grades. Other topics covered include the theory of measurement and errors, traversing, and area computation. Field exercises are included to complement lecture topics. Co-requisite: MTH 114. Laboratory fee.

CET 212 SURVEYING II 3 Credits

This course is a continuation of CET 211 and covers the elements of horizontal, vertical, and compound curves, cross-sectioning, and earthwork computations. Other topics covered include the essentials of boundary surveys, coordinates, control surveys, construction surveys, and state plane coordinates. Field exercises and computer applications are included to complement lecture topics. Prerequisite: "C" or better in CET 211. Laboratory fee.

CET 214 EVIDENCE & PROCEDURES FOR BOUNDARY LOCATION 3 Credits

This course addresses the concept of evidence relating to boundary locations as discoverable on the ground and through deeds or other written records, and the procedures followed by the land surveyor when conflicts occur between those items of evidence by relating laws and cases. Prerequisite: "C" or better in CET 212.

CET 221 HYDRAULICS AND DRAINAGE 4 Credits

This course is an introduction to the fluid properties of water and the concepts of surface water hydrology. Topics covered include flow through pipes and channels and relationships between rainfall and runoff. Class time is divided between the study of theory and the application of this theory in the design of storm drainage systems. Laboratory exercises are included to complement lecture topics. Prerequisite: "C" or better in CET 211. Co-requisite: MTH 114. Laboratory fee.

CET 225 SOIL MECHANICS 3 Credits

This is an introductory course in soil properties and testing techniques. Topics covered include soil classification, index properties, bearing capacity, retaining walls, soil compaction, and pile driving. Emphasis is placed on practical field applications including inspection and testing. Laboratory exercises are included to complement lecture topics. Prerequisite: "C" or better in ENR 110. Laboratory fee.

CET 231 STRUCTURES 4 Credits

This is an introductory course in steel and concrete structural design. Students perform calculations and write specifications for the correct size and physical characteristics of structural components of the simpler forms of structural systems. Design of steel and wood framing members – including bearing plates, base plates, and riveted, bolted, and welded connections – is included. Also included is the study of reinforced concrete elements such as rectangular beams, T-beams and one and two-way slabs, tied and spiral columns, footings, and foundation walls. Prerequisite: "C" or better in ENR 220.

CET 251 CET SEMINAR 1 Credit

This is a survey course involving a variety of topics relevant to civil engineering, construction, and land surveying. Through group discussion, research, and oral presentation, students gain an appreciation of the skills and techniques needed for success as a professional in their chosen field. Co-requisite: CET 231 or permission.

College Success

CSS 101 COLLEGE SUCCESS SEMINAR 1.5 Credits

This course prepares students for college life by offering critical information and providing an ongoing support system, as needed, throughout the first semester. It emphasizes self-assessment, self-management, the development of life skills, goal-directed behavior, and effective study habits. Co-requisites: ENG 088 and ENG 088T.

Communication

CMS 110 FUNDAMENTALS OF TELEVISION PRODUCTION 3 Credits

This course is designed to teach the basic fundamentals of

broadcasting operations. Topics covered include basic production, audio systems equipment and operations, camera operation techniques, lighting and video switching, master control, and studio operations. Also covered are electronic news gathering, electronic field production, and videotape editing. Laboratory fee.

CMS 113 WRITING FOR FILM AND TELEVISION 3 Credits

This course familiarizes students with the basics of writing for film and television. Students are taught to apply industry standard formats in preparing scripts. Topics covered include style, story structure and content, characterization, dialogue, and opportunities for new writers in the industry. Students practice writing in the different styles of film and television shows. Prerequisite: "C" or better in ENG 101.

CMS 121 FUNDAMENTALS OF FILMMAKING 3 Credits

This introductory course is designed to acquaint students with the basic elements of film production. Students are taught the aesthetics and techniques required for producing 8mm film and 16mm film. They are also introduced to techniques in producing, writing, cinematography, directing, and editing. Students are required to write, produce, and direct a short film. (Note: Students are required to share in the expenses involved in their productions.) Prerequisite: "C" or better in CMS 113 or permission by instructor. Laboratory fee.

CMS 136 RADIO BROADCASTING AND PRODUCTION 3 Credits

This course is designed to teach the fundamentals of radio production. Students examine the basic audio and studio operating procedures and gain hands-on experience in operating a radio broadcasting station. This is a theoretical as well as a "hands-on" course that splits time between lecture, lab, and station operation. Laboratory fee.

CMS 210 TELEVISION PRODUCTION II 3 Credits

This is an advanced course for those students interested in acquiring increased knowledge and sophistication in the production of television programs. Remote shooting, field production, and studio operations are principal components of the course. Students in CMS 210 participate in the Essex County College Observer (ECCO) -TV productions. Prerequisite: "C" or better in CMS 110. Laboratory fee.

CMS 219 VIDEO PRODUCTION 3 Credits

This advanced hands-on course allows students to create and develop a series of independent video productions. The tasks that students undertake include script writing, producing, directing, scheduling productions, camera operating, field videotaping, and post-production editing. (Note: Students are required to purchase their own videotapes.) Prerequisite: "C" or better in CMS 110. Laboratory fee.

ENG 151 MASS COMMUNICATIONS AND POPULAR CULTURE 3 Credits

This course surveys and examines mass communications, concentrating on radio, television, film, and other electronic and print media. The expression of popular culture through the mass media is analyzed and evaluated. Prerequisite: "C" or better in ENG 101.

Computer Information Systems

CIS 107 COMPUTER LITERACY 3 Credits

This introductory course in personal computers is specifically designed for students who have had little or no experience using the personal computer. The course introduces important computer concepts and provides students with hands-on lab experiences to prepare them for word processing assignments in college courses and for further study in computer-related courses. CIS 107 can be used as a free elective in all departments except Computer Information Systems. Laboratory fee.

CIS 111 INFORMATION PROCESSING I 4 Credits

This course provides an introduction to JavaScript programming. Topics covered include integrating JavaScript and HTML, creating pop-up windows, adding scrolling messages, validating forms, enhancing the use of images and form objects, working with cookies, arrays, and frames, and using objects to create a shopping mall application. Prerequisite: "C" or better in CIS 153. Laboratory fee.

CIS 114 INTRODUCTION TO VISUAL BASIC 4 Credits

This is a course about problem solving with computers. The programming language used is Visual Basic. Hands-on use and manipulation of Windows events, forms, controls, components, and structured programming techniques are covered. The examples and exercises present a sampling of the way that computers are used in society. Prerequisites: "C" or better in MTH 092 and CIS 107 or CSC 100. Laboratory fee.

CIS 131 MICROCOMPUTERS IN BUSINESS 3 Credits

This course provides hands-on instruction on the applications of microcomputers in the business environment. Students gain experience in using application software packages such as Microsoft Office. The course includes an introduction to Windows, Microsoft Word, Excel, Access, Outlook, and PowerPoint. Pre- or Co-requisites: ENG 096 and RDG 096 (passing grade of "C" or better for each), or placement. Prerequisite: Some computer literacy is strongly recommended. Laboratory fee.

CIS 135 MICROCOMPUTER SPREADSHEETS 3 Credits

This course provides hands-on instruction in the use of Excel for Windows. It covers basic spreadsheet design and creation, formulas, charts, and data management.

Step-by-step instruction using realistic case studies emphasizes the important features of the software. (Advanced features, case studies, and macro creation using Visual Basic are covered in CIS 235). Pre- or Co-requisites: ENG 096 and RDG 096 (passing grade of "C" or better for each), or placement. Prerequisite: "C" or better in CIS 107. Laboratory fee.

CIS 136 DESKTOP PUBLISHING FOR IBM COMPUTERS 3 Credits

This course provides hands-on instruction to develop students' understanding of desktop publishing using Microsoft Office and the Internet. Topics covered include basic concepts, layout and good form, research, creating a presentation, using templates, and working with text, fonts, clip-art, drawings, and photographs. Students are required to design a variety of presentations as well as printed works indicative of their competence and typical of those found in business and industry as part of their portfolio. Pre- or Co-requisites: ENG 096 and RDG 096 (passing grade of "C" or better for each), or placement. Prerequisite: "C" or better in CIS 107. Laboratory fee.

CIS 137 MICROCOMPUTER DATABASES 3 Credits

This course provides hands-on instruction in the use of the database management package, Access. This course is designed to help students plan, create, and maintain database files for typical business needs. The course covers basic concepts, displays, editing, sorting and querying of information, producing forms and reports, and managing multiple databases. A final class project is assigned. Pre- or Co-requisites: ENG 096 and RDG 096 (passing grade of "C" or better for each), or placement. Prerequisite: "C" or better in CIS 107. Laboratory fee.

CIS 139 MULTIMEDIA CONCEPTS 3 Credits

This course provides an introduction to many of the individual components of interactive, computer-assisted communications. Because multimedia technology is a tool, the applications are practically endless and multimedia may mean different things to different people. It may be a communications tool to some and an artistic medium to others. It can also be a teaching tool or a way to complete a business transaction. This course assists students in planning and developing multimedia presentations in their field of interest. Pre- or Co-requisites: ENG 096 and RDG 096 (passing grade of "C" or better for each), or placement. Prerequisite: "C" or better in CIS 107. Laboratory fee.

CIS 152 INTERNET CONCEPTS 3 Credits

This course provides a basic introduction to the world wide computer communications network, the Internet, including the World Wide Web. Students gain an understanding of the history and background as well as the hardware and media that comprise the Internet. This is a research-oriented course in which Internet Protocol, net etiquette, e-mail, accessing Internet services, File

Transfer Protocol, and searching the databases are explored. Students are provided hands-on introduction to the HyperText Markup Language (HTML) used to create World Wide Web sites in the Internet. Students also create their own website and begin to use the Language (HTML) to create, edit, and maintain their site. Pre- or Co-requisites: ENG 096 and RDG 096 (passing grade of “C” or better for each), or placement. Prerequisite: “C” or better in any CIS course. Laboratory fee.

**CIS 153 ADVANCED INTERNET CONCEPTS 3 Credits
 AND APPLICATIONS**

This course is an extension of the basic introduction to the Internet language covered in CIS 152. Students learn to design and improve World Wide Web sites. The course also covers more complex tables, manipulation of Frames, Common Gate Interface (CGI), Cascading Style Sheets (CSS), and a brief introduction to JavaScript within the confines of HTML tags. Incorporating multimedia files (audio and video) are also covered. CSS and JavaScript are discussed on a very basic level with the goal of introducing students to tools that enhance HTML and add dynamic content to web sites. Upon the completion of this course, students will be prepared to take the introductory course in JavaScript (CSS 111). Prerequisite: “C” or better in CIS 152. Laboratory fee.

**CIS 212 SYSTEMS ANALYSIS AND 3 Credits
 DESIGN**

This course gives an overview of the systems development life cycle covering the information gathering and reporting activities from the analysis phase through the implementation phase. The course introduces the classical and structured tools/techniques for describing process flow, data flows, data structures, file design, input/output designs, and program specifications. Pre- or Co-requisites: ENG 096 and RDG 096 (passing grade of “C” or better for each), or placement. Prerequisite: “C” or better in any CIS or CSC course.

CIS 215 DATA COMMUNICATIONS 3 Credits

This course is designed to develop an understanding of current data communications technology as it applies to information systems. Topics covered include basic concepts and terminology as it relates to data communications and networks, with particular emphasis on local area networks. Students are required to design PC network hardware configurations based upon selected case studies. Prerequisite: “C” or better in CIS 212 or permission of the instructor.

**CIS 235 ADVANCED MICROCOMPUTER 3 Credits
 SPREADSHEETS**

This course is a continuation of CIS 135, which introduced students to the spreadsheet analysis application, Excel for Windows. Continuing the step-by-step instruction using case studies, advanced Excel features and OLE (Object Linking and Embedding), hyperlink to the Internet and

Visual Basic functions are covered. Special attention is paid to creating macro modules using Visual Basic. An advanced research project is required. Pre- or Co-requisite: ENG 101 (passing grade of “C” or better). Prerequisite: “C” or better in CIS 135. Laboratory fee.

**CIS 237 ADVANCED MICROCOMPUTER 3 Credits
 DATABASE**

This course is a continuation of CIS 137 emphasizing advanced features of database management. Topics covered include creating customized forms and reports, creating charts and graphs, advanced queries and OLE (Object Linking and Embedding), macros, and hyperlink to the Internet and Visual Basics. A case project is assigned to be completed by the end of the semester. Pre- or Co-requisite: ENG 101 (passing grade of “C” or better). Prerequisite: “C” or better in CIS 137. Laboratory fee.

Computer Sciences

**CSC 100 FUNDAMENTALS OF 3 Credits
 COMPUTER SCIENCE**

This course introduces the elementary concepts of computer science and is specifically designed for students planning to major in the discipline. The course emphasizes the various aspects of computing such as problem solving, algorithm design, and program construction. Students also explore the application of computer science to various real-world problems. An object-oriented programming language is used to develop the student’s problem solving and programming skills. Successful completion of programming projects requires students to use a computer laboratory outside of the class period. Co-requisite: MTH 092.

CSC 104 NETWORK FUNDAMENTALS 3 Credits

This course is an introduction to microcomputer hardware and operating system components associated with network technology. It includes examination of microprocessors, databases, ports, and video displays. Laboratory fee.

CSC 105 NETWORK ADMINISTRATION 4 Credits

This course provides the necessary information and hands-on laboratory experience for students who intend to administer Local Area Networks. The course provides students with technical knowledge in the areas of networking connectivity, data communications, and communication protocols. Students are required to demonstrate their proficiency in the subject matter by completing a series of laboratory exercises. Prerequisite: “C” or better in CSC 104. Laboratory fee.

CSC 108 CLIENT OPERATING SYSTEMS 4 Credits

This is a course in the organization, structure, and implementation of operating systems typically used by clients in Local and Wide Area Networks. The course covers in

detail the features associated with graphical, secure, 32-bit network operating systems such as Windows 2000 Professional. Students must be prepared for extensive hands-on work in a client/server environment. Prerequisite: "C" or better in CSC 104. Laboratory fee.

CSC 110 ROUTING AND SWITCHING FUNDAMENTALS 4 Credits

This course is designed to introduce the fundamental terminology, concepts, and principles associated with the configuration and implementation of Cisco routers in Local and Wide Area Networks. The course covers in detail the OSI Reference Model, IP addressing, signaling and data transmission, and network topologies. All course topics correspond to the first semester of the Cisco Networking Academy Program curriculum for the CCNA examination. The course is taught in a lecture, discussion, and demonstration format within the confines of a specialized laboratory. Laboratory fee.

CSC 111 ROUTING AND SWITCHING WIDE AREA NETWORKS 4 Credits

This course is a continuation of CSC 110. Students develop the knowledge to configure Cisco routers in Local and Wide Area Networks. The course covers in detail router configuration, IP addressing, WAN routing protocols, and network troubleshooting. All course topics correspond to the second semester of the Cisco Networking Academy Program curriculum for the CCNA examination. Students are required to complete a selected series of router implementation and configuration exercises to pass the course. The course is taught in a lecture, discussion, and demonstration format within the confines of a specialized laboratory. Prerequisite: "C" or better in CSC 110. Laboratory fee.

CSC 112 COMPUTER PROGRAMMING FOR ENGINEERING & TECHNOLOGY 3 Credits

This course is an introduction to computer-oriented problem solving and programming and their applications in engineering. It provides the essential foundation for a program of study in object-oriented programming and computer-oriented mathematics. It covers the general areas of data analysis (graphics, sorting, and statistics), curve fitting (regression and interpolation), and equation solving. Students learn programming and the use of general-purpose application software tools such as spreadsheets, database, and mathematical software. Students are required to complete a series of laboratory assignments illustrating applications of computer-oriented problem solving. Prerequisite: "C" or better in MTH 113 or MTH 119.

CSC 121 COMPUTER SCIENCE I 4 Credits

This course serves as an introduction to the concepts and methodologies fundamental to computer science. Emphasis is placed upon object-oriented design and analysis with a thorough discussion of the concepts and principles associated with object-oriented programming. A high level object-oriented language is utilized for pro-

gramming assignments and to illustrate conceptual material. It is recommended that a student be enrolled concurrently in either MTH 113 or MTH 119 to derive the most benefit from the course. Prerequisite: "C" or better in MTH 100 and CSC100, or placement.

CSC 122 COMPUTER SCIENCE II 4 Credits

This course explores further the concepts introduced in CSC 121, applying them to more complex problems. Areas covered include class construction, class instantiation, file/stream processing, list processing, string processing, dynamic storage allocation, and internal search/sort methods. Prerequisite: "C" or better in CSC 121 and MTH 113 or MTH 119.

CSC 210 ADVANCED NETWORK ADMINISTRATION 4 Credits

This is a continuation of CSC 105. Emphasis is on the advanced concepts of network administration in a Microsoft Windows 2000 environment. The course provides the necessary information through lecture and hands-on laboratory work for the management of local area networks. Topics covered include server management, client configuration, network security configuration, and network infrastructure administration. Students are required to demonstrate their proficiency in the subject matter by completing a series of laboratory exercises. Prerequisite: "C" or better in CSC 105. Laboratory fee.

CSC 211 INTERNETWORKING 4 Credits

This course is designed to enhance students' knowledge of the implementation and configuration of Cisco routers in an internetworking environment. It covers in detail LAN switching, Virtual LANs, Access Control Lists, Interior Gateway Routing Protocol, and network management. All course topics correspond to the third semester of the Cisco Networking Academy Program curriculum for the CCNA examination. Students are required to complete a selected series of router implementation and configuration exercises to pass the course. The course is taught in a lecture, discussion, and demonstration format within the confines of a specialized laboratory. Prerequisite: "C" or better in CSC 111. Laboratory fee.

CSC 212 ADVANCED INTERNETWORKING 4 Credits

This course develops students' knowledge of Wide Area Network Design. It covers in detail the concepts and design implementations for Wide Area Networks using the Point-to-Point Protocol, ISDN, and Frame Relay. Topics covered correspond to the fourth semester of the Cisco Networking Academy Program curriculum for the CCNA examination. Students are required to complete a network design project to pass the course. The course is taught in a lecture, discussion, and demonstration format within the confines of a specialized laboratory. Prerequisite: "C" or better in CSC 211. Laboratory fee.

CSC 221 COMPUTER SYSTEMS AND ARCHITECTURE 4 Credits

This course provides a general introduction to the structure of computer systems and covers Assembly language for a specific computer. Topics discussed include machine components and cycles, assemblers, addressing techniques, macros, subroutines, program linkage, and input/output. A specific Assembly language is developed and implemented. Students must be prepared for extensive individual work in the computer laboratory. Prerequisite: "C" or better in CSC 122.

CSC 225 DATA STRUCTURES 4 Credits

This course is designed to present the fundamentals of data structures from an object-oriented perspective. The course introduces students to the design and implementation of abstract data types using an object-oriented programming language. The course includes introduction to algorithm analysis, recursion, and internal and external sorting/searching methods. The fundamental concepts of inheritance and virtual functions are also examined. Students are required to complete a series of programming projects that demonstrate their understanding of lecture topics. Prerequisite: "C" or better in CSC 122.

CSC 228 OPERATING SYSTEMS 4 Credits

This course examines the concepts, designs, and operations of modern real-time, general-purpose operating systems. The course covers fundamental operating system technology as well as contemporary design principles such as real-time systems, multiprocessor scheduling, memory management, file management, and security and network processing. Students are required to complete a selected series of programming projects that illustrate operating system design principles. Prerequisite: "C" or better in CSC 225.

CSC 231 DATABASE DESIGN 4 Credits

This course introduces the concepts and techniques associated with the manipulation of mass storage based files. Topics explored include various file processing environments, access methods, typical data structures, and file design and implementation. Students must be prepared for extensive individual work in the computer laboratory. Prerequisite: "C" or better in CSC 122.

CSC 235 ADVANCED OBJECT-ORIENTED PROGRAMMING 4 Credits

This course covers the object-oriented paradigm associated with programming in a network environment. The course focuses on topics that relate to developing object-oriented applications for the Internet, Intranets, and World Wide Web. The Java programming language is used to illustrate software development for network environments. Topics covered include applet construction, animation, class construction, exception handling, graphics, HTML interfacing, and graphical user interface design. Students are required to develop and implement a network application. Prerequisite: "C" or better in CSC 225.

Cooperative Education

CEE 298 COOPERATIVE EDUCATION EXPERIENCE I 1-4 Credits

This course is designed to give students practical employment experience in their majors or related fields of study. Students typically work for a 12 to 15 week period under supervision in the workplace and are guided through their experiences by faculty advisors. Participants in this course also receive classroom training in the Career Development Seminar I – *Preparing for the Workplace*, which covers career assessment and planning, resume writing, interviewing, and job search techniques.

CEE 299 COOPERATIVE EDUCATION EXPERIENCE II 1-4 Credits

Students participating in a second cooperative education experience receive continued or additional employment experience in positions related to their majors or career goals. Participants in this course receive classroom training in the Career Development Seminar II – *Succeeding in the Workplace*, which teaches business communication, teamwork, leadership, and other skills necessary for job success.

Criminal Justice

CJI 101 INTRODUCTION TO CRIMINAL JUSTICE 3 Credits

This introductory course on the principles and problems of the criminal justice system analyzes the role of the criminal justice officer in the community, the rights of the individual citizen, and the laws under which we live. The course examines in depth the organization and administration of the courts, corrections, and law enforcement agencies. The course includes analysis of the opportunities and obligations of the criminal justice officials, and those in law enforcement, correctional services, and courts. Special topics such as terrorism and cyber crime are also explored. Using various multimedia platforms, the course explores criminal justice issues, examines the issues that influence offenders, and identifies explanations for delinquent and criminal behavior. Students are required to complete a field assignment involving in-court observations. Pre- or Co-requisites: ENG 096/097 and RDG 096/097 (passing grade of "C" or better for each), or placement.

CJI 102 POLICE ROLE IN THE COMMUNITY 3 Credits

The course includes analysis of the social, economic, population, and political factors that affect the relationship between police and the community. The course examines community/police partnership collaborations and a problem-solving approach to policing. The course will also explore special topics such as community policing, the use of deadly force, terrorism, policing the drug problem, and civil liability. Prerequisite: "C" or better in CJI 101.

CJI 103 PROBATION AND PAROLE 3 Credits

This course presents probation as a judicial process and parole as an executive function. A historical review of trends in probation and parole such as the community-based programs in work release, half-way house contract program planning, therapeutic community, and treatment team concepts in probation and parole are examined. Modern trends, such as the justice model, determinate sentencing, restorative justice, “broken windows” supervision, and intensive supervision in the adult and juvenile system are also examined. The course includes discussion of the community resources that can be brought to bear on the correctional task and the concept of shock probation. Prerequisite: “C” or better in CJI 101.

CJI 104 CONSUMER LAW AND PROTECTION 3 Credits

This course is designed to provide students with an understanding of consumer law that will be of value in their everyday lives. Topics covered include family law, housing law, environmental law, consumer law, individual rights, and local, state, and federal consumer protection agencies. Students are required to complete a research project and submit the result in an acceptable form. Prerequisite: “C” or better in CJI 101.

CJI 111 POLICE ADMINISTRATION AND ORGANIZATION 3 Credits

This course examines the organizational framework, authority structure, and major functions of representative police agencies. It also covers the administrative problems of allocating responsibility and support functions and of coordinating many large and small area commands. The course includes discussion of recruitment, career advancement, and selection of leadership. Prerequisite: “C” or better in CJI 101.

CJI 112 POLICE MANAGEMENT 3 Credits

Principal areas of emphasis include the duties and responsibilities of the police supervisor, personnel problems, and handling of disciplinary problems, complaints, and grievances. The principles of efficient leadership, the relevance of motivation and communication, and techniques of teaching are presented. Prerequisite: “C” or better in CJI 101.

CJI 120 PRISON SUBCULTURES AND LIFESTYLES 3 Credits

This course focuses on the theoretical and policy issues and dilemmas of the American correctional system in handling citizens who have been imprisoned. It examines the origin and nature of the inmate social system, inmate social roles, and the prison socialization process. It explores, partly from the inmate's own perspective, modern concepts of behavior modification, punishment, community alternatives to imprisonment, and probable trends in the practice of correction. Prerequisite: “C” or better in CJI 101.

CJI 121 INTRODUCTION TO CORRECTIONS 3 Credits

This course examines the total correctional process from law enforcement through the administration of justice, probation, prisons, correctional institutions, and parole. Prerequisite: “C” or better in CJI 101.

CJI 123 CORRECTIONAL ADMINISTRATION 3 Credits

This course examines the principles of organization and management as applied to correctional institutions. It covers the theoretical and practical aspects of correctional management. Factors such as organization, decision making, values, human relations, and power are considered. Prerequisite: “C” or better in CJI 121.

CJI 134 INTRODUCTION TO SECURITY 3 Credits

This course surveys the concepts and issues surrounding the administration of security techniques and provides an overview of the functions of a wide range of security activities in a democratic society. Pre- or Co-requisites: ENG 096/097 and RDG 096/097 (passing grade of “C” or better for each).

CJI 135 SECURITY ADMINISTRATION 3 Credits

The purpose of this course is to introduce the student to the management and administration of a private security force and/or agency. Special attention is given to selection of security personnel, licensing/bonding requirements, and administrative style. Prerequisite: “C” or better in CJI 134.

CJI 136 CRIMINOLOGY 3 Credits

This course examines the various causative explanations of the nature of crime and criminal behavior and society's reaction to criminal and correctional institutions. Major theories of criminal behavior and current issues of crime prevention and control are also covered. The course explores criminal justice issues, examining the explanations for delinquent and criminal behavior, using various multimedia platforms. Special topics such as the motivations of terrorist, serial killers, pedophiles, and assassins are also explored. Students are required to complete a field assignment involving in-court observations. Prerequisite: “C” or better in CJI 101 or SOC 101 or PSY 101.

CJI 137 PRINCIPLES OF LOSS PREVENTION 3 Credits

This is a theory course on the development of physical, operational, and other security programs. It explains the various types of surveys used to identify loss exposures and the management processes which define proper security countermeasures to use for specific vulnerabilities. Accepted theories and principles associated with loss prevention are 185, presented as basic tools for decision-making. Students enrolling in the course should have background in typical applications of security countermeasures and also in organizational frameworks defining the level at which security decision-making is required. Prerequisites: “C” or better in CJI 134 and 135.

CJI 138 UNIFORMED SERVICES 3 Credits

This survey course exposes the student to a wide range of activities and responsibilities associated with uniformed protection services in both “in-house” and commercial organizations. Students gain familiarity with typical duties in such areas as patrol, fire prevention, plant safety, first aid, and disaster control. The course also examines current trends in professionalism, use of firearms, and licensing. Specific duties associated with selected industries such as transportation, hospitals, and educational institutions are explored. Prerequisite: “C” or better in CJI 134.

CJI 139 SECURITY HARDWARE 3 Credits

This survey course focuses on physical security countermeasures, particularly on the design and monitoring of electronic alarm systems, responses to alarm signals, and identifying the causes of false alarms. The techniques used in integrating various physical security measures, both electronic and non-electronic, into an effective facility program are examined with consideration given to such determinant factors as desired or required profile, regulatory requirements, impact on operational requirements, and alternative countermeasures. Students enrolling in this course should have knowledge of processes used in loss prevention decision-making and have some background in physical security measures vis à vis the total security function. Prerequisite: “C” or better in CJI 134. Co-requisite: CJI 137.

CJI 201 PATROL ADMINISTRATION 3 Credits

This course examines in detail the primary police functions and their objectives. It analyzes administrative planning of patrol activities, requirements for their effective execution, and the allocation of patrol strength to meet specific needs and emergencies. Prerequisite: “C” or better in CJI 101.

CJI 202 CRIME AND DELINQUENCY 3 Credits

This course surveys the nature and extent of crime and delinquency and examines the major approaches to causation, apprehension, control, and treatment. The course explores sociological, psychological, and multidisciplinary explanations for delinquent and criminal behavior using various multimedia platforms. The course also examines special topics such as gangs, youth violence, child abuse investigation, juvenile sex offenders, and juvenile waiver to adult court. Students are required to complete a field assignment involving in-court observations. Prerequisite: “C” or better in CJI 101 or SOC 101 or PSY 101 or SOC 108.

CJI 203 PRINCIPLES OF CRIMINAL INVESTIGATION 3 Credits

This course explores the fundamentals of investigation, crime scene search and recording, collection and preservation of evidence, scientific aid, interviews and interrogation, follow-up, and case preparation. This course is designed to provide students with the basic theoretical and philosophical understanding of the investigatory process. Analysis of problems encountered in interviewing, interrogating, evidence

collection, and admissibility will be examined. Application of investigation theories to the administration of justice will also be developed. Prerequisite: “C” or better in CJI 101. CJI 210 recommended, but not required.

CJI 204 EVIDENCE 3 Credits

This course surveys the basic rules of evidence important to law enforcement personnel and criminal justice students. It includes a study of the applicable amendments to the constitution, landmark Supreme Court decisions, the Federal Rules of Evidence, Hearsay, and recent changes in the rules of evidence at the federal and state levels. Students are required to complete a field assignment involving in-court observations. Prerequisite: “C” or better in CJI 101 or LAS 101 or LAS 106.

CJI 205 INTRODUCTION TO CRIMINAL LAW 3 credits

This course expands on concepts introduced in CJI 101, Introduction to Criminal Justice. It traces the definition of crime and the origins of criminal law in the United States. Discussion topics include basic legal terminology, classification of crimes, specific criminal offenses, and the New Jersey courts. This course also amplifies and further develops Criminal Procedure topics initially covered in CJI 101, Introduction to Criminal Justice. The course explores conflicting models of justice, due process, and crime control. The Bill of Rights and major Supreme Court decisions as they affect the operation of the courts, including the juvenile courts and correctional systems, are a central theme and focus. Prerequisite: “C” or better in CJI 101 or LAS 101 or LAS 106.

CJI 210 FORENSIC SCIENCE 3 Credits

This is an introductory course on the application of physical, chemical, behavioral, medical, and biological sciences to physical evidence used to explain or solve civil and/or criminal law cases. This course explores the collection, examination, evaluation, and interpretation of physical evidence. Emphasis is placed on lecture and demonstration. Prerequisite: “C” or better in CJI 101.

CJI 211 COUNSELING THE ADDICTED OFFENDER 3 Credits

This course provides an introduction to the knowledge, skills, attitudes, case management, and counseling techniques required for the counseling and treatment of the addicted offender. The course includes a review of the special needs of this population and the focus programs and facilities set up to treat them in addictions and criminal justice settings. This course is a joint offering of the Criminal Justice and Human Services programs of the Social Science Division. Pre- or Co-requisites: ENG 096/097 and RDG 096/097 (passing grade of “C” or better for each).

CJI 250 CURRENT ISSUES IN CRIMINAL JUSTICE 3 Credits

This course examines the current critical issues in the criminal justice system. It includes comparison and analy-

sis of pending cases before the federal and state courts. Students learn about previous decisions and other topics of a social nature that can impact on the administration of the criminal justice system. Prerequisite: "C" or better in CJI 101.

Dance

DAN 161 MODERN INTERPRETIVE DANCE I 3 Credits

This studio course offers basic instruction for beginning and intermediate students. The course will focus on developing the familiarity and understanding of the major systems of modern dance.

DAN 162 MODERN INTERPRETIVE DANCE II 3 Credits

Continuation of DAN 161. Prerequisite: "C" or better in DAN 161.

Dental Auxiliaries (offered through UMDNJ - School of Health Related Professions)

DAS 103 DENTAL MATERIALS 3 Credits (Core Course)

This course introduces the dental student to the chemical and physical properties of materials most commonly used in dental practice. It includes discussion of theory, and demonstration and performance of basic laboratory and operator procedures as related to these materials. Emphasis is placed on the expanded functions as listed in the New Jersey Dental Auxiliary's Act. Prerequisite: Formal acceptance into the program.

DAS 106 DENTAL SCIENCE 2 Credits

The dental student is introduced to the basic principles of pharmacology as it relates to the practice of dentistry. Students also learn how to relate the basic principles of general pathology to disease conditions of the oral cavity and related structures. Prerequisite: Formal acceptance into the program.

DAS 107 CLINICAL ASSISTING 4 Credits

Students learn clinical application of the principles and techniques learned in previous courses as pre-clinical procedures. Expanded functions allowed by the State of New Jersey are practiced in the New Jersey Dental School during the clinical rotation assignments; students thereby gain practical experience with dentists, patients, and other auxiliary personnel. Prerequisites: "C" or better in DAS 110 and DHY 205.

DAS 108 PRACTICE MANAGEMENT 1 Credit

This course provides the dental hygiene and dental assisting student with background information required to effectively manage the business office of a dental practice. Prerequisite: Formal acceptance into the program.

DAS 110 INTERNSHIP 1 Credit

This course incorporates the pre-clinical principles and techniques addressed in DHY 112 and DHY 205. Chairside assisting, office management, laboratory assignments, inventory control, radiographs, and expanded functions allowed by the State of New Jersey for dental assistants are performed during the clinical rotation assignments in private practice. Prerequisites: "C" or better in DAS 103 and DHY 205.

DHY 100 INTRODUCTION TO CLINICAL DENTAL HYGIENE 4 Credits

This course develops students' basic knowledge, skills, and judgments necessary for prevention of diseases of the teeth and surrounding tissue. Students learn via lectures, seminars, self-instructional audio-visual presentations, and reading assignments. Laboratory and clinical experiences provide the opportunity for practical application of the principles of comprehensive dental hygiene treatment. Prerequisite: Formal acceptance into the program.

DHY 101 DENTAL HEAD AND NECK ANATOMY (Core Course) 3 Credits

This course examines the basic structures of the oral cavity, the nomenclature, structure and morphology of the teeth, and function of the teeth. Demonstrations and lecture sessions emphasize the clinical appearance of the anatomical features of the teeth, and the relationship of the teeth to adjacent teeth, opposing teeth, immediately surrounding tissues, and approximating tissues. This course also deals with the structure and function of the cross structures of the head and neck. Discussions emphasize important anatomical concepts. Prerequisite: Formal acceptance into the program.

DHY 102 DENTAL RADIOLOGY (Core Course) 3 Credits

Lecture and laboratory sessions focus on the principles of radiology and its clinical application. Lecture topics include x-ray production, processing, intra and extra oral techniques, quality assurance, utilization of radiographic selection criteria, radiographic interpretation and radiation biology and safety, infection control, and hazardous waste disposal. Laboratory experience includes simulation exercises with mannequins, and working with assigned patients. Students are taught via lectures and demonstrations, and are responsible for answering workbook questions and completing a quality assurance project. Students who take the laboratory component will also complete a portfolio with a self-evaluation paper. Prerequisite: "C" or better in DHY 112.

DHY 103 CLINICAL DENTAL HYGIENE I 3 Credits

Students are offered introduction and demonstration in advanced techniques used during a dental hygiene appointment including oral physiotherapy, applying fluoride, treatment planning, adjunctive instrumentation, hypersensitivity testing, and airbrasive treatment. Case studies are examined with respect to treatment planning, behavior modification strategies, and adult

and pediatric preventive counseling. Prerequisites: "C" or better in DHY 100, DHY 101, and DHY 112.

DHY 104 CLINICAL SERVICES I 2 Credits

The student learns to perform the basic procedures relative to the traditional dental hygiene appointment. Learning will be through clinical experience and weekly seminars. The seminar supports and supplements clinical education with discussion of topics relating to: treatment planning, time management with respect to setting up patient appointments and running the clinic, telephone skills, legal and ethical issues surrounding patients records, sharpening, adjunctive instrumentations, tobacco cessation, and latex sensitivity. Prerequisites: "C" or better in DHY 100, DHY 102, and DHY 112.

DHY 106 NUTRITION 2 Credits

This course offers students knowledge and skills to apply in the dental setting in the areas of nutrition, diet evaluation, and counseling relative to oral health. Prerequisite: Formal acceptance into the program.

DHY 107 ORAL EMBRYOLOGY AND HISTOLOGY 2 Credits

The course develops students' basic knowledge of general histology and embryology and detailed knowledge of histology and embryology of the head, neck and oral cavity. Teaching methods include lecture, laboratory, and slide presentations. Prerequisites: "C" or better in DHY 101, DHY 105, BIO 121, and BIO 122.

DHY 110 MEDICAL EMERGENCIES IN THE DENTAL OFFICE (Core Course) 1 Credit

The course is designed to prepare the student to play a vital role in the management of medical emergencies. Information is offered on recognizing and treating emergency situations. The medical history and evaluation section of this course is designed specifically to help obtain and record accurately the patient's past and present physical condition, and to modify the dental hygiene treatment plan accordingly. Prerequisite: Formal acceptance into the program.

DHY 112 INTRODUCTION TO THE DENTAL PROFESSIONS (Core Course) 4 Credits

Topics relevant to the practice of dentistry, including concepts pertaining to general and specialty practice are covered in this class. The purpose is to introduce students to the areas of the profession and allied dental education. Prerequisite: Formal acceptance into the program.

DHY 113 DENTAL HEALTH EDUCATION (Core Course) 1 Credit

This course is designed to prepare the dental hygiene student to help individuals and groups develop patient education programs. Emphasis is given to focusing on the patient

as a whole person, analyzing the patient's lifestyles, values, behavioral patterns, and the environment in which the patient lives. The course covers the processes involved in the development, implementation, and evaluation of dental health education programs in a number of settings. Prerequisite: "C" or better in DHY 112.

DHY 200 ORAL PATHOLOGY 2 Credits

The course covers abnormalities in morphology and function. Since abnormalities begin at the cellular level, this course also begins with cellular alterations and response. The majority of the course is devoted to oral pathology, with emphasis placed on those lesions most frequently encountered. For each lesion discussed, the etiology, pathogenesis, clinical and microscopic signs and symptoms, differential diagnosis, treatment, follow-up, and prognosis are presented. Limited discussion will be devoted to general pathology as it relates to oral lesions and manifestations. Prerequisites: "C" or better in DHY 100, DHY 101, DHY 106, DHY 107, BIO 121, BIO 122, and BIO 211.

DHY 201 PERIODONTOLOGY I 2 Credits

The course examines the basic concepts of the anatomy and physiology of the gum with regard to the pathology of the periodontium, and the etiology and treatment of periodontal disease. The relationship between the histopathologic changes of the supporting structures of the teeth and the clinical situation is stressed. The course includes information on the dental hygienist's role in initial therapy and as a disease control therapist in maintaining oral health. Prerequisite: Formal acceptance into the program.

DHY 202 CLINICAL DENTAL HYGIENE II 2 Credits

This course is designed to further educate the dental hygiene student in various aspects of clinical practice. Included in this course is information relative to the care and treatment of the periodontic, adolescent, pregnant, geriatric and special needs patients. Lectures, student presentations and interviews, discussions, and case studies are used to enhance learning. Prerequisite: "C" or better in DHY 103.

DHY 203 CLINICAL SERVICES II 3 Credits

The student is required to demonstrate advanced techniques relative to the dental hygiene appointment, including oral physiotherapy, treatment planning, behavior modification strategies, and adult and child preventive counseling. Case presentations are also discussed and analyzed. Students learn from the seminar and clinical experience. Prerequisites: "C" or better in DHY 103, 104, 107, 110, and 113.

DHY 204 DENTAL HEALTH EDUCATION/ COMMUNITY DENTAL HEALTH 2 Credits

This course examines the principles and practices with regard to delivering health care to the public. Topics covered include: Dental public health, the role of the dental

auxiliary in delivering public health, research methods and biostatistics, planning and evaluation of community dental health programs, and tools of public health, including epidemiology, dental indices, and reliability and validity of research methods. Prerequisite: Formal acceptance into the program.

DHY 205 DENTAL SPECIALTIES I (Core Course) 1 Credit

Students are given the opportunity to manipulate properties of dental materials used in the practice of dentistry. Biological considerations in the selection and utilization of dental materials is covered. Students learn about the way the clinical applications react to the oral environment. The course is a prerequisite to DHY 210, where the student will function and perform expanded duties to laboratory proficiency. The expanded duties are outlined in the New Jersey Dental Auxiliary Practice Act. This course consists of both lecture and laboratory sessions. Prerequisite: "C" or better in DAS 103.

DHY 207 CLINICAL SERVICES III 3 Credits

This course further refines students' clinical skills and prepares them to apply their knowledge of pathology and periodontology to the clinical setting. Prerequisite: "C" or better in DHY 203.

DHY 209 PHARMACOLOGY AND ORAL MEDICINE 1 Credit

This course introduces the dental hygiene student to pharmacology as it relates to the practice of dentistry. Students receive preparation for dealing with adverse drug reactions, pharmacological effects, and their usual incitations and contraindications. Prerequisite: Formal acceptance into the program.

DHY 210 DENTAL SPECIALTIES II 1 Credit

This course is designed to build upon the knowledge and skills developed in DHY 205. Students will rotate throughout the clinic, where they will function as New Jersey expanded duties dental hygienists/dental assistants, and become clinically proficient in all expanded duties listed in the New Jersey Dental Auxiliary Practice Act. In addition, dental hygiene students will attend the New Jersey Dental School Pain Control course to obtain necessary information about the application of pain control techniques. Prerequisite: "C" or better in DHY 205.

DHY 211 PERIODONTOLOGY II 2 Credits

This lecture course is a continuation of DHY 201. Students further explore clinical manifestations of periodontal disease and its treatment using case histories. Guest lecturers present the most current information on available clinical and adjunctive home care aids. Students' knowledge is further enhanced through case presentations and review of articles on current developments. Prerequisite: "C" or better in DHY 201.

DHY 213 CAPSTONE SEMINAR 2 Credits

The Capstone Seminar is to be taken at the conclusion of the student's program of study. Students are expected to synthesize what they have learned in the Dental Hygiene major by putting together a case study for publication and presentation, using appropriate research methods and analysis of oral pathological conditions. Prerequisites: All DAS and DHY courses to this level.

DHY 215 PAIN AND ANXIETY CONTROL 1 Credit

This course is designed to introduce the student to the principles of local anesthesia in dentistry. Emphasis is placed on clinical application of these principles. Anatomy of the head and neck is stressed throughout the course, including in depth review of the trigeminal nerve and neurophysiology. The pharmacology of various local anesthetics and vasoconstrictors are reviewed. Discussion of systemic toxicity and local anesthetics alert the student to emergencies that can develop in the dental suite. Local anesthetic techniques are discussed. A rational approach to selecting anesthetic and injection techniques for each patient is presented. Co-requisite: DHY 210.

Dietary Management

NTR 100 FOOD SERVICE MANAGEMENT 5 Credits

Food Service Management will introduce meal service systems for health care environments. The course will discuss service and delivery systems, menus and selections, forecasting, purchasing, receiving and storage, food production, employee safety, tools of management, human resource management, and governmental legislation and regulations, productivity, and budgets.

NTR 109 SANITATION AND FOOD SAFETY 3 Credits

Sanitation and Food Safety is designed to enhance the student's ability to learn and retain comprehensive food safety knowledge on all aspects of handling food; from receiving and storing to preparing and serving. Specific focus will be given to providing safe food in the micro-world, the flow of food through the operation, clean and sanitary facilities & equipment, and sanitation management. Sanitation and Food Safety clinical practicum is designed to enhance the student's ability to learn and retain comprehensive food safety knowledge on all aspects of handling food; from receiving and storing to preparing and serving. Students will understand through hands on experience how to provide safe food in the micro-world, the flow of food through the operation, clean and sanitary facilities & equipment, and sanitation management.

NTR 209 PRACTICUM IN DIETARY MANAGEMENT 3 Credits

Practicum in Dietary Management will enhance knowledge learned in NTR100 regarding meal service systems

for health care environments. This clinical rotation is a hands on experience that will allow students to experience service and delivery systems, menus and selections, forecasting, purchasing, receiving and storage, food production, employee safety, human resource management, tools of management, personnel management, and governmental legislation and regulations, productivity, and budgets.

NTR 219 MEDICAL NUTRITION THERAPY FOR DIETARY MANAGERS 4 Credits

Medical Nutrition Therapy for Dietary Managers will introduce nutrition concepts and techniques for individuals in healthcare environment. Nutrition risk screening, interviewing/counseling methods, diet evaluation, basic diet calculations, documentation, nutrition care planning, and patient/client education will be included. Students will be exposed to nutrition concepts and techniques for individuals in healthcare environment, and will experience and practice nutrition risk screening, interviewing/counseling methods, diet evaluation, basic diet calculations, documentation, nutrition care planning, and patient/client education.

Drama

DRA 101 FUNDAMENTALS OF ACTING I 3 Credits

This course assists the student in developing pretextual techniques, including memory and sensory exercises and improvisations for the stage. The student's abilities to observe, concentrate, and imagine are also developed. Additionally, the course develops the student actor's ways and means of controlling body tension. As part of the practicum, short scenes are assigned to be rehearsed and performed in class for evaluation.

DRA 102 FUNDAMENTALS OF ACTING II 3 Credits

This is a continuation of DRA 101. Prerequisite: "C" or better in DRA 101. Note: Students taking Fundamentals of Acting are encouraged to take Introduction to the Theater (ENG 250).

DRA 104 THEATER WORKSHOP 3 Credits

This is a performance course for advanced acting students. The students present all forms of theatrical productions for the college community. Prerequisite: "C" or better in DRA 101 or placement.

DRA 108 INTERPRETIVE SPEECH 3 Credits

This course introduces the student to the techniques of dramatic interpretation of plays, poetry, short stories, and other prose pieces from literature. As a performance oriented course, its purpose is to give the student an opportunity to make poetry and drama come alive for an audience. The interpreter learns to create the dramatic dimensions of set, characterization, and mood through use of his/her voice alone. The class has several exhibitions of

dramatic reading and an end of term Readers Theater Production. Prerequisite: "C" or better in DRA 101 or placement.

Economics

ECO 101 PRINCIPLES OF ECONOMICS (MACRO) 3 Credits

This course provides an introduction to the principles of macroeconomics. Topics covered include supply and demand, free market ecosystems, the role of government, national income accounting, GDP, Keynesian fiscal policy, money and banking, Federal Reserve monetary policy, and current economic problems. Pre- or Co-requisites: ENG 096 and RDG 096 (passing grade of "C" or better for each), or placement.

ECO 102 PRINCIPLES OF ECONOMICS II (MICRO) 3 Credits

This course provides an introduction to the principles of microeconomics. It covers elasticity of supply and demand, marginal utility, cost of production, break even analysis, marginal analysis of all market models, antitrust issues, farm problems, labor market issues, urban poverty problems, and international trade and economics. Pre- or Co-requisites: ENG 096 and RDG 096 (passing grade of "C" or better for each), or placement.

Early Care and Education

ECE 101 EARLY CARE AND EDUCATION I 4 Credits

This course introduces the paraprofessional in early childhood education to the Child Development Associate (CDA) credentialing process and provides comprehensive instruction in early childhood education. The first three CDA competency goals and functional areas are discussed. Students begin to develop a professional resource file. Students who enroll in the course must have (within the past five years) at least 480 hours of experience working with children from infancy through five years old in a group setting. Strategies learned in the course will be practiced in the student's childcare center. Prerequisite: High school diploma or GED.

ECE 102 EARLY CARE AND EDUCATION II 4 Credits

This course builds on the knowledge and skills developed in ECE 101. It focuses on practical skills needed to successfully complete the Child Development Associate (CDA). The last three competency goals and functional areas are discussed. Students complete the professional resource file. Students enrolled in the course must have (within the past five years) at least 480 hours of experience working with children from infancy through five years old in a group setting. Strategies learned in the course will be practiced in the student's childcare center. Prerequisite: "C" or better in ECE 101. Co-requisite: ECE 103

ECE 103 EARLY CARE AND EDUCATION 3 Credits
FIELD EXPERIENCE

This course allows the paraprofessional to develop and demonstrate professional standards and practical skills in an early childhood setting. It provides students the opportunity to put theory into practice. Students are required to document working hours toward the requisite 480 hours of experience in one of the following childcare settings: center-based preschool, center-based infant/toddler facility, or a family childcare facility. Prerequisite: "C" or better in ECE 101. Co-requisite: ECE 102

Education

EDU 101 INTRODUCTION TO EDUCATION 3 Credits

This course introduces students interested in a career in education to some of the concepts, practices, and procedures of contemporary American education. The organization and operation of American schools, their financial and legal support, their place and role in the community, as well as some of the historical and philosophical foundations upon which American education is predicated, are examined. Teaching as a profession is also examined. Pre- or Co-requisites: ENG 096 and RDG 096 (passing grade of "C" or better for each), or placement.

EDU 103 PHILOSOPHY AND HISTORY OF EDUCATION 3 Credits

This course examines some of the most prominent concepts and philosophers in the field of education. Focus is on those educational theories and ideas that have shaped educational practices. Prerequisite: "C" or better in EDU 101.

EDU 201 EDUCATION IN URBAN ENVIRONMENT 3 Credits

This course examines the educational and social forces affecting the learning process of the inner city student. Issues considered include multiculturalism and the educational system, the effect of social institutions on the educational process, and the role of the teacher in the urban school. Prerequisite: "C" or better in EDU 101.

EDU 203 CHILDREN WITH SPECIAL NEEDS 3 Credits

This course is designed for those who plan to work with children who have special needs due to physical or mental differences or debilitating life situations. Emphasis is on meeting the needs of the child in an institutional setting, especially in agencies and schools. Prerequisite: "C" or better in PSY 101 or permission of the instructor.

EDU 205 EARLY CHILDHOOD EDUCATION 3 Credits

This is an introductory course in early childhood education. It includes discussion of curriculum for young children, focusing on the importance of appropriate goals, teaching methods, and teaching tools. Topics covered include practical scheduling, routines, and classroom

management. Prerequisite: "C" or better in EDU 101 or permission of instructor.

EDU 207 PRINCIPLES AND PRACTICES IN EDUCATION 3 Credits

This course examines the goals, curriculum, and teaching methods of schools. New organizational patterns and new techniques are introduced. Prerequisite: "C" or better in EDU 101 or permission of instructor.

EDU 233 EDUCATION SEMINAR I 3 Credits

Students discuss and analyze teaching strategies and their implementation at the educational sites where they are completing their fieldwork. Students are expected to use their knowledge and skills from academic courses in seminar discussion and relate this to their fieldwork assignments. Students are expected to develop a ten-page portfolio as part of their final course project. Co-requisite: EDU 234.

EDU 234 EDUCATION FIELDWORK I 3 Credits

Students are placed in a voluntary internship for a minimum of ten hours per week. The site may be a day care center, public or private school, or a special agency serving children. Students will teach and perform other duties under the supervision of the site staff and Essex County College faculty. Evaluation is conducted throughout the semester cooperatively by the faculty member and the professionals at the educational site. Co-requisite: EDU 233.

EDU 235 EDUCATION SEMINAR II 3 Credits

This internship seminar is a continuation of EDU 233. Students must choose two teaching strategies and develop a power point presentation and a twenty-page portfolio illustrating how the chosen strategies are implemented at their field placement sites. Co-requisite: EDU 236.

EDU 236 EDUCATION FIELDWORK II 3 Credits

This second semester internship placement is a continuation of EDU 234. Students are given enhanced teaching responsibilities and other duties under the supervision of the site staff and Essex County College faculty. Co-requisite: EDU 235.

EDU 270 PRINCIPLES AND TEACHING STRATEGIES IN EARLY CHILDHOOD EDUCATION 3 Credits

This course presents the principles underlying age-appropriate strategies of instruction in graphic arts, music, drama, language, science, and the social sciences in an early childhood educational setting. Prerequisite: "C" or better in EDU 101.

EDU 271 MODERN TRENDS IN EARLY CHILDHOOD EDUCATION 3 Credits

This course examines the current use of television, computers, and community resources as teaching tools. It

covers models of early childhood education including the Open Classroom, the Montessori School, the Piagetian Pre-School, and behavior analysis procedures. Prerequisite: "C" or better in EDU 101.

Electronic Engineering Technology

ELC 115 ELECTRIC CIRCUITS: DC AND AC 4 Credits

This introductory course in circuit analysis defines the electrical quantities, current, and voltage, and examines their relationship in various components and circuits. Circuits comprised of resistance, capacitance, and inductance which are energized by both DC and AC sources are considered. The theory includes Ohm's Law, Kirchhoff's Laws, series and parallel circuits, and several network theorems. In the laboratory the student performs electrical measurements which confirm his/her grasp of the theory. A circuit simulation computer software package is introduced and used as an analytical tool. Co-requisite: MTH 113. Laboratory fee.

ELC 120 ELECTRONICS I: SEMICONDUCTOR COMPONENTS 4 Credits

This course introduces students to the active components used in electronics circuits. It covers the physics, the characteristics, and some applications of semiconductor diodes and transistors. The emphasis is on transistor biasing circuits. These devices and their applications are also studied through laboratory experiments. Prerequisite: "C" or better in ELC 115 or permission. Laboratory fee.

ELC 211 ELECTRIC POWER 3 Credits

This course treats in detail the subject of electrical power including its generation, distribution, and utilization. It presents the theory, construction, maintenance, and characteristics of AC and DC motors, generators, and transformers. The associated laboratory is an integral part of the course. Prerequisite: "C" or better in ELC 115. Laboratory fee.

ELC 218 PULSE AND DIGITAL CIRCUITS 3 Credits

This course is an introduction to computer electronics. It includes Boolean Algebra, fundamentals of logic, logic circuits, and digital logic systems. Laboratory work is closely allied with theory and includes computer simulation. Prerequisite: "C" or better in ELC 115. Laboratory fee.

ELC 221 ELECTRONICS II: AMPLIFIERS 4 Credits

This course extends ELC 120 to include AC analysis of transistor circuits. Electronic amplification is examined in considerable detail. Field effect transistors (FET) and integrated circuits (IC) are introduced. Laboratory work, complementing the theoretical work, is emphasized. Prerequisite: "C" or better in ELC 120. Laboratory fee.

ELC 222 ELECTRONICS III COMMUNICATIONS SYSTEMS 4 Credits

This is the final course in the electronics sequence. Topics covered include modulation and demodulation for AM, FM, PM, and TV. Transmitters, receivers, and transmission characteristics are studied. Concepts of information theory, waveform analysis, and noise are introduced. Prerequisite: "C" or better in ELC 221. Laboratory fee.

ELC 224 LINEAR CIRCUIT ANALYSIS 3 Credits

This course introduces the basic theory and mathematical tools for analyzing Linear Electronic Systems. Areas covered include feedback concepts, frequency-response, transfer functions, and bode diagrams. Laboratory experiments are performed to support the theory. Prerequisite: "C" or better in ELC 221. Laboratory fee.

ELC 228 INTRO TO MICROPROCESSORS 4 Credits

This is an introductory course in microprocessor applications for students who already have basic knowledge of digital circuits principles. Computer hardware organization is analyzed, and machine-language programs are written and run. Hardware and software aspects of a popular eight-bit microprocessor are studied in detail. Theoretical ideas are reinforced by building and testing realistic experimental systems in the laboratory. Prerequisite: "C" or better in ELC 218. Laboratory fee.

ELC 230 CIRCUITS AND SYSTEMS FOR ENGINEERING 3 Credits

This is a calculus-based course in electric circuit theory and analysis for Engineering A.S. degree program students interested in pursuing computer or electrical engineering. It includes DC and AC principles with an emphasis on Kirchhoff's laws, network theorems for resistive, capacitive, and inductive networks, mesh and nodal analysis, and sinusoidal steady-state analysis. Also, power, resonance, and ideal transformers are studied. The theory is reinforced with instructor run demos. Assignments include the use of circuit analysis computer software. Prerequisites: "C" or better in PHY 104, MTH 122, and in either CSC112 or CSC121.

Energy Utility Technology

UTI 101 INTRODUCTION TO THE ENERGY UTILITY INDUSTRY 3 Credits

This course provides an overview of the energy utility industry and occupational opportunities, including but not limited to history of providing reliable service, regulatory influences, electric/gas energy flow & basic terminology, typical conditions for employment, and career opportunities. Prerequisites: "C" or better in ENG 096 and MTH 092 or placement, and ENR 100 or placement.

UTI 102 FUNDAMENTALS OF GAS COMBUSTION 3 Credits

This course provides students with the fundamentals of gas combustion, including knowledge and skills to diagnose combustion problems and make the proper adjustments to obtain complete combustion at the rated input using standard tools. Prerequisite: "C" or better in UTI 101.

UTI 103 FUNDAMENTALS OF POWER ALTERNATING CURRENT 3 Credits

This course provides participants with the fundamentals of the energy utility industry's alternating current theory, including, but not limited to vector analysis of power (KW,KVARs & KVA), power factor, phase angles, polyphase loads (Wye & Delta), and control of system efficiency. Pre-requisites: "C" or better in UTI 101 and ELC 115.

UTI 104 INTRODUCTION TO APPLIANCE SERVICE 7 Credits

This course provides participants with knowledge and skills to perform piping on residential appliances, work with utility gas regulators/meters, and conduct gas leak investigation, in accordance with industry standards & D.O.T. Pipeline Operator Qualification regulations. Prerequisites: "C" or better in UTI 102 and ELC 115.

UTI 105 INSIDE PLANT OPERATIONS 7 Credits

This course provides participants with knowledge and skills in electrical energy industry operations of switching stations and substations using safe work practices/procedures. The course covers one-line diagrams, types of stations, safety tagging, interrupting control prints, using basic test equipment, and communications. Prerequisite: "C" or better in UTI 103.

UTI 106 INTRODUCTION TO ENERGY UTILITY ENGINEERING 4 Credits

This course provides participants with the basic knowledge, skills, & technical background in construction, equipment, practices/procedures, design/layout, and typical problems of electrical distribution engineering. Prerequisite: "C" or better in UTI 103.

UTI 107 INTRODUCTION TO METERING 4 Credits

This course provides participants with fundamental knowledge and skills in the selection, installation, & testing for self-continued Watt-hour electrical energy measurement. Prerequisite: "C" or better in UTI 103.

UTI 108 INTRODUCTION TO UNDERGROUND UTILITIES 4 Credits

This course provides participants with the knowledge & skills to assist with electric utility underground distribution, construction, and maintenance. Students learn safe work practices, construction standards, operating prac-

tics, and testing procedures to become competent in the field. Pre-requisite: "C" or better in UTI 103.

UTI 109 INTRODUCTION TO GAS DISTRIBUTION 4 Credits

This course provides the student with the fundamental knowledge and skills to achieve 16 basic operator qualifications necessary for gas utility construction and maintenance, in accordance with D.O.T. Pipeline Operator Qualifications regulations. Prerequisite: "C" or better in UTI 102.

UTI 110 INTRODUCTION TO POWER PLANT OPERATIONS AND MAINTENANCE 6 Credits

This course provides participants with an overview of the electric generation process and of power plant systems and functions. They will obtain the knowledge and skills necessary for safe power plant operation, learn power company philosophy, and receive an overview of generating site facilities, interdepartmental responsibilities, proper health, industrial and environmental safety, and communication practices. Prerequisite: "C" or better in UTI 103.

UTI 111 ALTERNATIVE ENERGY SOURCES 3 Credits

This course is an introduction to electrical energy generation and its impact on the environment and society. Various energy alternatives such as solar, wind, geothermal, ocean and fuel cells are examined, along with the positive and negative aspects of each. Prerequisite: "C" or better in ENR 100.

UTI 201 ENERGY UTILITY COOPERATIVE EDUCATION I 4 Credits

Participants apply the knowledge & skills learned within the specific occupational concentration while working as part of an energy utility represented associate team. The learner will be required to complete a guided field experience checklist for the specific occupation. Pre-requisite: "C" or better in UTI 103 and one UTI course elective approved by an advisor.

UTI 202 ENERGY UTILITY COOPERATIVE EDUCATION II 4 Credits

Participants apply the knowledge & skills learned within the specific occupational concentration while working as part of an energy utility represented associate team. The learner will be required to complete a guided field experience checklist for the specific occupation. Pre-requisite: "C" or better in UTI 201 and one UTI course elective approved by an advisor.

Engineering

ENR 100 INTRODUCTION TO ENGINEERING TECHNOLOGIES AND SCIENCES 3 Credits

This course helps students select the technology field of

interest to them. They learn the fundamentals and acquire the necessary skills used in engineering and technology. The course is designed to develop student ability to function effectively on teams; identify, analyze, and solve technical problems; make effective written and oral communications and presentations; understand professional, ethical, and social responsibilities; respect diversity and recognize contemporary professional, social, and global issues; and commit to lifelong learning and continuous improvement. Students utilize application software packages while learning more about each branch of engineering and technology. A field trip is included. Pre- or Co-requisites: ENG 096 and MTH 092 (passing grade of “C” or better for each), or placement.

ENR 103 ENGINEERING GRAPHICS AND INTRODUCTION TO CAD 2 Credits

This course covers the fundamentals of engineering graphics including the drawing of orthographic, isometric, and auxiliary projections. Other topics include scaling, sectioning, dimensioning, and drawing documentation. This course uses the latest release of computer aided design (CAD) software commonly used in industry to introduce students to CAD interface, structure, and commands. Prerequisite: “C” or better in MTH 092 and ENR100, or placement.

ENR 105 APPLIED COMPUTER AIDED DESIGN 2 Credits

This first course in Computer Aided Design (CAD) uses the latest release of AutoCAD software. Students are introduced to the terminology, use, and capabilities of CAD. Through hands-on instruction, students learn to complete projects using the latest hardware and software. After starting with the beginning draw and edit commands, the course proceeds to cover tolerance dimensioning, printing, the creation of symbols libraries, isometric rendering, three dimensional wire-frame modeling, and blocks with attributes. Prerequisite: “C” or better in ARC 101 or ENR 103. Laboratory fee.

ENR 106 INTERMEDIATE COMPUTER AIDED DESIGN 2 Credits

This course uses the latest release of CAD software commonly used in workplaces. Through hands-on instruction, students learn to complete a series of CAD projects. Topics covered include drawings in different disciplines, three-dimensional wire, surface, and solid modeling, geometric dimensioning and tolerancing, shading, and rendering. Prerequisite: “C” or better in ENR 103. Laboratory fee.

ENR 110 MECHANICS 3 Credits

This is a course in trigonometry-based applied statics for technology students, and it involves the fundamental principles of the mechanics of rigid bodies. Topics covered include vectors, forces, moments, center of gravity, free-body diagrams, equilibrium, simple trusses, friction, and moment of inertia. Prerequisites: “C” or better in MTH 113 and PHY 101.

ENR 205 ADVANCED CAD 3 Credits

This course is designed to introduce advanced CAD applications using the latest versions of operating systems as well as the most recent CAD systems. The course covers attribute and attribute extraction, external reference files, rendering and animation, and solid modeling. It includes an introduction to customization. Prerequisite: “C” or better in ENR 105 or placement. Laboratory fee.

ENR 211 ENGINEERING MECHANICS I STATICS 3 Credits

This is a course in calculus-based statics. Topics covered include elementary vector algebra, scalar and vector products as applied to two and three-dimensional force systems, equilibrium, friction, second moments, and virtual work. Extensive use is made of the free body diagram approach and vector analysis. Prerequisites: “C” or better in MTH 121 and PHY 103.

ENR 212 ENGINEERING MECHANICS II DYNAMICS 3 Credits

This is a course in kinematics and kinetics using vector analysis. Topics covered include curvilinear motion with respect to fixed and rotating axes of particles and rigid bodies, work, energy, impulse, and momentum. Prerequisite: “C” or better in ENR 211.

ENR 220 MECHANICS OF MATERIALS 4 Credits

This course covers stresses and deformation in structural members due to axial tensile and compressive loads, torsional loads on shafts, and bending and shear loads on beams. It also covers the basic design of structural members based on the analysis of stress and deformation. Laboratory exercises are included to complement lecture topics. Prerequisite: “C” or better in ENR 110. Co-requisite: MTH 114. Laboratory fee.

ENR 250 COMPUTER AIDED DESIGN PROJECT 2 Credits

In this course, students apply the skills they learned from previous CAD courses to individually design a comprehensive project in their fields using specialized CAD software commonly used in workplaces. For example, manufacturing and mechanical students design parts using a parametric solid modeling package; architectural students make architectural designs using an animation and rendering package; civil construction/surveying students complete projects in construction, road design, and surveying using civil and mapping packages. Students are provided internship opportunities with industry. Prerequisite: “C” or better in ENR 205. Laboratory fee.

English

ENG 085 COLLEGE LANGUAGE STUDIES 6.0 Credits

College Language Studies is a reading/writing skills

course designed to develop student ability to comprehend and analyze texts. This course will take a whole language approach. Students will not only read and discuss texts but will also learn to write about them. The writing skills component emphasizes fluency, writing process, sentence structure, and paragraph development. Students will utilize various text materials as a springboard for writing assignments. Texts studied will be used as sources for student writing, providing not only potential content but also structural and stylistic examples. A study skills course is also a co-requisite. Co-requisite: ENG 088T and CSS 101.

ENG 085T COLLEGE LANGUAGE STUDIES (Tutorial) 2 Credits

Supplemental instruction of ENG 088 is a combination of self-directed web-based, classroom, and individualized “one-on-one” instruction with faculty as well as trained instructional assistants. Emphasis is on reinforcement of classroom lecture as well as training in the use of the College’s web-based system for student information, registration, library usage, etc. Co-requisites: ENG 088 and CSS 101.

ENG 096 ENGLISH FOUNDATIONS 4.5 Credits

This course is designed to enable the student to write at college level. By applying the writing process, the student will write a number of essays, adhering to the principles of English grammar, usage, mechanics, and punctuation. Prerequisites: ENG 088 or ESL 105/106 (passing grade of “C” or better for each), or placement. Co-requisite: ENG 096T

ENG 096T ENGLISH FOUNDATIONS (TUTORIAL) 1 Credit

Supplemental instruction of ENG 096 is a combination of self-directed web-based, classroom, and individualized “one-on-one” instruction with faculty as well as trained instructional assistants. Emphasis is on reinforcement of classroom lecture as well as training in the use of the College’s web-based system for student information, registration, library usage, etc. Co-requisite: ENG 096.

ENG 101 COLLEGE COMPOSITION I 3 Credits

Expository writing is taught through principles of rhetoric, mechanics, and style. Critical thinking is developed through analysis and discussion of selected essays. Introductory library procedures are taught. Prerequisite: “C” or better in ENG 096/097 or placement. Pre- or Co-requisite: RDG 096/097 (passing grade of “C” or better), or placement.

ENG 102 COLLEGE COMPOSITION II 3 Credits

This course develops students’ ability to write longer compositions using advanced library skills, research techniques, and proper documentation. Students are introduced to literature and develop interpretive skills through literary discussions. The goal is also to develop students’ appreciation of fine writing and an understanding of literary concepts. The course culminates in the production of an orig-

inal, extensive, multiple source, fully documented literary research paper. Prerequisite: “C” or better in ENG 101.

ENG 105 TECHNICAL WRITING 3 Credits

Emphasizing the need to write clearly in any professional setting, this course introduces a variety of technical and business writing formats including resumes, business correspondence, formal and informal reports and proposals, and memos. A variety of research and documentation techniques and styles is also covered. Prerequisite: “C” or better in ENG 101.

ENG 106 AMERICAN ENGLISH PHONETICS FOR THE ESL STUDENT 3 Credits

This is a non-technical course for the student whose first language is not English. It deals with the sounds of English and its sound patterns (stress, rhythm, pitch, and intonation). Students practice words and conversational phrases, listen to tapes, record their own voices, and give talks in class. The goal is to enable them to be readily understood when they speak English, and to understand the spoken English they hear. Prerequisite: placement/ advisement.

ENG 108 VOICE AND DICTION 3 Credits

This course is designed for students who wish to improve control over their voices in speaking, and to study and practice English pronunciation and articulation through a series of planned exercises and drills. Students are required to practice and apply the proper methods of voice production and articulation to improve their performance. Prerequisite: placement.

ENG 109 EFFECTIVE SPEECH 3 Credits

This course covers the basic elements of oral communication. Students are required to prepare and present several brief speeches with emphasis on content, organization, and delivery. Pre- or Co-requisite: ENG 096 and RDG 096 (passing grade of “C” or better for each), or placement. Completion of or simultaneous enrollment in ENG 101 is strongly recommended.

ENG 151 MASS COMMUNICATIONS AND POPULAR CULTURE 3 Credits

This course surveys and examines mass communications, concentrating on radio, television, film, and other electronic and print media forms. The expression of popular culture through the mass media is analyzed and evaluated. Prerequisite: “C” or better in ENG 101.

ENG 169 CREATIVE WRITING 3 Credits

Designed to give practice, guidance and criticism to students interested in becoming writers, this course emphasizes the development of creative talent through structured assignments, independent writing, and the analysis of selected literary works. Prerequisite: “C” or better in ENG 101 or written departmental approval.

ENG 205 THE WESTERN LITERARY TRADITION 3 Credits

The literary tradition of the western world is examined from its roots in the Old Testament and the Koran through its culmination in the European Renaissance. Students conduct an intensive study of selected literary masterpieces. Prerequisite: "C" or better in ENG 102 or ENG 105.

ENG 208 SURVEY OF SHAKESPEAREAN LITERATURE 3 Credits

This survey course examines Shakespeare's histories, comedies, and tragedies, paying close attention to the major themes and characters, and their place in the social and literary context. Prerequisite: "C" or better in ENG 102 or ENG 105.

ENG 215 MODERN LITERARY MASTERPIECES 3 Credits

The development of modern literary thought is examined from the post-Renaissance era to the present day. Students conduct an intensive study of selected masterpieces of world literature. Prerequisite: "C" or better in ENG 102 or ENG 105.

ENG 221 AMERICAN LITERATURE I 3 Credits

This course focuses on writing in the United States from its beginnings in Native American oral literature to the antebellum era. The construction of America will be examined through intensive study of various texts, both poetry and prose. Prerequisite: "C" or better in ENG 102 or ENG 105.

ENG 222 AMERICAN LITERATURE II 3 Credits

This course focuses on writing in the United States from the American Civil War to the contemporary era. The student will gain some understanding of the literary history of the United States across periods, genres, regions, cultures, and aesthetics. Prerequisite: "C" or better in ENG 102 or ENG 105.

ENG 232 AFRICAN AND CARIBBEAN LITERATURE 3 Credits

The literary traditions of sub-Saharan Africa and the Caribbean are examined through an intensive study of selected works. Negritude is explored especially in its relationship with the literature of colonizing European countries. Particular emphasis is placed on the socio-cultural and political forces that have shaped this literature as well as on the mode of presentation. Prerequisite: "C" or better in ENG 102 or ENG 105.

ENG 237 SURVEY OF AFRO-AMERICAN LITERATURE 3 Credits

Beginning with the slave narratives of 1700 and proceeding to the protest writings of modern times, this survey course examines the literature of the African American in America, and gives importance to the historical develop-

ment. Prerequisite: "C" or better in ENG 102 or ENG 105.

ENG 238 MAJOR BLACK AMERICAN WRITERS 3 Credits

This course addresses the development of literary trends and values as well as prevailing social conditions as they are represented by Black American writers from early to modern literature. Prerequisite: "C" or better in ENG 102 or ENG 105.

ENG 242 MODERN LATIN AMERICAN LITERATURE 3 Credits

This course offers an introduction to the emerging voices of Latin America. In presenting the literature of this region, importance is given to the history, politics, and culture of Latin America, enabling students to recognize the literary works as an expression of a common humanity. Prerequisite: "C" or better in ENG 102 or ENG 105.

ENG 250 INTRODUCTION TO THE THEATER 3 Credits

The drama as a literary and theatrical form is examined from early through modern plays. Students conduct intensive study of selected plays from the points of view of the playwright, actor, director, designer, and audience. Prerequisite: "C" or better in ENG 102 or ENG 105.

ENG 263 SURVEY OF WOMEN'S LITERATURE 3 Credits

This course traces the development of women's literature from the eighteenth to the twentieth century. It begins with a study of classical and Judio-Christian myths about women and then contrasts these archetypes with representative works by major women writers, exploring the influence of gender, class, and ethnicity in the development of women's role in society. Prerequisite: Grade of "C" or better in English 102 or English 105.

ENG 264 CONTEMPORARY WOMEN'S LITERATURE 3 Credits

The course examines contemporary literature written by women, focusing on what it means to be a woman in today's society. The course examines representative works from major women writers who come from diverse social, political, cultural, economic, and personal perspectives. Prerequisite: Grade of "C" or better in English 102 or English 105.

English as a Second Language

ESL 073 ESL INTENSIVE EXPERIENCE CULTURE 3 Credits

This is an introductory course designed to expose English as a Second Language students to several aspects of American society. Through field trips, class discussions, media exposure, student presentations, and course read-

ings, students discuss, question, and effectively experience elements of American cultural life. Topics such as family life, holidays, sports, and the educational system are discussed. Students are also challenged to understand and appreciate the ethnic, religious, and linguistic diversity of the United States as they begin to examine their prior assumptions and understanding of cultures other than their own. All class sessions are conducted in English. Prerequisites: Placement through the departmental writing exam and an oral interview conducted by an academic advisor in the Bilingual Studies Department. Co-requisites: ESL 074, ESL 075, ESL 076, & ESL 077.

ESL 074 ESL INTENSIVE EXPERIENCE 3 Credits
LISTENING & COMPREHENSION

This is a basic English as a Second Language course designed to enhance and develop the listening comprehension of non-native speakers of English. Through class conversations, individual and group listening exercises, and lab work, students are exposed to conversations and spoken narratives, and asked to demonstrate an understanding of the basic messages communicated through these texts. Students also receive practice in selective listening as they are asked to listen more discriminately to the more formal aspects of the language. All class sessions are conducted in English. Prerequisites: Placement through the departmental writing exam and an oral interview conducted by an academic advisor in the Bilingual Studies Department. Co-requisites: ESL 073, ESL 075, ESL 076, & ESL 077.

ESL 075 ESL INTENSIVE EXPERIENCE 3 Credits
SPEAKING

This is a basic English as a Second Language course designed to facilitate and develop the communicative oral competence of non-native speakers of English. Through the use of role-playing, dialogue, conversations, and oral presentations, students enhance their speech fluency and increase their ability to communicate basic needs, ideas, and feelings about everyday life. Students are afforded a comfortable and nurturing environment as they practice using English for the accomplishment of goal-oriented tasks of an academic and functional nature. All class sessions are conducted in English. Prerequisites: Placement through the departmental writing exam and an oral interview conducted by an academic advisor in the Bilingual Studies Department. Co-requisites: ESL 073, ESL 074, ESL 076, & ESL 077.

ESL 076 ESL INTENSIVE EXPERIENCE 3 Credits
READING

This is a basic English as a Second Language reading comprehension course for students who demonstrate first language literacy and some prior exposure to English. Selections from literature, popular media, and academic texts are read and discussed. Students learn to employ specific reading and pre-reading strategies, expand their vocabulary, and increase their understanding of written English. Students are also challenged to speak and write about the concepts and issues addressed in the class read-

ings. All class discussions are conducted in English. Prerequisites: Placement through the departmental writing exam and an oral interview conducted by an academic advisor in the Bilingual Studies Department. Co-requisites: ESL 073, ESL 074, ESL 075, & ESL 077.

ESL 077 ESL INTENSIVE EXPERIENCE 3 Credits
WRITING

This is a basic English as a Second Language writing course for students who demonstrate first language literacy and some prior exposure to English. Through lecture, group dynamics, and one-on-one student-teacher interaction, students learn to communicate ideas with increased fluency, clarity, and grammatical accuracy in English, while gradually decreasing their reliance on first language translation. Use of fundamental pre-writing and revision strategies enable students to effectively carry out writing tasks of both an academic and functional nature. All class sessions are conducted in English. Prerequisites: Placement through the departmental writing exam and an oral interview conducted by an academic advisor in the Bilingual Studies Department. Co-requisites: ESL 073, ESL 074, ESL 075, & ESL 076.

ESL 080 ESL BASIC ACADEMIC GRAMMAR 4.5 Credits

This course is for students who need to understand basic English grammatical structures for effective communication and self-error analysis and correction. The grammatical structures will be presented in a natural context through informative, high-interest readings, meaningful discussions, and follow-up exercises. Co-requisite: ESL 080T.

ESL 080T ESL BASIC ACADEMIC 1 Credit
GRAMMAR (Tutorial)

Supplemental instruction of ESL 080 is a combination of self-directed web-based, classroom, and individualized “one-on-one” instruction with faculty as well as trained instructional assistants. Emphasis is on reinforcement of classroom and lecture as well as training in the use of the College’s web-based system for student information, registration, library usage, etc. Co-requisite: ESL 080.

ESL 095 ESL WRITING, READING 6 Credits
AND COMMUNICATION

This is an intermediate ESL writing course designed for students whose first language is not English. Through extensive reading and writing activities, students will learn to read and write English with greater confidence and ease. In this course, students will read authentic and unedited works of popular fiction and non-fiction in English. By reading, discussing, and writing about what they read, students will enhance their vocabulary and comprehension of written English. Students will also learn to produce fluent, coherent, logical, and academic prose, as they write about topics and books read in class. Grammar will be explained in the context of student writings in an effort to clarify meaning. This course is conducted in English. Prerequisite: Placement through the Bilingual Placement Exam. Co-requisites: ESL 095T.

ESL 095T ESL WRITING, READING AND COMMUNICATION (Tutorial) 2 CREDITS

Supplemental instruction of ESL 095 is a combination of self-directed web-based, classroom, and individualized “one-on-one” instruction with faculty as well as trained instructional assistants. Emphasis is on reinforcement of classroom and lecture as well as training in the use of the College’s web-based system for student information, registration, library usage, etc. Co-requisites: ESL 095.

ESL 100 FORM AND FUNCTION OF ENGLISH 3 Credits

This course is designed to help ESL students gain a better understanding of English grammatical structures necessary for effective communication. The grammatical structures studied in this class are from authentic, unabridged reading material and students’ writings. The focus is on analysis of errors that are typical for ESL students who experience first language interference. This course is for students who are at the ESL 103/104 or ESL 105/106 level, and will be conducted in English. Prerequisites: “C” or better in ESL 095 or placement by writing sample and interview.

ESL 103 ESL WRITING AND COMMUNICATION II 3 Credits

This is a course for students whose first language is not English. The goal of this course is to develop students’ ability to understand, summarize, and discuss abstract ideas in formal academic English. Students learn to produce grammatically accurate, logical, connected, well-developed essays. This course is conducted in English. Prerequisites: “C” or better in ESL 095 or placement through the Bilingual Placement Exam. Co-requisite: ESL 104.

ESL 104 ESL READING AND COMMUNICATION II 3 Credits

This is a course for students whose first language is not English. Through the reading of authentic works of fiction and non-fiction, students increase their command of American English vocabulary, syntax, writing, and speaking styles, and gain introductory knowledge of relevant aspects of American culture, history, and society. This course is conducted in English. Prerequisites: “C” or better in ESL 095 or placement through the Bilingual Placement Exam. Co-requisite: ESL 103.

ESL 105 ESL WRITING AND COMMUNICATION III 3 Credits

This course is for students whose first language is not English. Students learn to write a variety of expository pieces such as paraphrases, book reports, summaries of articles, essays, and term papers. Library research may be required for projects. Students learn to write with grammatical accuracy and clear focus, give importance to logical development of ideas and support for main ideas, and prepare appropriate introductions and conclusions. The course is conducted in English. Prerequisites: “C” or bet-

ter in ESL 103 or placement through the Bilingual Placement Exam. Co-requisite: ESL 106.

ESL 106 ESL READING AND COMMUNICATION III 3 Credits

This course is for students whose first language is not English. The goal of this course is to develop skills necessary for accurate reading and comprehension of unabridged novels, periodicals, non-fiction, and reference materials in anticipation of further college-level work. Students are required to demonstrate reading and comprehension skills through in-class oral presentations, double-entry journals, and a research project. The research project is a synthesis of what has been read and discussed in class. This course is conducted in English. Prerequisites: “C” or better in ESL 104 or placement through the Bilingual Placement Exam. Co-requisite: ESL 105.

ESL 108 ACCELERATED WRITING 3 Credits

The purpose of this course is to guide students through the process of writing and organizing multi-paragraph essays following standard rhetorical techniques. The course addresses the entire process of writing, from the pre-writing stage to the editing and revision steps where grammar and mechanics are covered. Prerequisites: Placement through a writing exam and an oral interview. Co-requisites: ESL 109, ESL 110, ESL 111, and ESL 112.

ESL 109 ACCELERATED READING 3 Credits

This course enables students to efficiently pick out main ideas as well as details from a variety of sources including segments from newspapers, magazines, and novels. Students are required to outline and summarize some of these materials. Techniques for increasing vocabulary are taught. The course assists students in making the transition to college level reading. Prerequisites: Placement through a writing exam and an oral interview. Co-requisites: ESL 108, 110, 111, and 112.

ESL 110 ACCELERATED SPEAKING 3 Credits

This course offers students an opportunity to improve their speaking ability. Students’ pronunciation difficulties are addressed as well as their use of idiomatic English. Students also present several speeches focusing on content and organization. Academic language in class discussions is emphasized. Prerequisites: Placement through a writing exam and an oral interview. Co-requisites: ESL 108, ESL 109, ESL 111, and ESL 112.

ESL 111 ACCELERATED LISTENING COMPREHENSION 3 Credits

This course is designed to improve students’ listening skills in both academic and personal settings. Lectures, videos, and other teaching tools are used to enhance students’ abilities to identify and comprehend main ideas as well as details. Note-taking strategies are practiced to help students prepare

for college-level communication demands. Prerequisites: Placement through a writing exam and an oral interview. Co-requisites: ESL 108, ESL 109, ESL 110, and ESL 112.

ESL 112 AMERICAN CULTURE & DIVERSITY 3 Credits

The purpose of this course is to familiarize international students with basic aspects of American culture and history in preparation for college-level courses. The course engages students in discussions and writings on assigned readings. Students are encouraged to use academic language in classroom discussions and writings. Prerequisites: Placement through a writing exam and an oral interview. Co-requisites: ESL 108, ESL 109, ESL 110, and ESL 111.

Finance

FIN 101 INTRODUCTION TO FINANCE 3 Credits

This course presents a framework of money management concepts. It covers establishment of goals, determining sources of income, and preparing a budget. Emphasis is placed on budget preparation, the development of consumer buying ability, and the use of credit. Students will learn the financial implications of savings and about providing for adequate retirement and estate planning. Prerequisite: "C" or better in ECO 101.

FIN 201 MONEY AND BANKING 3 Credits

This course presents the history of American banking institutions, principles, and practices. Emphasis is on the relationship of finances to business structure, operation, and organization. The course examines present-day financial structures, agents, problems, and institutions. It provides the students with the fundamentals of monetary theory and the role of monetary policy in the economy. Prerequisite: "C" or better in ECO 102.

FIN 207 PRINCIPLES OF INVESTMENT 3 Credits

This course provides an introduction to the security investment process. It reviews the investment strategy associated with various types of stock orders, discusses the fundamental and technical approaches to common stock analysis, and examines bond and preferred stock pricing mechanisms. The course also reviews the unique aspects of derivative security, mutual funds, real estate, and limited partnership investments. Prerequisite: "C" or better in ECO 101.

FIN 209 INTERNATIONAL FINANCE 3 Credits

This course introduces the student to the international financial environment. It focuses on the financial management of businesses operating in international markets. The course covers international monetary systems and foreign exchange risks. Students will learn about short-term and long-term financial markets and the risks associated with them. Prerequisite: "C" or better in ECO 101.

FIN 211 FINANCE SEMINAR/EXPERIENTIAL AND DIRECTED STUDY 3 Credits

In consultation with a faculty advisor, students design and complete an independent project related to an internship, current employment, or life experience. This project aids in the assimilation of students' practical off-campus work or life experience in business, industry, or cultural organizations with their studies and or career interests. The course draws upon students' experiences and integrates them with study in the finance option. Students are required to attend a weekly one-hour session with their professor when they will discuss readings, assignments, and projects. Prerequisite: "C" or better in FIN 101.

French

FRN 101 ELEMENTARY FRENCH I 3 Credits

This is the first half of a one-year course for students with little or no background in the French language. Listening comprehension, speaking, reading, and writing are developed within the limits of basic vocabulary, idioms, and grammar. Pre- or Co-requisite: Placement.

FRN 102 ELEMENTARY FRENCH II 3 Credits

This course is a continuation of FRN 101. It is designed to expand students' knowledge of vocabulary and grammar to include multiple tenses and uses of the verb. The four language skills: listening comprehension, speaking, reading, and writing continue to be developed. Prerequisite: "C" or better in FRN 101 or placement.

FRN 201 INTERMEDIATE FRENCH I 3 Credits

French 201 is a continuation of French 101 and 102. This course is designed to strengthen the four language skills through listening, oral, and written exercises. This intermediate level of French will review grammar points covered in the introductory stages, but focus more heavily on conversational skills by working on dialogues and oral presentations. Cultural variations and significance will be explored through selected readings from the text, short newspaper articles, and films. Prerequisites: FRN 101 and 102 (passing grade of "C" or better in each) or placement.

FRN 202 INTERMEDIATE FRENCH II 3 Credits

French 202 is a continuation of FRN 201. This course aims to further develop and enhance the four language skills and create a greater sense of cultural awareness and appreciation. This will be accomplished through films, course lectures, and articles. Classes will be conducted, for the most part, in French; students will be encouraged to address each other and the professor in French. Class readings will engage students in contemporary concerns in the French and Francophone world; students will be expected to analyze their own views based on the readings. The language's practical side will be further emphasized by discussing how to give directions and handle

daily situations. In addition to developing conversational skills, students will also begin to write short analytical papers. Prerequisites: French 101, 102, and 201 (passing grade of “C” or better) or placement.

Geographic Information Systems

GIS 101 CARTOGRAPHY/COMPUTER MAP READING 3 Credits

This course covers the fundamentals of cartography. Topics include coordinate systems, theoretical principles, and acquisition and use of location data using both continuous and discrete geo-referencing methods. The course provides an introduction to preparation and interpretation of data in cartographic form and the use of computers for map compilation, design, and production. It includes principles of Global Positioning Systems (GPS), surveying, digital cartography, and methods of map making. Pre- or Co-requisites: ENG 096/097 and RDG 096/097 (passing grade of “C” or better for each), or placement. Co-requisite: MTH 101.

GIS 111 FUNDAMENTALS OF GEOGRAPHIC INFORMATION SYSTEM 4 Credits

This course deals with the use of computer mapping and database in multiple applications. The course supports incorporation of imagery and data into a geographic oriented database system, and provides insights into different GIS techniques, approaches, and applications. Topics covered include data structures, basic functions, methods of data capture, sources of data, as well as the nature and source of spatial data and objects. Prerequisite: “C” or better in GIS 101.

GIS 201 INTRODUCTION TO SPATIAL ANALYSIS 4 Credits

This course exposes students to various components of spatial analysis. Emphasis is placed on modeling and decision making with the use of spatial data. Additional emphasis is placed on the acquisition, refinement, and analysis of data from numerous sources. The course promotes the analytical and critical thinking that is required when conducting statistical analysis of geographic data. Emphasis is placed on understanding data at a descriptive level for conducting statistical analysis. Prerequisite: “C” or better in GIS 111.

GIS 211 ADVANCED APPLICATIONS IN GEOGRAPHIC INFORMATION SYSTEM 4 Credits

This course includes the technical aspects of GIS functions, algorithms, theory of geographical data structures, and error handling. Emphasis is placed on laboratory experiences requiring manipulation of tools, data, and macros. Students are introduced to terminology and concepts related to ESRI ArcView GIS software (industry standard software). This course is concerned with ways GIS can be used to analyze, integrate, and communicate geographic information. Prerequisite: “C” or better in GIS 111.

GIS 220 GIS IN HOMELAND SECURITY 3 Credits

This course addresses the compilation, management, and analysis of the many different types of critical geographic elements in our communities. It covers a range of GIS methods for the preparation and implementation of five phases of Homeland Security strategic planning: Risk Assessment, Mitigation, Preparedness, Response, and Recovery. Prerequisite: Approval by Division.

GIS 221 GIS IN LAW ENFORCEMENT 3 Credits

This course will empower law enforcement personnel to view and analyze pertinent information critical to the safety and well being of a community or region through the use of maps and spatial analysis techniques. Geospatial data relevant to law enforcement and crime analysis are: political and administrative boundaries, natural and manmade landscape features, population demographics, policing features, and calls for service (CFS) locations. Prerequisite: Approval by Division.

GIS 222 GIS IN ECONOMIC DEVELOPMENT 3 Credits

The use of Geographic Information Systems (GIS) empowers economic developers to view and analyze pertinent information critical to the growth and development of a community or region. This course enables the visualization and study of these community factors through the use of maps and spatial analysis techniques. Prerequisite: Approval by Division.

GIS 298 GIS APPLICATION PROJECTS 3 Credits

Students use the Project Management Model to discuss and build a campus-wide base map. Selected projects (ANR, PHS, SS) integrate project planning, geographic problem solving tools, software application, project management, data creation, data manipulation, data analysis, reports, and presentations. Prerequisite: “C” or better in GIS 201.

GIS 299 GIS INTERNSHIP 3 Credits

This course provides the opportunity to interact with a municipal, industrial, or service organization. Emphasis is placed on defining a question, gathering and analyzing pertinent data, and drawing conclusions leading to question resolution. Upon completion of the internship, students should be able to demonstrate their command of GIS applications for problem solving. Prerequisite: “C” or better in GIS 298.

Geology

GEO 101 GEOLOGY I 4 Credits

This course in physical geology covers the following topics: minerals, rock types, volcanism, weathering, earthquakes, mass wasting, water, and deformation. Laboratory and field work serve to enhance the topics

covered in the lectures. Prerequisite: Grade of “C” or better in ENG 096. Laboratory fee.

GEO 102 GEOLOGY II 4 Credits

This course is a continuation of GEO 101 focusing on historical geology. Lecture topics include: groundwater, glaciers, geologic time, fossils, evolution, earth history, and life history. Laboratory and field work serve to enhance the topics covered in the lectures. Prerequisite: “C” or better in GEO 101. Laboratory fee.

Health

HLT 101 HEALTHFUL LIVING 3 Credits

This course is offered to help students achieve and maintain optimum health and to understand the principles underlying healthful living. Among the topics covered are mental and emotional health, narcotics, human sexuality, and heart disease. Prerequisite: “C” or better in ENG 096/097 or placement.

History

HST 101 WORLD CIVILIZATION I 3 Credits

This course is the first half of a two-semester sequence. It examines aspects of the major social, political, economic, religious, and intellectual developments of world civilization from earliest times to the seventeenth century. Emphasis is placed on the ideas and institutions that have shaped the culture of world civilization. Pre- or Co-requisites: ENG 096 and RDG 096 (passing grade of “C” or better for each), or placement.

HST 102 WORLD CIVILIZATION II 3 Credits

World Civilization II is the second half of a two-semester sequence. It examines aspects of the major social, political, economic, and intellectual developments of world civilization from the 17th century to the present. Emphasis is placed on the ideas and institutions that have shaped the society and culture of the modern world. It is recommended that HST 101 be taken before HST 102. Pre- or Co-requisites: ENG 096 and RDG 096 (passing grade of “C” or better for each), or placement.

HST 111 AMERICAN HISTORY I 3 Credits

This course surveys the history of the United States from the pre-Columbian period to the end of Reconstruction (1877). It analyzes the political, economic, social, and intellectual events of Native American history, colonial history, the American Revolution and Constitution, the early national period, expansion, slavery, and the sectional differences leading to the Civil War and Reconstruction. Pre- or Co-requisites: ENG 096 and RDG 096 (passing grade of “C” or better for each), or placement.

HST 112 AMERICAN HISTORY II 3 Credits

This course surveys the history of the United States from 1877 to the present. It examines the political, economic, intellectual, and social forces that shaped modern America. Particular attention is given to developments surrounding the industrialization of the United States, the emergence of the United States as a world power, immigration, economic changes in the twentieth century including periods of prosperity and the depression, and the civil rights and women’s rights movements. It is recommended that HST 111 be taken before HST 112. Pre or Co-requisites: ENG 096 and RDG 096 (passing grade of “C” or better for each), or placement.

HST 121 AFRICAN-AMERICAN HISTORY I 3 Credits

This course is an introduction to the African-American historical experience from the 1440’s to 1865, beginning with West African societies and their relations with European explorers and traders. It concludes with the end of slavery in the United States. Students explore the economic, social, political, intellectual, and psychological dynamics of African, Caribbean, and African-American life and the intra- and interracial relations. Pre- or Co-requisites: ENG 096 and RDG 096 (passing grade of “C” or better for each), or placement.

HST 122 AFRICAN-AMERICAN HISTORY II 3 Credits

This course examines the historical presence of Africans in the Americas and the Caribbean from the end of slavery in the 19th century to the present. Students explore the social, political, economic, and psychological dimensions of this experience throughout this global study with focus on United States history and intra- and interracial relations. It is recommended that HST 121 be taken before HST 122. Pre- or Co-requisites: ENG 096 and RDG 096 (passing grade of “C” or better for each), or placement.

HST 131 LATIN AMERICAN HISTORY I 3 Credits

This course surveys the history of Latin America from the pre-Columbian period to about 1830. It focuses on pre-Columbian civilizations, the conquest, the establishment of the Spanish and Portuguese empires, the evolution of a Latin culture, the struggle for independence, and the first attempts at modernization and intellectual independence in Latin America. Pre- or Co-requisites: ENG 096 and RDG 096 (passing grade of “C” or better for each), or placement.

HST 132 LATIN AMERICAN HISTORY II 3 Credits

This course surveys the history of Latin America from about 1850 to the present. Emphasis is on the colonial heritage, the shaping of Latin culture, and the role of neo-colonialism. Special attention is given to the Caribbean nations and to present models of social, cultural, and economic development adopted by Latin American nations. It is recommended that HST 131 be taken before HST 132. Pre- or Co-requisites: ENG 096 and RDG 096 (passing grade of “C” or better for each), or placement.

HST 133 CULTURE AND HISTORY OF PUERTO RICO 3 Credits

This course introduces the student to the culture and history of Puerto Rico by tracing the development of the Puerto Rican nation through the Spanish “discovery” and eventual colonization by the United States. The course includes analysis of the contemporary Puerto Rican scene from a social, political, and economic context. Pre- or Co-requisites: ENG 096 and RDG 096 (passing grade of “C” or better for each), or placement.

HST 134 SURVEY OF AFRICAN HISTORY I 3 Credits

This course examines the growth and development of the African continent from prehistoric times to the early nineteenth century. Considered are the geographic divisions of the continent, ancient empires of Africa, the structure, nature, and significance of African tribal life, and development of European exploitation during the nineteenth century. Pre- or Co-requisites: ENG 096 and RDG 096 (passing grade of “C” or better for each), or placement.

HST 135 SURVEY OF AFRICAN HISTORY II 3 Credits

This is a continuation of HST 134. The course analyzes the 19th century European impact on Africa, the socio-economic, political, and ideological reactions of African peoples, the nature of colonialism and neo-colonialism, and national movements of independence. Pre- or Co-requisites: ENG 096 and RDG 096 (passing grade of “C” or better for each), or placement.

HST 136 SURVEY OF ASIAN CIVILIZATION I 3 Credits

This is the first half of a two-part introduction to the political history of China, Japan, and India. Special attention is given to the diverse value systems that developed in this area, with discussions focusing on the basic philosophical assumptions of Confucian, Buddhist, and Hindu beliefs. The student is introduced to the current scholarship in the field and to primary source translations. The first semester deals with China to 1840, Japan to 1868, and India to 1854. Pre- or Co-requisites: ENG 096 and RDG 096 (passing grade of “C” or better for each), or placement.

HST 137 SURVEY OF ASIAN CIVILIZATION II 3 Credits

This is a continuation of HST 221, bringing China, Japan, and India into perspective in the modern world. It is recommended that HST136 be taken before HST137. Pre- or Co-requisites: ENG 096 and RDG 096 (passing grade of “C” or better for each), or placement.

HST 161 MODERN EUROPEAN HISTORY I 3 Credits

This is the first semester of a two-semester sequence that examines the social, intellectual, economic, and political problems in European history from 1648 to 1914. Particular attention is given to the role of ideas in historical events and processes and to the place of Europe in the context of world civilizations. Pre- or Co-requisites: ENG

096 and RDG 096 (passing grade of “C” or better for each), or placement.

HST 162 MODERN EUROPEAN HISTORY II 3 Credits

This is the second half of a two-semester sequence which explores representative developments in European intellectual and cultural history from the mid-19th century until the 1980s. Emphasis is on France and Germany and on movements and figures that have had an important impact on social and cultural analysis and practice during the last hundred years. It is recommended that HST 161 be taken before HST 162. Pre- or Co-requisites: ENG 096 and RDG 096 (passing grade of “C” or better for each), or placement.

Homeland Security

HLS 101 INTRODUCTION TO HOMELAND SECURITY 3 Credits

This course will introduce students to the vocabulary and important components of Homeland Security. Discussions will focus on the importance of agencies associated with Homeland Security and their interrelated duties and relationships. Exploration of state, national, and international laws impacting Homeland Security and examination of historical events that impact Homeland Security will occur. Likewise, discussions of critical threats confronting Homeland Security today will be addressed.

Hospitality Management

HMM 103 INTRODUCTION TO HOSPITALITY MANAGEMENT 3 Credits

This course provides an introduction to the field of hospitality and to the career opportunities and specific skills required for various positions in the hospitality industry. Pre- or Co-requisites: ENG 096 and RDG 096 (passing grade of “C” or better for each), or placement.

HMM 226 SUPERVISORY DEVELOPMENT IN HOSPITALITY MANAGEMENT 3 Credits

This course is designed to build students’ knowledge and skills in administration with respect to the hospitality industry. Importance is given to methods of motivating people, delegating duties, handling grievances, discipline, and training of subordinates. Prerequisite: “C” or better in HMM 103.

HMM 256 HOSPITALITY MANAGEMENT LAW 3 Credits

This course is designed to familiarize students with laws pertaining to the operation of hotels and motels. The laws include those on accommodations and discrimination, liability for premises, liability of products sold and supplied, property of guest, checks and credit cards, liens and eviction, employer-employee relationships, and related criminal and civil responsibilities. Prerequisite: “C” or better in HMM 103.

HMM 261 HOSPITALITY HOUSING MANAGEMENT 3 Credits

This course identifies, defines, and describes the fundamentals of housekeeping and laundry management in the hotel-motel industry. It covers proper record keeping, organizing, functions, and responsibilities. Practical skills are developed. The course covers the essentials of proper management including proper planning and implementation, efficiency, and meeting standards with regard to purchasing, hygiene, staffing, and scheduling. Prerequisite: "C" or better in HMM 103.

HMM 263 HOSPITALITY MANAGEMENT FRONT OFFICE PROCEDURES 3 Credits

This course analyzes jobs in the hotel-motel front office including that of cashiering, switchboard operating, auditing and posting machine operations, registering, credit, and checking out of guests. Prerequisite: "C" or better in HMM 103.

HMM 264 FOOD AND BEVERAGE MANAGEMENT 3 Credits

This course examines standards of quality, grades, methods of purchasing, receiving, issuing, storage, inventory, and service of food commodities. Basic principles of beverage management and merchandising as related to the hospitality industry are studied. The course includes detailed examination of wines and spirits, their origins, manufacturing process, and service. Prerequisite: "C" or better in HMM 103.

Italian

ITL 101 ELEMENTARY ITALIAN I 3 Credits

This is the first half of a year course for students with little or no background in the Italian language. Listening comprehension, speaking, reading, and writing are developed within the limits of basic vocabulary, idioms, and grammar. Pre- or Co-requisite: Placement.

ITL 102 ELEMENTARY ITALIAN II 3 Credits

This course is a continuation of ITL 101. It is designed to expand students' knowledge of vocabulary and grammar to include multiple tenses and uses of the verb. The four language skills: Listening comprehension, speaking, reading, and writing continue to be developed. Prerequisite: "C" or better in ITL 101 or placement.

Journalism

JRN 141 WRITING FOR THE MEDIA 3 Credits

This introductory course explores content structure and the nature of writing for radio, television, print, and electronic journalism.

JRN 142 NEWS REPORTING (PRINT) 3 Credits

This course includes evaluation of news reports, news gathering methods, writing leads, interviewing, and writing various types of news stories.

JRN 144 JOURNALISM WORKSHOP 1 Credit

This course provides the opportunity to apply the techniques learned in journalism theory courses. Students have the opportunity to work on a variety of college publications. Prerequisite: "C" or better in ENG 141.

JRN 145 JOURNALISM INTERNSHIP 1 Credit Internship Hours: 45

The journalism internship is designed to give students seeking a career in communications the practical experience towards completion of their program. Students will have the opportunity to work on the Essex County College Observer (ECCO) or other approved publications.

JRN 243 INTRODUCTION TO NEWS BROADCASTING 3 Credits

This course is an introduction to broadcast news writing and reporting for radio, television, and the internet.

JRN 245 POLITICS AND THE MEDIA 3 Credits

This is a survey course that focuses on media coverage of politics, special interest groups, and political parties. The course will include analysis of media influence on politicians and advocacy groups. The course will explore the use of advertising, how media messages impact voters, and the effect political campaigns have on society and democracy. Emphasis will be placed upon polls, focus groups, and various audiences.

Massage Therapy

HSC 151 MASSAGE THEORY AND PRACTICE I 4 Credits

This introductory course in massage therapy emphasizes basic massage training using Shiatsu and Swedish massage styles. Lecture topics include: history of massage therapy, theory, benefits, and definitions of techniques. Laboratory work includes hands-on demonstrations and practice sessions to gain proficiency in basic techniques. Prerequisites: MTH 086, ENG 096, and RDG 096, or placement. Co-requisites: BIO 117 or BIO 121, HSC 155.

HSC 152 MASSAGE THEORY AND PRACTICE II 2 Credits

This course builds on massage therapy techniques learned in HSC 151. Emphasis is on Swedish massage and the practical integration of other styles. Lecture topics include: Massage therapy equipment options, massage styles and intention (for example, general relaxation and energizing), introducing the new client to massage, and

building working relationships with clients. Laboratory work includes demonstrations and practice sessions to learn and refine massage techniques related to upper and lower extremities, abdomen, pelvis, and hip. Prerequisite: HSC 151. Co-requisite: HSC 160.

HSC 153 MASSAGE THEORY AND PRACTICE III 4 Credits

This course deals with deep tissue work and medical massage techniques, and refines student knowledge of the human anatomy. Prerequisites: HSC 152, HSC 160, and BIO 117. Co-requisites: BIO 118 and HSC 161.

HSC 155 PROFESSIONAL DEVELOPMENT I 2 Credits

Students are oriented to the role of the professional massage therapist within the health care environment and the general community. Topics covered include: ethics, insurance, contraindication, and regulations at the state and national levels. Prerequisites: MTH 086, ENG 096, and RDG 096, or placement.

HSC 156 PROFESSIONAL DEVELOPMENT II 3 Credits

The course provides detailed information on running a massage therapy business. Topics covered include: Self-analysis and career planning, marketing, pricing, opening a practice, legal requirements, client records, and financial management. Prerequisites: HSC 155 and HSC 160. Co-requisite: HSC 161.

HSC 158 AROMATHERAPY 4 Credits

A course designed to give massage students an introduction to the use of essential oils in the art of massage for healing. Students will learn the history and use of essential oils and how they interact with body chemistry affecting organs and organ systems. They will come to understand that essential oils interact pharmacologically, physiologically, and psychologically with the human body. Students will be educated in the indications, contraindication, and the scope of practice associated with the use of essential oils.

HSC 160 MASSAGE THERAPIST PRACTICUM I 2 Credits

Students under the supervision of faculty apply basic skills hands-on massage therapy techniques with members of the college community. Lectures are centered on assessment of students' performance within the practicum as well as issues related to the challenges encountered in making the proper diagnosis regarding what methodology should have been applied with subject volunteers. Prerequisites: HSC 151, HSC 155, and BIO 117 (or BIO 121). Co-requisite: HSC 152.

HSC 161 MASSAGE THERAPIST PRACTICUM II 3 Credits

During a 15-week period, students build greater confidence and skill while working in the student clinic at

Essex County College and refining their massage style, which now incorporates Shiatsu, Swedish, and deep tissue massage techniques. Prerequisites: HSC 152, HSC 160 and BIO 117 (or BIO 121). Laboratory fee.

HSC 162 MASSAGE THERAPIST PRACTICUM III 2 Credits

This is an advanced lecture and clinical course where students perform massage services in a supervised setting in the campus student clinic as well as at off-campus sites. This course will build greater professional confidence and refine personal massage style incorporating advanced techniques (such as Neuromuscular, Myofascial Release, Reflexology, and Shiatsu).

HSC 165 SELF-CARE FOR THE MASSAGE THERAPIST 1 Credit

Students learn the techniques for preventing repetitive strain injuries, promoting a balanced lifestyle, and improving overall wellness. The self-care techniques that are presented include joint and muscle specific exercises, breathing techniques for stress relief, and visualization/affirmations for career success. Body mechanics and body awareness activities are emphasized. The relationship of posture and body mechanics to pain and injury is also covered. Prerequisites: MTH 086, ENG 096, and RDG 096, or placement.

Mathematics

Mathematics courses should be taken sequentially each semester until you meet the college core proficiency requirement of "C" or better in MTH 092. Upon completion of zero level math courses, you should continue immediately with the math requirements for your major.

MTH 086 INTRODUCTORY ALGEBRA 4.5 Credits

This beginning mathematics course is designed to take students from concrete arithmetic ideas to the more abstract algebraic forms of these ideas. Throughout, the emphasis is on showing students the practical use of concepts and developing understanding by translating English phrases and sentences into algebraic expressions. Topics covered include simplifying arithmetic and algebraic expressions, signed numbers, fractions, decimals, percents, estimations, and geometric applications. Co-requisite: MTH 086T

MTH 086T INTRODUCTORY ALGEBRA (TUTORIAL) 1 Credit

Supplemental instruction of MTH 086 is a combination of self-directed web-based, and individualized "one-on-one" instruction with faculty as well as trained instructional assistants. Emphasis is on reinforcement of class work and lecture. Co-requisite: MTH 086

MTH 092 ELEMENTARY ALGEBRA 4.5 Credits

This course fully develops algebraic concepts introduced

in MTH 086 and the algebra curriculum is extended to include the following topics: linear equations, graphing, exponents, systems of linear equations, elementary quadratic equations, and applications. Prerequisite: “C” or better in MTH 086 or placement. Co-requisite: MTH 092T

MTH 092T ELEMENTARY ALGEBRA (TUTORIAL) 1 Credit

Supplemental instruction of MTH 092 is a combination of self-directed web-based, and individualized “one-on-one” instruction with faculty as well as trained instructional assistants. Emphasis is on reinforcement of class work and lecture. Co-requisite: MTH 092

MTH 100 INTRODUCTORY COLLEGE MATHEMATICS 4 Credits

This course covers topics including special products, factoring, and other operations on polynomials, rational and radical expressions, integral and rational exponents and scientific notation. In addition, analytic and graphical methods of solving linear equations, linear systems, literal equations, and elementary polynomial equations are covered. Students are also introduced to the analytic geometry of functions, including lines, circles, polynomials and conic sections. Diverse applications are emphasized throughout the course. Prerequisite: “C” or better in MTH 092 or placement.

MTH 101 STATISTICS AND PROBABILITY I 4 Credits

This course provides an introduction to the basic ideas and methods of collecting, representing, and analyzing data to report findings using elementary techniques from statistics and probability. Topics include the following: frequency distributions; histograms and frequency polygons; measures of central tendency and variability; conditional probability; percentiles; Z-scores; normal and binomial distributions; confidence intervals; hypothesis testing; and regression and correlation. Prerequisite: “C” or better in MTH 092 or placement.

MTH 102 STATISTICS AND PROBABILITY II 3 Credits

This course is a continuation of MTH 101. Emphasis is placed on sampling theory and hypothesis testing, the t-distribution and the chi-square distribution, regression, correlation, linear prediction, analysis of variance, and non-parametric tests. Prerequisite: “C” or better in MTH 101.

MTH 103 FUNDAMENTAL CONCEPTS OF MODERN MATHEMATICS I 4 Credits

This survey course considers the basic foundation concepts of Mathematics and is also intended to impart an appreciation of the impact of mathematics as a historical cultural force. Topics are chosen from set theory, mathematical systems, algebra, number theory, geometry, counting methods, and elementary probability and statistics, and emphasize practical applications and associated calculator techniques. Prerequisite: “C” or better in MTH 092 or placement.

MTH 104 FUNDAMENTAL CONCEPTS OF MODERN MATHEMATICS II 3 Credits

This course is a continuation of MTH 103. Topics covered include symbolic logic, the algebra of sets, probability, and selected topics from plane and solid geometry. Prerequisite: “C” or better in MTH 103.

MTH 109 TECHNICAL MATHEMATICS 3 Credits

This course covers topics selected from arithmetic, algebra, geometry, and trigonometry with applications. This course is offered to meet the needs of specific disciplines, e.g., Radiologic Technology, Ophthalmic Dispensing, and Chemical Technology. Prerequisite: “C” or better in MTH 092 or placement.

MTH 113 COLLEGE ALGEBRA WITH TRIGONOMETRY 4 Credits

This course covers topics from algebra and trigonometry at a level and emphasis appropriate for applied technology majors who will continue on with a at least one semester of applied calculus. Topics are chosen from the following: functions and their graphs, angles and triangles, systems of linear equations with determinants, trigonometric functions, equations and identities, exponential and logarithmic functions, and a general treatment of conic sections. Prerequisite: “C” or better in MTH 100 or placement.

MTH 114 UNIFIED CALCULUS I 3 Credits

This course provides an introduction to one variable differential and integral calculus, emphasizing methods and applications. Topics include limits, continuity, the derivative, differentiation formulas for algebraic functions, anti-differentiation, the Fundamental Theorem of Calculus, and an introduction to the techniques of integration. Prerequisite: Grade of ‘C’ or better in MTH 113 or placement.

MTH 116 MEDICAL MATHEMATICAL CALCULATIONS 1 Credit

This course reviews basic mathematical calculations and conversions and emphasizes how these techniques are used in the administration of medications. Prerequisite: “C” or better in MTH 092 or placement. Co-requisite: NRS 107.

MTH 117 MATHEMATICS FOR MANAGEMENT SCIENCE 3 Credits

This course covers linear programming techniques used to solve optimization problems, matrix methods used to solve systems of linear equations, graphs and networks, difference equations, the mathematics of finance, introductory applied probability and statistics, and an introduction to decision science. Prerequisite: Grade of ‘C’ or better in MTH 100 or placement

MTH 119 PRECALCULUS I **4 Credits**

This course, along with MTH 120, prepares students for a rigorous treatment of calculus. Topics covered include absolute value and inequalities; relations and functions; polynomials and rational functions and their graphs; exponential and logarithmic functions and their graphs; and determinants, matrices and their applications. A graphing calculator is highly recommended for use in this course. Prerequisite: “C” or better in MTH 100 or placement.

MTH 120 PRECALCULUS II **4 Credits**

This course, along with MTH 119, prepares students for a rigorous treatment of calculus. Topics covered include trigonometric functions, identities, graphs, and equations; inverse trigonometric functions; vectors and complex numbers; sequences and series; the Binomial Theorem; analytic geometry; and polar coordinates. A graphing calculator is highly recommended for use in this course. Prerequisite: “C” or better in MTH 119 or placement.

MTH 121 CALCULUS WITH ANALYTIC GEOMETRY I **4 Credit**

This is the first course in a rigorous sequence in early transcendental calculus. Topics covered include the theory and application of limits, continuity, differentiation, anti-differentiation and the Fundamental Theorem of Calculus. Methods and applications include related rates, implicit differentiation, indeterminate forms, Newton’s method, the Mean Value theorems, volumes, surface area and arc length. Prerequisite: Grade of “C” or better in MTH 120 or placement.

MTH 122 CALCULUS WITH ANALYTIC GEOMETRY II **4 Credits**

This course is a continuation of MTH 121. Topics covered include force, work, moments and other applications of the definite integral; methods of integration, approximation of area, conic sections, polar coordinates, improper integrals and infinite series. Prerequisite: Grade of “C” or better in MTH 121 or placement.

MTH 127 BASIC CALCULUS **4 Credits**

This course is an intuitive approach to differential and integral calculus of a single variable, with an introduction to multivariable differential calculus, emphasizing applications in business, economics and the social sciences. Prerequisite: “C” or better in MTH 100 or placement.

MTH 136 DISCRETE MATHEMATICS **3 Credits**

This course covers mathematical structures relevant to computer science and computer information systems. Topics include sets, relations, functions, graphs, trees, methods of proof including mathematical induction, recurrence relations, Boolean algebras and their applica-

tion to circuit design, elementary combinatorics, coding theory, and formal languages. Prerequisite: “C” or better in MTH 113 or MTH 119.

MTH 141 MATHEMATICAL STATISTICS **3 Credits**

This course covers the mathematical theory of statistics. Topics offered include counting techniques and mathematical probability, random variables and probability distributions, applications to sampling theory, hypothesis testing, and correlation and regression. Prerequisite: “C” or better in MTH 114 or MTH 121, or placement.

MTH 213 UNIFIED CALCULUS II **3 Credits**

This course is a continuation of MTH 114. Topics include volumes of solids of revolution; derivatives and integrals of transcendental functions; further techniques and applications of integration; polar coordinates; an introduction to multivariable calculus; and first-order differential equations. Prerequisite: “C” or better in MTH 114 or placement.

MTH 221 CALCULUS WITH ANALYTIC GEOMETRY III **4 Credits**

This course, a continuation of MTH 122, covers the theory and applications of vector differential and integral Calculus in \mathbf{R}^2 and \mathbf{R}^3 . Topics include parametric curves and surfaces, general vector fields, partial derivatives, vector differential operators, tangent planes, non-rectangular coordinate systems, multiple integrals, the change of variables theorems, line integrals, and vector integral theorems of Green, Gauss, and Stokes. Prerequisite: “C” or better in MTH 122 or placement.

MTH 222 DIFFERENTIAL EQUATIONS **4 Credits**

This course covers methods for solving ordinary differential equations together with physical and geometric applications, with particular emphasis on linear equations with constant coefficients. Topics include first-order equations, the n^{th} -order linear equation with constant coefficients, power series solutions, Laplace Transforms, linear systems, and numerical methods. Prerequisite: “C” or better in MTH 221 or placement.

MTH 239 INTRODUCTION TO LINEAR ALGEBRA **3 Credits**

This course is an introduction to the theory and applications of linear operators on finite dimensional vector spaces. Topics include linear systems, matrix algebra, Euclidean and general vector spaces, subspaces, change of bases and linear transformations, the eigenvalue problem, projections, orthogonality, the Spectral Mapping Theorem, the Jordan Canonical Form, inner product spaces, and quadratic forms. Prerequisite: “C” or better in MTH 121.

Mechanical/Manufacturing Engineering Technology

MET 201 MANUFACTURING PROCESSES AND MATERIALS 3 Credits

This course deals with the principles, methodology, and economics of manufacturing processes with respect to materials, production operations, and quality control. The topics also include tooling, automation, maintenance, industrial organization and management, marketing, and statistics applied to manufacturing problems. Laboratory work is included. Prerequisite: "C" or better in PHY 101 or placement. Laboratory fee.

MET 202 MODERN MANUFACTURING SYSTEMS AND ROBOTICS 4 Credits

This course introduces the concept of computer integrated manufacturing systems through the use of a flexible manufacturing center comprised of a number of workcells. It covers communication between the individual process controllers and a factory control system. Robot operation and programming is introduced. The course also covers the mechanical aspects of material manipulation, various feedback mechanisms, and the integration of robots with other machines in the workcell. The student applies the design concept and techniques to develop a machine tool operation system. Field trips to assembly plants are included. Prerequisite: "C" or better in MET 201 or placement. Laboratory fee.

MET 210 KINEMATICS 3 Credits

Students learn about moving elements used in the design and analysis of basic mechanisms in machines. Topics covered in the course include velocity and acceleration analysis on a plane, design and analysis of four-bar linkages, and cams, gears, and other mechanisms using graphical and analytical methods. Laboratory work is included. Prerequisite: "C" or better in ENR 110. Co-requisite: MTH 114. Laboratory fee.

MET 211 MACHINES AND CONTROLS 3 Credits

Students learn about DC and AC motors and generators and the transmission mechanisms used to drive mechanical power. The course covers transducers for position and velocity. Programmable logic control (PLC) systems are introduced. Laboratory work involves the use of computer integrated manufacturing (CIM) workcell equipment which includes computer numerical control (CNC) machinery, robotics control systems, and vision control systems. Prerequisites: "C" or better in ELC 115 and PHY 101. Co-requisite: MET 215. Laboratory fee.

MET 215 FLUID MECHANICS 3 Credits

This course covers the basic concepts and applications of fluid systems including essentials of fluid properties, fluid statics, Bernoulli's theorem, fluid measurements, and losses

due to flow in pipes. Laboratory work deals with models and operational systems as well as exercises involving the underlying principles of hydraulics and pneumatic mechanisms. Prerequisite: "C" or better in PHY 101. Co-requisite: MTH 114. Laboratory fee.

MET 225 COMPUTER NUMERICAL CONTROL 4 Credits

This course introduces computer numerical control (CNC) programming in an applied fashion using lathe, milling, and other machines in the laboratory. The course emphasizes mastery of G and M codes and focuses on the integration of computer aided design (CAD), computer aided manufacturing (CAM), and CNC. The latest release of CAM software packages and modern CNC machines are available and used by the students to complete several hands-on projects. Prerequisite: "C" or better in ENR 103 or placement. Co-requisite: ENR 105. Laboratory fee.

MET 250 MECHANICAL ENGINEERING TECHNOLOGY PROJECT 2 Credits

This course is taught in a lecture and demonstration format within the confines of a specialized laboratory. The student completes a comprehensive project that includes the various aspects of mechanical/manufacturing engineering technology. The project must encompass a wide range of topics such as design, CAD, production planning, material handling, machining, and quality control and inspection. Pre- or Co-requisites: "C" or better in MET 202 and MET 211.

Medical Terminology

HSC 109 INTRODUCTION TO MEDICAL TERMINOLOGY 3 Credits

A survey of medical science designed to foster mastery of medical terminology to ensure its accurate and appropriate use in the allied health fields. Medical vocabulary is emphasized and a general discussion of human anatomy and physiology is provided. Disease, diagnosis and treatment procedures are also covered. Pre-requisites: Eng 096 and RDG 096, or ESL 105/106 or placement.

Meteorology

PHY 114 METEOROLOGY 4 Credits

This course covers the composition and structure of the atmosphere, the flows of energy to, from, and through the atmosphere, and the resulting motions produced from small to planetary scales. The physical principles of atmospheric phenomena are stressed to provide an understanding of weather's impact on humans, particularly the impact of severe weather. Methods of analysis are developed through the study of current weather as meteorological data are delivered via the Internet. Laboratory fee.

Music

MUS 100 MUSIC APPRECIATION 3 Credits

This course is designed to develop students' knowledge and appreciation of Western classical music. It also considers certain world music and its influence on the Western tradition. Pre- or Co-requisites: ENG 096 and RDG 096 (passing grade of "C" or better for each), or placement.

MUS 105 MUSICIANSHIP I 2 Credits

This course in music theory, harmony, counterpoint, ear training, sight singing, and composition is designed for the music major. It is the first in the musicianship series (Musicianship I, II, III and IV).

MUS 106 MUSICIANSHIP II 2 Credits

This is a continuation of MUS 105. Prerequisite: "C" or better in MUS 105 or placement.

MUS 108 MUSIC HISTORY 3 Credits

This survey course on musical literature examines the relationship of music to other arts historically, from the romantic period to contemporary music. Pre- or Co-requisites: ENG 096 and RDG 096 (passing grade of "C" or better for each), or placement.

MUS 109 JAZZ APPRECIATION 3 Credits

This course is an introduction to America's classical music and jazz. Importance is given to listening techniques, terminology, style characteristics, and the history of jazz and African-American music. This course is designed for both music and non-music majors. Pre- or Co-requisites: ENG 096 and RDG 096 (passing grade of "C" or better for each), or placement.

MUS 111 MIDI MUSIC COMPOSITION I 3 Credits

This course is designed to create a technical and conceptual foundation for further studies in electronic music. Students will learn and demonstrate basic compositional techniques, including form, melody, rhythm, and harmony. Also, the student will demonstrate the ability to use computers and software to create and perform music. Emphasis will be on developing skills appropriate to the beginning student for the purpose of creative and technical expression. Prerequisite: "C" or better in MUS 105. Laboratory fee.

MUS 115 EAR TRAINING AND SIGHT SINGING I 3 Credits

This course is designed to develop music reading and related aural skills through practice and application of sight reading techniques and ear training procedures.

MUS 116 EAR TRAINING AND SIGHT SINGING II 3 Credits

This course is a continuation of MUS 115. Prerequisite: "C" or better in MUS 115 or placement.

MUS 117 BLACK CONTRIBUTIONS TO MUSIC 3 Credits

This course examines in detail the unique and essential elements that characterize Black music in both vocal and instrumental styles, giving emphasis to its historical development and role as a major force in shaping America's musical taste. Pre- or Co-requisites: ENG 096 and RDG 096 (passing grade of "C" or better for each), or placement.

MUS 118 SOUND DESIGN I 3 Credits

This course introduces students to non-linear digital audio recording, editing, and mixing for music and sound production. It is designed for musicians and media artists who want to learn the Pro Tools feature set and incorporate its use into their music and media production activities. Prerequisite: "C" or better in MUS 105. Laboratory fee.

MUS 121 VOICE CLASS I 2 Credits

This course is designed to train and develop the individual voice and ear for solo work as well as for ensemble singing. Areas of study include breathing, tone production, diction, general musicianship, and interpretation. Four to six credits in voice class are recommended for students planning to major in music education.

MUS 122 VOICE CLASS II 2 Credits

This course is a continuation of MUS 121. Prerequisite: "C" or better in MUS 121.

MUS 131 KEYBOARD CLASS I 2 Credits

Music students apply their knowledge of music theory to the keyboard in class, and develop sufficient technique and facility to classify piano as their minor requirement.

MUS 132 KEYBOARD CLASS II 2 Credits

This course is a continuation of MUS 131. Prerequisite: "C" or better in MUS 131 or placement.

MUS 141 COLLEGE CHOIR I 1 Credit

This course is designed for students who possess vocal and technical abilities. The choir represents the College and meets during the school day to sing both sacred and secular vocal pieces, accompanied and a cappella.

MUS 142 COLLEGE CHOIR II 1 Credit

This course is a continuation of MUS 141. Prerequisite: "C" or better in MUS 141 or placement.

MUS 153 INSTRUMENTAL WORKSHOP I 1 Credit

Practical experience in solo and ensemble instrumental performance is offered. The required performance level for entry into this course is left to the discretion of the instructor.

MUS 154 INSTRUMENTAL WORKSHOP II 1 Credit

This course is a continuation of MUS 153. Prerequisite: "C" or better in MUS 153.

MUS 205 MUSICIANSHIP III 2 Credits

This course is a continuation of MUS 106. Prerequisite: "C" or better in MUS 106 or placement.

MUS 206 MUSICIANSHIP IV 2 Credits

This course is a continuation of MUS 205. Prerequisite: "C" or better in MUS 205 or placement.

MUS 209 CONTEMPORARY ARRANGEMENT AND COMPOSITION 3 Credits

The student is exposed to the techniques involved in providing musical settings for any size performance group, and encouraged to exercise his/her creative ability through the use of technical tools. Prerequisite: "C" or better in MUS 106 or placement.

MUS 221 VOICE CLASS III 2 Credits

This course is a continuation of MUS 122. Prerequisite: "C" or better in MUS 122.

MUS 222 VOICE CLASS IV 2 Credits

This course is a continuation of MUS 221. Prerequisite: "C" or better in MUS 221.

MUS 231 KEYBOARD CLASS III 2 Credits

This course is a continuation of MUS 132. Prerequisite: "C" or better in MUS 132.

MUS 232 KEYBOARD CLASS IV 2 Credits

This course is a continuation of MUS 231. Prerequisite: "C" or better in MUS 231.

MUS 241 COLLEGE CHOIR III 1 Credit

This course is a continuation of MUS 142. Prerequisite: "C" or better in MUS 142.

MUS 242 COLLEGE CHOIR IV 1 Credit

This course is a continuation of MUS 241. Prerequisite: "C" or better in MUS 241.

MUS 253 INSTRUMENTAL WORKSHOP III 1 Credit

This course is a continuation of MUS 154. Prerequisite: "C" or better in MUS 154.

MUS 254 INSTRUMENTAL WORKSHOP IV 1 Credit

This course is a continuation of MUS 253. Prerequisite: "C" or better in MUS 253.

MUS 261-269 K,S,B,W,P,G, V,C, or D

Applied Performance

(Instrument Identified by Letter)

Areas I-IX

1 or 2 credits per course

These are private music instruction courses in a student's chosen performance area of voice or instrument. The chosen area is identified by a letter representing voice or instrument as follows:

K (Keyboard: Piano, Organ, and Harpsichord)

S (String Instruments: violin, viola, cello, string bass)

B (Bass Instruments: trumpet, trombone, tuba, French horn, etc.)

W (Woodwind: saxophone, clarinet, oboe, etc.)

P (Percussion: drums, all percussion family)

G (Guitar: acoustic, electric, bass)

V (Voice)

C (Composition)

D (Drama)

The courses will be either one credit for one half hour private instruction per semester week or two credits for one hour private instruction per semester week. Approval by Music Coordinator is required. Laboratory fee.

New Media Technology

NMT 101 INTERACTIVE MULTIMEDIA DESIGN 4 credits

This course serves as an introduction to New Media Technology. The student will develop a foundation in the creation of such diverse technologies as animation, DVD and CD creation, Flash animation, QuickTime movie creation, audio and video editing, and embedding and media for hand held devices. Students will work in teams in the creation of different and diversified tasks necessary to create a multimedia design project. This course requires lab time. Laboratory fee.

NMT 201 FLASH AND ACTIONSCRIPTING 4 credits

This course introduces students to animation technology using Flash software. Students will develop original Flash presentations. The process includes creating the storyboard, implementing Actionscripting, and creating their final Flash movie. This course requires lab time. Prerequisite: "C" or better in ART171 Cyberspace Graphics and Beginning Animation. Laboratory fee.

NMT 202 GAME DESIGN AND APPLICATION 3 credits

This course introduces the student to the principles of game design and its many diverse uses. The game design process includes imagining the game, defining the way the game will work, describing the elements that make up the game, and transmitting the information to the team who will build the game. The student will learn to create interactive games for different platforms including story-

boarding, character development, interactivity, and introductory scripting. Pre-requisite: "C" or better in NMT173 Flash and Actionscripting or ART171 Cyberspace Graphics and Beginning animation. Laboratory fee.

Nursing

NUR 100 NURSING SUCCESS SEMINAR 2 Credits

This is an introductory course to prepare the nursing student for academic and personal success in the nursing program. The course is designed to teach the nursing student to develop a plan of study and strategies for success. Student management of finances, resources, family issues, and academic issues will be discussed. Students will learn how to utilize college resources to facilitate their success.

NUR 101 FOUNDATIONS OF NURSING 3 Credits

This course will provide nursing students with an introduction into the roles and responsibilities of the professional nurse. The historical development of nursing and the current trends in the nursing profession will be explored. The legal and ethical responsibilities of the professional nurse will be discussed as it applies to the daily practice of nursing. The course covers nursing process, critical thinking skills, and preparatory skills for clinical, laboratory, tutorial, and theoretical assignments. Students will be required to participate in 20 hours of volunteer service in a health care facility.

LPN 101 FUNDAMENTALS OF PRACTICAL NURSING 8 Credits

This course focuses on the development of the role of the Practical Nurse in relation to other professionals within the current health care delivery system. Legal and ethical obligations of the profession are introduced. This course also focuses on the nursing concepts of human relationship and caring, bridging the gap of theory and technical skills using the nursing process to guide through critical thinking application with emphasis on the adult population. The framework of Maslow's hierarchy of basic human needs and Erikson's psychosocial theory of development as it applies to the principles of client hygiene, assessment, safety, comfort, mobility, infection control, elimination, and nutrition will be discussed. Emphasis is on safe care of the adult client whose ability to meet basic human needs has been compromised. Theoretical nursing concepts are applied and clinical skills are reinforced in the laboratory, in acute care setting, and long-term care setting. Concepts that influence nursing practice, such as cultural diversity, spirituality, interpersonal communication skills, and client teaching/learning will be included. The student will begin to develop proficiency in the calculation of drug dosage in medication administration and the use of medical terminology.

LPN 102 ADULT HEALTH 1 8 Credits

This course explores the role of the Practical Nurse in

assisting adult clients experiencing health alterations to meet their basic human needs. Erikson's psychosocial theory is applied in the developmental assessment of clients who are young adults, middle aged, and older adults. Theory is specific to the health care needs of clients with cardiovascular, respiratory, integumentary, and endocrine deficits. Concepts in gerontological nursing, as well as nutrition, diet therapy, and microbiology are integrated throughout the course. The student will be expected to apply theoretical knowledge and proficient clinical skills in interactions with the adult clients. Clinical experience will be in structured health care settings to include medical-surgical units in hospitals, skilled nursing units in the nursing home, and rehabilitation setting. This course will include assessing, planning, implementing, and evaluating nursing care for patients adapting to commonly occurring health problems.

LPN 103 ADULT HEALTH II/ MENTAL HEALTH 9 Credits

This course expands upon Adult Health I and continues with the role of the Practical Nurse in assisting adult clients with medical-surgical and mental health disorders. Current medical and non-traditional therapies will be discussed. Emphasis is placed on the recognition of the client's inability to meet basic needs, selection of appropriate nursing interventions, evaluation of outcomes of care, documentation, and communication with members of the health care team. The student will demonstrate the use of critical thinking in the adaptation of therapeutic communication. Current strategies in adult mental health care and specific legal and ethical guidelines associated with this area are discussed. Clinical experiences will focus on nurse-client communication and nursing in in-patient medical surgical and/or community mental health settings. The nursing process will be used to guide students in all application of the learning environment.

LPN 104 MATERNAL – CHILD HEALTH/PEDIATRIC HEALTH 8 Credits

This course focuses upon the role of the Practical Nurse in caring for clients and families experiencing childbirth, newborns, and pediatric care issues. The primary emphasis is on basic human needs during pregnancy, labor and delivery, postpartum period, and the pediatric client. Erikson's psychosocial theory of development is applied in the assessment of clients from infancy through adolescence. The responses of the child bearing client, children, and their family to illness and hospitalization are discussed. Students are expected to apply theoretical knowledge and proficient clinical skills in interactions with child-bearing, newborn, and pediatric clients. Interpersonal communication skills, legal and ethical considerations, cultural beliefs, practices, and a family-centered approach are integrated throughout. Clinical experiences will focus on nurse-client communication within in-patient and ambulatory settings. The nursing process will be used to guide students in all application of the learning environment.

LPN 105 ROLE TRANSITION**2 Credits**

This course focuses on preparing the student for the NCLEX-PN licensure exam and for assuming a beginning Practical Nursing role, including legal and ethical responsibilities, delegating task to assisted personnel, and participating in continuing education and nursing organizations. Development of personal and professional management and leadership skills are discussed. Employment skills, such as resume writing, job selection, and interview strategies, are included. Emphasis is on assessment of needs in relation to test-taking and nursing content knowledge. A comprehensive examination will be given to determine student status.

PNR 101 NURSING ROLE AND CONCEPT**4 Credits**

This course focuses on the development of the role of the Practical Nurse in relation to other professionals within the current health care delivery system. Legal and ethical obligations of the profession are introduced. Maslow's Hierarchy of Needs and Erikson's psychosocial theory of development are presented as the framework for nurse-client interactions. The integration of critical thinking principles into the nursing process is a key focus. Concepts that influence nursing practice, such as cultural diversity, interpersonal communication skills, and client teaching/learning needs are also discussed. The student will begin to develop proficiency in the calculation of drug dosages and the use of medical terminology. Prerequisites: 2.5 G.P.A. or better in ENG 101, BIOI 121, and PSY 101. Co-requisite: BIO 122.

PNR 102 NURSING FUNDAMENTALS**6 Credits**

This course focuses on the nursing concepts and technical skills that provide the essential foundation for practice. Using the framework of basic human needs, principles of client hygiene, assessment, safety, comfort, mobility, infection control, elimination, and nutrition are discussed. Students begin to apply the basic elements of the nursing process and critical thinking in accordance with the role of the Practical Nurse. Emphasis is on safe care of the adult client whose ability to meet basic human needs has been compromised. Theoretical nursing concepts are applied and clinical skills reinforced in the laboratory and long-term, and/or acute care settings. Prerequisites: "C" or better in PNR 101 and BIO 122. Laboratory fee.

PNR 103 ADULT HEALTH I**7 Credits**

This course builds upon the foundations of the previous courses. Students are introduced to selected medical-surgical disorders and their influence on the adult client's attainment of basic needs. Aspects of therapeutic interventions, such as medications, diet, exercise, surgery and treatments, and the role of the practical nurse are presented. Emphasis is placed on the application of the nursing process and the integration of Maslow's Hierarchy of Needs framework and Erikson's developmental theory. Students refine previously learned skills and practice new skills that correspond with the client's therapeutic regimen. The focus remains on the adult client, with emphasis on the beginning recogni-

tion of teaching/learning and discharge needs for the client and his/her support system. Clinical experiences take place in acute, subacute, and/or community settings. This is a half-semester course. Prerequisites: "C" or better in PNR 102. Co-requisites: PNR 104. Laboratory fee.

PNR 104 MENTAL HEALTH**3 Credits**

This course explores the role of the Practical Nurse as a member of a health care team caring for clients who have mental health alterations. Students will apply the nursing process, using critical thinking and psychosocial theory, to assist clients to meet their basic human needs. Therapeutic communication, current strategies in mental health care, and the specific legal and ethical guidelines associated with this area are discussed. Clinical experiences focus on nurse-client communication in an inpatient and/or community mental health setting. This is a half-semester course. Prerequisite: "C" or better in PNR 102. Co-requisites: PNR 103.

PNR 105 ADULT HEALTH II**6 Credits**

This course expands upon Adult Health I and continues with the role of the Practical Nurse in assisting adult clients with medical-surgical disorders. Current medical and non-traditional therapies will be discussed. Emphasis is placed on the recognition of the client's inability to meet basic needs, selection of appropriate nursing interventions, evaluation of outcomes of care, documentation, and communication with the members of the health care team. Students will demonstrate the use of critical thinking in the adaptation of the nursing process with clients from diverse multicultural backgrounds. Students will implement nursing techniques in the acute care clinical setting. This is a half-semester course. Prerequisites: "C" or better in PNR 103 & PNR 104. Co-requisites: PNR 106. Laboratory fee.

PNR 106 MATERNAL CHILD HEALTH**4 Credits**

This course focuses upon the role of the Practical Nurse in caring for clients and families experiencing childbirth. The primary emphasis is on maternal and child attainment of basic human needs during pregnancy, labor and delivery, and the postpartum period. Expected outcomes and alterations in childbearing are discussed along with medical and nursing interventions. Interpersonal communication skills, legal and ethical considerations, cultural beliefs and practices, and a family-centered approach are integrated throughout. Students will apply the nursing process with childbearing families in inpatient and/or ambulatory settings. This is a half-semester course. Prerequisites: "C" or better in PNR 103 and PNR 104. Co-requisites: PNR 105. Laboratory fee.

PNR 107 PEDIATRIC HEALTH**4 Credits**

This course explores the role of the Practical Nurse in assisting pediatric clients experiencing health alterations to meet their basic human needs. Erikson's psychosocial theory is applied in the developmental assessment of clients from infancy through adolescence. The responses of children and their family to illness and hospitalization

are discussed. Students are expected to apply theoretical knowledge and proficient clinical skills in interactions with pediatric clients. Recognition and prioritization of client needs are demonstrated. Clinical experiences will be arranged in inpatient, community, and/or well child settings. Prerequisites: "C" or better in PNR 105 & PNR 106. Laboratory fee.

PNR 108 ROLE/TRANSITION REVIEW 2 Credits

This course focuses on the preparation of the student for the NCLEX-PN licensure exam and the assumption of a beginning Practical Nursing role, including legal and ethical responsibilities and participation in continuing education and nursing organizations. Development of personal and professional management and leadership skills are discussed. Employment skills, such as resume writing, job selection, and interview strategies, are also covered. Emphasis is on assessment of needs in relation to test-taking and nursing content knowledge. A comprehensive examination will be given to determine student status. Prerequisite: "C" or better in PNR 107. Laboratory fee.

NRS 106 LPN MOBILITY I 2 Credits

This is the first course of the LPN Articulation Option. It includes the essential concepts that an LPN needs to bridge the gap in the role of LPN to RN. It is designed to provide a foundation for all subsequent nursing courses. Students review basic concepts of the nursing profession, the role of the provider of care, and the basic physiologic and higher level needs of man. Classroom activities are designed to help students assess and diagnose basic needs, and assist in meeting those needs in elderly adults who are healthy or who experience simple health alterations. Students are tested in the classroom to determine their proficiency. The goal of this course is to prepare the LPN for a smooth transition into professional nursing. Prerequisites: "C" or better in BIO 121, CHM 101 or CHM 103, and ENG 101. Co-requisite: MTH 116. Laboratory fee.

NRS 107 NURSING I 6 Credits

This course is designed to provide a foundation for all subsequent nursing courses. Students are introduced to basic concepts of the nursing profession, the role of provider of care, and the basic physiologic and higher level needs of man. Laboratory and clinical activities are designed to help students to assess and diagnose basic needs and assist in meeting those needs in elderly adults who are healthy or who experience simple health alterations. Pre or Co requisites: BIO 121, CHM 101 or CHM 103, and ENG 101. (A passing grade of "C: or better for each). Co-requisite: MTH 116. Laboratory fee.

NRS 108 NURSING II 8 Credits

Students render care to clients who have commonly occurring health alterations generally affecting middle adult populations. Laboratory and clinical activities create a construct which assists students to develop the role of

provider of care. Assessment skills and nursing diagnoses are expanded, with a focus on planning and intervention to meet the physiologic, psychosocial, and safety needs of clients. Prerequisites: "C" or better in NRS 107, or NRS 106, MTH 116. Co-requisite: BIO 122. Laboratory fee.

NRS 109 REVIEW OF LEARNING SKILLS AND NURSING CONCEPTS 2 Credits

This is a course for students who are waiting for readmission into the Nursing Program. It involves re-examination of selected professional concepts which were taught in the previous nursing course. Study skills, critical thinking, and test-taking strategies are discussed. The goal of this course is to prepare the student personally and academically to successfully complete the nursing program. Prerequisite: Previous enrollment in a nursing course and awaiting readmission to the Nursing Program.

NRS 111 LPN MOBILITY II 6 Credits

This is the second course in the LPN Articulation Option following NRS 106. Students care for clients who have commonly occurring health alterations generally affecting middle adult populations. Laboratory and clinical activities create a construct which assists the LPN to advance in the role of provider of care. Assessment and nursing diagnoses are expanded with a focus on planning and intervention to meet the physiologic, safety, and psychosocial needs of clients. Credit is given for previous knowledge. Upon successful completion of this course, an additional 6 credits will be given to students who complete NRS 106 and NRS 111. Prerequisites: "C" or better in NRS 106; Co-requisite: BIO 122. Laboratory fee.

**NRS 231 MATERNAL HEALTH NURSING 4 Credits
(For graduates of Foreign Schools of Nursing)**

This course is for graduates of foreign schools of nursing to assist them in fulfilling the Maternal Health Nursing requirements for CGFNS Certification. Focus is on the emotional, social, and physiological tasks and needs of the family within the childbearing years. This includes the relationships of the individuals; the reproductive growth and development cycles through the neonate; maintenance of health before, during, and after the birth of the child; and prevention of common health problems during pregnancy. Complications during childbearing as well as women's health are also considered. Nursing care involves the assessment, diagnosis, planning, and evaluation skills as they apply to rendering safe, professional nursing care during pregnancy, labor and delivery, the postpartum and neonatal periods. Special admission requirements apply. See the Chairperson, Department of Nursing.

NRS 233 NURSING III 9 Credits

Students render care to clients who have complex health alterations generally affecting young adult populations. The focus is on further development of the role of provider of care. Students continue to develop communication skills and the ability to assist clients to meet higher level

needs. Laboratory and clinical activities assist students to assess, diagnose, plan, and evaluate nursing care, and to refine previously learned nursing skills to render care to clients with complex health alterations. Prerequisites: "C" or better in NRS 108 or NRS 111, BIO 122, PSY 101. Co-requisite: BIO 211. Laboratory fee.

NRS 234 NURSING IV 9 Credits

Students render care to clients with potential and/or actual alterations associated with the childbearing/rearing developmental phases. The course enables students to further refine their expertise as providers of care and to develop skills associated with being managers of care. Students are required to apply to the nursing process an integration of their knowledge of basic and developmental needs and previously learned health alterations. Laboratory and clinical activities focus on assessment, planning, implementation, and evaluation of care of clients within the context of family or significant group, and the application of complex nursing skills. Prerequisites: "C" or better in NRS 233, BIO 211. Co-requisite: NRS 235. Laboratory fee.

NRS 235 NURSING SEMINAR 2 Credits

This is a seminar course where students integrate all nursing concepts. The focus is on analysis and application of current professional trends and issues. The role of member of the profession is explored and operationalized. Laboratory exercises are designed to develop computer assisted test-taking skills with respect to all areas of nursing practice. Prerequisites: "C" or better in all major program requirements. Co-requisite: NRS 234.

NRS 291 PSYCHIATRIC-MENTAL HEALTH NURSING 4.5 Credits
(For graduates of Foreign Schools of Nursing)

This course is for graduates of foreign schools of nursing to assist them in fulfilling the Psychiatric/Mental Health requirements for CGFNS Certification. The course focuses on the use of the nursing process in caring for young adults who are experiencing threats to their potential for self-actualization. The nursing process is developed as a tool with emphasis placed on shifting nursing care priorities and evaluating care. Nursing care involves the assessment, diagnosis, planning, and evaluation skills as they apply to rendering safe, professional nursing to clients with alterations in their mental health. Special admission requirements apply. See the Chairperson, Department of Nursing.

Nutrition

HSC 101 INTRODUCTION TO NTRITION 3 Credits

This basic course in nutrition and diet therapy examines the principles of nutrition and their application in daily dietary practice. The classifications of nutrients in food, their sources, and their impact in normal or deficient

intake are explored in detail. The course examines how diet and nutrition relate to the pathologic and pathophysiologic processes of the body, and also the benefit of food to emotional health. The concepts of digestion, absorption, transport, and elimination are reviewed. Energy obtained from food that supports the ongoing activities of body tissue and the mechanisms used to maintain energy balance are examined. Prerequisite: "C" or better in BIO 100 or higher or in CHM 100 or higher.

HSC 102 NUTRITION THROUGH THE LIFE CYCLE 3 Credits

This course explores the role and the effect of nutrition and diet on preconception, pregnancy, lactation, infancy, childhood, adolescence, adulthood, and aging. It examines characteristics of normal growth and development, nutrition assessment, nutrition needs, and the common deficiencies seen in each phase of the life span. Students gain practice in menu planning for each stage of life. Prerequisite: "C" or better in HSC 101.

Office Administration & Computer Technology

OCT 101 INTRODUCTION TO COMPUTER LITERACY AND KEYBOARDING 3 Credits

This course provides an introduction to personal computers and is specifically designed for students who have little or no experience using a computer. The course will also assist the student in developing alphanumeric keyboarding proficiency with particular emphasis given to the development of alphabetic keyboarding speed and accuracy. Included in this course are overviews of basic computer concepts and the essentials of Microsoft Windows.

OCT 100 MICROCOMPUTER KEYBOARDING 1 Credit

This course is designed to assist the student in developing alpha-numeric keyboarding proficiency. Emphasis is on developing speed and accuracy in using the computer for keyboarding. Preor Co-requisites: ENG 096/097 and RDG 096/097 (passing grade of "C" or better for each), or placement.

OCT 104 INTRODUCTION TO WORD PROCESSING 1 Credit

This course introduces computer word processing (Microsoft Word for Windows) concepts and provides students hands-on experience in creating, formatting, editing, saving, printing, and retrieving documents. Students learn to prepare documents such as personal and business letters, job application letters, resumes, and multiple page reports with footnotes. Prerequisite: "C" or better in OCT 100 or CIS 107 or ENG 088/089.

**OCT 105 MICROCOMPUTER KEYBOARDING 3 Credits
AND DOCUMENT PROCESSING**

This course is designed to help students develop a mastery of the microcomputer keyboard using the touch method. Students learn correct keyboarding techniques and formatting for producing manuscripts, simple tables, and personal and business letters. (This course is not a substitute for OCT 106. Students in certificate and degree programs in Word Processing, Office Careers, and Office Systems Technology must take OCT 106.) Prerequisite: "C" or better in OCT 100 or OCT 104. Preor Co-requisites: ENG 096/097 and RDG 096/097 (passing grade of "C" or better for each), or placement.

OCT 106 KEYBOARDING AND FORMATTING I 3 Credits

This course is designed for students with prior keyboarding background. It expands their knowledge and skills in document formatting and word processing. This focus is on developing vocational competency; students learn to use computers as a business tool for preparing a wide range of typical business correspondence such as tables, reports, and forms from unarranged and rough-draft sources. Emphasis is also on developing proofreading, competency and promoting the Industrial Standards of 35-40 WPM keyboarding speed.

**OCT 107 DOCUMENT PUBLICATION 3 Credits
AND DESIGN**

This course continues developing keyboarding skills with emphasis on the advanced formatting of various kinds of business correspondence including reports, tables, electronic forms, medical office documents, and legal office documents. It covers using and designing miscellaneous office forms, designing office publications, and designing web pages and desktop publishing projects from arranged, unarranged, and rough-draft sources. In addition, students are introduced to the popular software program, Microsoft® Publishing. Prerequisites: OCT 106 or equivalent or permission of the Business Division.

OCT 121 BUSINESS COMMUNICATIONS 3 Credits

This course reviews in a practical, step-by-step manner the major areas of grammar and language arts skills, including spelling and business terminology. Students are presented rules, examples, and intensive practice materials relating to improvement of communication skills at the business and professional level.

OCT 122 OUTLOOK MANAGEMENT 2 Credits

This course provides an overview of Microsoft Outlook 2003, a powerful communications and scheduling program that helps individuals communicate with others, keep track of contacts, and organize schedules. Outlook allows individuals to send and receive electronic mail and permits engagement in real-time messaging with family, friends, or coworkers using instant messaging. Outlook also provides the means to organize your contacts. Users can easily track e-mail messages, meetings, and notes

with a particular contact. Outlook's Calendar, Contacts, Tasks, and Notes components aid in this organization. This personal information management (PIM) program provides a way for individuals and workgroups to organize, find, view, and share information easily.

OCT 210 OFFICE SYSTEMS MANAGEMENT 3 Credits

This course provides a comprehensive coverage of supervisory management, particularly as it applies to the first-line office supervisor in a high-tech office environment. Emphasis is on job planning and controlling the work; making effective decisions; managing conflict and change; recruiting, training, and supervising personnel; ensuring employee safety and health; dealing with unions, grievances, and discipline; improving productivity and cost control; supervising oneself; managing time and stress; and developing a career plan. Prerequisites: Completion of 12 credits in Office Administration and Computer Technology courses or permission of OCT/ Business adviser.

**OCT 215 SPECIALIZED MACHINE 3 Credits
TRANSCRIPTION**

This course is designed to develop knowledge and skills in processing pre-recorded communications using word processing software. Seven elements of transcription are reviewed and emphasized: Knowledge of equipment, listening, professional development, proofreading, keyboarding, formatting techniques, and English grammar and usage. Legal and medical terminology use is also covered. A variety of documents that contain such terminology are processed from pre-recorded tapes. Prerequisites: "C" or better in OCT 106, OCT 121, and OCT 250.

OCT 220 MEDICAL OFFICE PROCEDURES 3 Credits

This course provides students interested in working in a medical office the opportunity to integrate previous skills in keyboarding, word processing, transcription, and communications as they apply to work in medical facilities. The course also covers procedures in filing; preparation of medical forms, financial records and reports, and case histories; ordering supplies; and duties of the receptionist, secretary, and other medical office personnel. Prerequisites: "C" or better in ENG 101, OCT 106, and HSC 109.

OCT 230 LEGAL OFFICE PROCEDURES 3 Credits

This course introduces students to the highly specialized skills and knowledge necessary for legal office work. Topics covered include: Legal terminology, ethics, financial record keeping, filing procedures, and current legal office procedures. Students also learn to use computers to process legal documents and correspondence. Prerequisites: "C" or better in OCT 107, OCT 121, and OCT 250.

**OCT 250 WORD/INFORMATION PROCESSING 3 Credits
APPLICATIONS I**

This course provides hands-on experience in the operation of computers. Students learn to use state-of-the-art word processing software, such as Microsoft Word. They learn to carry out such tasks as booting the equipment, saving, editing and retrieving, list/merging, sorting, and other specialized machine operations. Documents that students learn to process are representative of those prepared in typical business offices. Emphasis is also placed on the related areas of proofreading and copy editing. In addition, the Microsoft Office Specialist (MOS) certification program will be described in detail. Prerequisites: "C" or better in OCT 105 or placement.

**OCT 251 WORD/INFORMATION PROCESSING 3 Credits
APPLICATIONS II**

This course is a continuation of OCT 250. Students will review the basic concepts of Microsoft Word for Windows and will be introduced to advanced applications not covered in OCT 250. A variety of realistic business documents will be created, in addition to MOS (Microsoft Office Specialist) activities. Proofreading and editing skills will be emphasized. Pre-requisites: OCT 106, OCT 121, OCT 250, and ENG 101 or current full-time administrative/office employment.

**OCT 252 ADMINISTRATIVE OFFICE 3 Credits
SIMULATION**

This course provides a realistic administrative assistant simulation at a medium-sized technology company. Students will be working for the manager of the Human Resource and Development department, but will also perform duties for other departments, as deemed necessary by the supervisor. Responsibilities will include assisting the Director in the daily performance of assignments, maintaining telephone, e-mail, and correspondence with contacts, planning and scheduling of meetings and events, planning and execution of travel arrangements, and drafting correspondence. These activities refine the skills and competencies necessary for effective job performance by administrative support professionals.

OCT 290 OCT INTERNSHIP 3 Credits

This course provides students the opportunity to gain practical work experience related to an occupational specialization or program. Part-time employment opportunities in banks, insurance companies, law firms, government agencies, and other offices enable students to apply skills learned in the classroom to an actual work situation. Supervision and guidance are offered by the training sponsor and the program coordinator. Students attend a seminar once a week to integrate and discuss the work experience and the specialized program. This course should be taken only in the last semester of the certificate or degree program. Divisional permission is required the semester before desired enrollment in this course. Prerequisites: All OCT courses to this level.

Paralegal Studies

**PLS 101 INTRODUCTION TO 3 Credits
PARALEGAL STUDIES**

This course provides an introduction to the legal profession in general, the specific role of paralegals, and their relationship to other legal professionals. Students explore the American legal system and are introduced to federal and state courts. The course examines in detail the Code of Professional Ethics and other related standards of proper conduct. Pre- or Co-requisites: "C" or better in ENG 096 and RDG 096 (passing grade of "C" or better for each), or placement.

**PLS 102 LEGAL RESEARCH AND 3 Credits
WRITING**

This course serves as an introduction to the specific research and writing functions and skills necessary to perform as a legal assistant. Students learn to analyze legal problems using locators and other general references in the law library. Students brief cases, write legal memoranda, and use the Shepard's Citators. The course also introduces students to the use of computer-assisted legal research including the use of WESTLAW, Lexis-Nexis, reporter systems, and statutory materials. The course also examines the role of the paralegal, the Code of Professional Ethics, and other related standards of proper conduct. Prerequisites: "C" or better in both ENG 101 and PLS 101.

PLS 105 TORTS 3 Credits

This course covers the principles of tort law, its application in commonly faced situations in law practice, and the role of the paralegal in the preparation of a tort claim. Emphasis is placed on negligence and the defenses to negligence. The course also examines the role of the paralegal, the Code of Professional Ethics, and other related standards of proper conduct. Prerequisite: "C" or better in PLS 101.

PLS 107 CONTRACTS 3 Credits

This course provides an introduction to the basic elements of contract law and contract formation and discharge including offer, acceptance, consideration, capacity, intent, discharge, and remedies. Students learn to draft simple clauses and contracts. The course also examines the role of the paralegal, the Code of Professional Ethics, and other related standards of proper conduct. Prerequisite: "C" or better in PLS 101.

**PLS 108 INTRODUCTION TO 3 Credits
NURSE PARALEGALISM**

This course provides an introduction to the legal nurse profession. It includes examination of the history, evolution, and role of the legal nurse practitioner in the areas of legal analysis, research and writing, review and analysis of medical records, litigation procedures, medical/legal ethics, and personal injury law. The business and marketing plan of an independent legal nurse practitioner is also examined.

PLS 202 ADVANCED LEGAL RESEARCH AND WRITING 3 Credits

This course is designed to improve and refine legal research and writing skills through a series of assignments which require in-depth research and legal analysis and which are designed to simulate actual assignments given to paralegals in the workplace. The course also examines the role of the paralegal, the Code of Professional Ethics, and other related standards of proper conduct. Prerequisite: "C" or better in PLS 102.

PLS 203 WILLS AND ESTATE ADMINISTRATION 3 Credits

Students are introduced to the basic provisions of the law of wills and estates. They learn to draft wills and other appropriate instruments. The laws of interstate succession and the law of trusts are also examined. The course also examines the role of the paralegal, the Code of Professional Ethics, and other related standards of proper conduct. Prerequisite: "C" or better in PLS 101.

PLS 204 BUSINESS ORGANIZATIONS & GOVERNMENT REGULATION 3 Credits

This course examines in detail the forms of business organizations with emphasis on partnerships and corporations. Employment law and government regulation of businesses are also studied. The course also examines the role of the paralegal and the Code of Professional Ethics and other related standards of proper conduct as applied to partnerships and corporations and other business organizations. Prerequisite: "C" or better in PLS 101.

PLS 205 ADMINISTRATIVE LAW 3 Credits

This introductory course in administrative law focuses on the sources and evolution of administrative law, administrative agencies, due process, delegation, rule making, investigation, adjudication, and judicial review. It includes examination of the Administrative Procedures Act and a review of the ethical principles of administrative law. Prerequisite: "C" or better in PLS 101.

PLS 206 LITIGATION PROCEDURES 3 Credits

This course examines the rules governing a case as it moves through the courts and basic litigation procedures. Topics covered include state and federal court rules and procedures, client interviews, pleadings, discovery proceedings, trial preparation, and the appellate process. The course also examines the role of the paralegal, the Code of Professional Ethics, and other related standards of proper conduct. Prerequisite: "C" or better in PLS 101.

PLS 210 PROPERTY TRANSACTIONS 3 Credits

Students are introduced to the law of property as well as to the various types of property transactions and related matters. Topics covered include contracts, mortgages, leases, deeds, title searches, and recording statutes. Students learn to prepare sample real estate closing docu-

ments. The course also examines the role of the paralegal, the Code of Professional Ethics, and other related standards of proper conduct. Prerequisite: "C" or better in PLS 101.

PLS 211 MEDICAL LEGAL ETHICS 3 Credits

This course examines the major ethical codes of the medical and legal professions as set forth by the ABA, AMA, ANA, AALNC, NALA, and NFPA. How the principles of these codes apply to contemporary medical and legal issues is also covered, with emphasis on application to the role of the legal nurse.

PLS 220 FAMILY LAW 3 Credits

This course examines substantive and procedural laws and rules pertaining to marriage, dissolution of marriage, child support and custody, separation agreements, adoption, surrogate motherhood, and custody issues. The course also examines the role of the paralegal, the Code of Professional Ethics, and other related standards of proper conduct. Prerequisite: "C" or better in PLS 101.

PLS 225 LAW OFFICE MANAGEMENT AND FIELD EXPERIENCE 3 Credits

Students are placed in law-related positions to gain practical experience necessary for success as legal assistants. Students are required to establish learning objectives related to their positions to effect the attainment of specific job competencies. Students are required to attend routine sessions on campus with their professor to review their work experiences. The course also examines the role of the paralegal, the Code of Professional Ethics, and other related standards of proper conduct. Prerequisites: "C" or better in PLS 202 and PLS 206.

Philosophy

PHI 101 INTRODUCTION TO PROBLEMS IN PHILOSOPHY 3 Credits

This course provides an introduction to the basic problems of philosophy, such as metaphysics, epistemology, ethics, aesthetics, and others. Pre- or Co-requisites: ENG 096 and RDG 096 (passing grade of "C" or better for each), or placement.

Physical Education

PHE 101 INTRODUCTION TO PHYSICAL EDUCATION 2 Credits

This course provides an introduction and professional orientation to the field of physical education. The role of the instructor of physical education in schools, industry, and community agencies is emphasized. The scientific foundations of physical activity and career opportunities in physical education are also examined. Pre- or Co-requisites: ENG 096 and RDG 096 (passing grade of "C" or better for each), or placement.

PHE 107 BEGINNER AQUATICS 1 Credit

Students are introduced to basic water safety skills to enable them to be reasonably safe while in, on, or above the water. Prerequisite: Permission of instructor.

PHE 115 FIRST AID AND SAFETY 2 Credits

This course provides an introduction to preventive measures and first aid practices and procedures used in the event of accidents or illness. The course emphasizes principles and procedures that form the basis of safety education. Pre- or Co-requisites: ENG 096 and RDG 096 (passing grade of "C" or better for each), or placement.

PHE 117 INTERMEDIATE AQUATICS 1 Credit

This course is a continuation of PHE 107 and is designed to develop advanced skills in swimming and personal safety. Prerequisite: "C" or better in PHE 107 or placement by instructor.

PHE 119 CONCEPTS IN PHYSICAL EDUCATION 2 Credits

Through a series of lectures, various aspects of health and physical fitness are explored. In addition to mastering selected concepts concerning health and physical fitness, each student develops, through self-testing laboratories, his/her own physical fitness profile. Each student assesses his/her fitness level and designs a program of exercise to achieve and/or maintain fitness. Pre- or Co-requisites: ENG 096 and RDG 096 (passing grade of "C" or better for each), or placement.

PHE 151 SOCCER/SPEEDBALL 1 Credit

This fifteen-week course is designed to develop basic skills, knowledge, and appreciation of the games and to also develop performance proficiency in both activities.

PHE 153 BASKETBALL 1 Credit

Students learn the fundamentals, techniques, and strategies of the game, and also gain an appreciation of the complexities of the game. While it is not expected that a student has experience or familiarity with basketball, it should be noted that this fifteen-week course requires a high degree of physical exertion.

PHE 157 VOLLEYBALL 1 Credit

This course covers the historical development and present status of the sport. Students receive instruction in the fundamental skills, game strategy, rules, terminology, and specifics concerning safety. This course is fifteen weeks long and students are advised to be prepared for a demanding level of physical interaction.

PHE 251 BADMINTON 1 Credit

Students receive instruction in the fundamental skills and techniques of the sport. The course also examines the his-

tory of the sport, current trends, rules, terminology, equipment, and etiquette. Students will play in double and single games to perfect their skills. This fifteen-week course is designed to allow students of varied physical states of preparedness to explore a moderate form of exercise.

PHE 252 BOWLING 1 Credit

Students receive instruction in the fundamental skills and techniques of the sport. The course covers: approach, release, follow-through, aiming, scoring, rules, etiquette, and selection of equipment. The course covers fifteen weeks of instruction. Students should be mindful of the amount of time necessary for commuting to the location of the bowling alley and returning to campus for classes immediately following this course.

PHE 253 GOLF 1 Credit

Students receive instruction in basic golf strokes, rules, etiquette, and playing opportunities. The course includes analysis of the sport through instant video replay. This fifteen-week course is only offered during the Spring of the year.

PHE 255 TENNIS 1 Credit

Students receive instruction in the fundamental skills and techniques of the sport. The course covers forehand and backhand strokes, serve, volley, lob, and smash. Strategies, hand grips, rules of the game, and selection of equipment are also discussed. Development of performance proficiency in the sport is a basic objective of this course. By the end of this fifteen-week course, students will be expected to successfully engage in doubles and intra class competition.

PHE 256 TRACK AND FIELD 1 Credit

This course introduces students to the techniques and mechanics of such activities as running/sprinting, jumping, throwing and hurdling, and development of speed, power, and endurance. This fifteen-week course will necessitate that students come to class prepared with appropriate running attire.

PHE 257 WEIGHT TRAINING FOR FITNESS 1 Credit

Students are required to follow a regimen of progressive, resistance exercises for developing physical fitness. Individual assistance is rendered to help the student with the regimen in order to build strength, stamina, endurance, and muscle tone. At the end of the fifteen-week course, students will complete a personal assessment of their individual progress.

PHE 258 WRESTLING 1 Credit

Students receive instruction in the fundamental skills and techniques of the sport. The course covers the historical development and present status of the sport, offensive and defensive skills, rules, strategies, and specific techniques. Safety and training procedures are also examined. Students must be physically prepared for the rigors of fifteen weeks of strenuous class interaction.

PHE 260 GYMNASTICS ON APPARATUS 1 Credit

Students receive instruction in the various methods of gymnastics. They start with basic gymnastic movements and advance to more difficult movements. Student progression to various levels is determined by how well they perform specific skills and their mastery of equipment. Students are provided instruction in vaulting, horse, parallel bars, high bar, balance beam, and rings. Safety measures related to equipment and spotting are emphasized. Students must be prepared to complete a full fifteen weeks of class.

PHE 261 COACHING AND OFFICIATING 2 Credits
FOOTBALL

This course offers instruction in various types of offensive and defensive patterns, rules, strategy, scouting techniques, and officiating mechanics.

PHE 262 COACHING AND OFFICIATING 2 Credits
SOCCER

This course covers the basic principles and coaching methods for competitive soccer and also the mechanics of officiating.

PHE 263 COACHING AND OFFICIATING 2 Credits
BASKETBALL

This course covers coaching methods for competitive basketball, strategy, scouting essentials, and mechanics of officiating.

PHE 266 COACHING AND OFFICIATING 2 Credits
CROSS COUNTRY/TRACK AND FIELD

This course covers coaching principles and practices, scouting techniques, rules, strategy, and scoring.

PHE 270 AEROBIC ACTIVITY 1 Credit

This course is designed to help students develop and maintain body flexibility, muscular strength, muscular endurance, cardiovascular endurance, and ideal body composition through aerobic dance and exercise. Students perform prescribed dance/exercise type movements to music.

PHE 275 TABLE TENNIS 1 Credit

This course introduces the student to the skills, strategies, techniques, and components of the game of Table Tennis. Hand-eye coordination, agility, reaction time, cardiovascular endurance, and mental alertness skills will be developed to enhance competitive abilities. Rules, equipment, and tournament play will be taught as a part of the Table Tennis experience.

PHE 276 SELF-DEFENSE 1 Credit

This course is designed to help students develop self-defense skills. Students receive instruction on a variety of basic self defense movements including styles of American

Karate. The course covers the physical, verbal, and spiritual benefits of Karate and also safety precautions.

PHE 277 ELEMENTS OF HATHA YOGA 1 Credit

During this fifteen-week course, students perform stretching and breathing exercises based on Hatha Yoga. These exercises (asanas), if practiced regularly and methodically, aid in maintaining good health, improving cardiovascular circulation, and reducing stress. The exercises, when mastered, stretch and flex all major areas of the body in a balanced fashion, increasing blood flow and improving breathing. Students keep a log of their individual progress and do a research report on the benefits of Hatha Yoga and its relationship to good health.

Physical Therapist Assistant

PTA 101 FUNDAMENTALS OF PHYSICAL 5 Credits
THERAPIST ASSISTING I

This course is designed to orient the student to the role of the Physical Therapist Assistant and some of the duties involved therein. It covers the history of physical therapy, philosophy, duties, patient psychology, and ethics. Students learn about the relationship and placement of physical therapy in today's medical picture. Fundamentals of body structure, osteology, and kinesiology are stressed throughout. Students practice patient positioning, draping, transfers, therapeutic massage, and are also introduced to therapeutic exercises. Students learn via laboratory work and practice sessions in class. Prerequisite: Formal acceptance into the program. Laboratory fee.

PTA 102 PRINCIPLES OF PHYSICAL 5 Credits
THERAPIST ASSISTING I

This course is designed to introduce students to disorders most commonly seen in patient care. It includes detailed examination of the application and effects of various modalities and equipment, particularly the use of heat, cold, water, and electricity in clinical practice. Students learn the use of equipment, including traction and intermittent compression pumps. They also learn the practical application of goniometric measurements, manual muscle testing, and ambulation training. Students learn via laboratory work, practice sessions in class, and observations in physical therapy clinics. Prerequisite: "C" or better in PTA 101. Co-requisite: PTA 106. Laboratory fee.

PTA 103 PHYSICAL THERAPIST 5 Credits
ASSISTING PRACTICUM

Each student is assigned to a clinical setting that exposes the student to practical application of those principles and techniques covered in PTA 101, 102, and 106. The student meets periodically with his/her Academic Coordinator of Clinical Education for review and help with any encountered difficulties. Prerequisites: "C" or better in BIO 122, PTA 102, and PTA 106.

PTA 106 THERAPEUTIC INTERVENTION IN CHILD DEVELOPMENT AND GERONTOLOGY 3 Credits

This course introduces the student to human development throughout the lifespan. Students learn about acquisition of gross and fine motor skills in the pediatric population and the concept of positioning and adaptive equipment. Normal infantile reflexes are introduced and the effects of persisting abnormal reflexes are discussed. Emphasis is placed on equilibrium and righting reactions and the normal/abnormal developmental sequence. Geriatric pathology is presented and students are trained to recognize and treat age-related changes affecting all biological systems. Prerequisites: Grade of "C" or better in PTA 101 and BIO 121. Co-requisite: PTA 102.

PTA 201 PRINCIPLES OF PHYSICAL THERAPIST ASSISTING II 4 Credits

Students continue to gain skills in the assessment of various aspects of the human body. Sensory testing, balance and coordination, righting, and equilibrium reaction are covered. The anatomy and physiology of the nervous system are reviewed, and pathologies are examined in depth. Techniques in neuro-rehabilitation are introduced. Prerequisites: "C" or better in PTA 101, PTA 102, PTA 103, and PTA 106. Co-requisites: PTA 203 and PTA 209. Laboratory fee.

PTA 202 PRINCIPLES OF PHYSICAL THERAPIST ASSISTING III 4 Credits

The course focuses on orthopaedic pathologies and rehabilitation, burns, cardiac rehabilitation, respiratory pathologies and treatments, prosthetics, and orthotic management. The course also covers the management of the geriatric patient, and ethical issues related to the administration of the health care system. Prerequisites: "C" or better in PTA 201 and PTA 203. Co-requisite: PTA 205. Laboratory fee.

PTA 203 PHYSICAL THERAPIST ASSISTING PRACTICUM II 4 Credits

This course offers students opportunities to practice Physical Therapist Assisting. Assignments are made on the basis of demonstrated need for additional knowledge and/or skill. Students are assigned to hospitals, nursing homes, sub-acute hospitals, and pediatric facilities. Prerequisites: "C" or better in PTA 102, PTA 103, and PTA 106. Co-requisites: PTA 201 and 209.

PTA 205 PHYSICAL THERAPIST ASSISTING PRACTICUM III 6 Credits

Students receive more opportunities to practice Physical Therapist Assisting. Assignments are made on the basis of demonstrated need for additional knowledge and/or skill in a given area. Students are assigned to hospitals, nursing homes, sub-acute hospitals, pediatric facilities, and various outpatient facilities. Prerequisites: "C" or better in PTA 201, PTA 203, and PTA 209. Co-requisite: PTA 202.

PTA 209 THERAPEUTIC EXERCISE 2 Credits

Students are introduced to the basic concepts of Exercise Physiology. Current exercise techniques are presented and practiced. The student is trained in the use of various exercise equipment, including isokinetic machines. Importance is given to the development of patient programs to improve posture, strength, power, endurance, flexibility, and relaxation. Prerequisite: "C" or better in PTA 103. Co-requisites: PTA 201 and PTA 203.

Physics

PHY 101 COLLEGE PHYSICS I 4 Credits

This is the first half of a standard college physics sequence for technology majors, architecture majors and biological science majors. Lecture and laboratory work is supported by individual assistance and computer activities. This course includes the study of kinematics, dynamics, momentum, energy, circular motion, universal gravitation, the structure of materials, and fluids. It is recommended that you take MTH 113 or MTH 119 concurrently. Prerequisite: "C" or better in MTH 100.

PHY 102 COLLEGE PHYSICS II 4 Credits

This is the second half of a standard college physics sequence. Lecture and laboratory work is supported by individual assistance and computer activities. This course emphasizes the study of electricity, magnetism and light, and additional topics selected from heat, thermodynamics, vibrations, waves, sound, and areas of modern physics. Prerequisite: "C" or better in PHY 101 or permission of instructor.

PHY 103 GENERAL PHYSICS I 4 Credits

This is the first course in general physics for computer science, engineering, and mathematics majors. Topics covered include calculus-based study of vectors, particle kinematics, Newton's laws, friction, work, conservation of energy, conservation of angular & linear momentum, equilibrium, gravitation, rotation, and simple harmonic motion. Emphasis is placed on problem solving and laboratory applications. Pre- or Co-requisite: MTH 121 (passing grade of "C" or better).

PHY 104 GENERAL PHYSICS II 4 Credits

This is a continuation of PHY 103 with emphasis on electrostatics, DC and AC circuits, electromagnetism, magnetic properties of matter, and electromagnetic oscillations. Laboratory work includes taking electrical measurements using modern electronic test equipment. Prerequisite: "C" or better in PHY 103. Co-requisite: MTH 122.

PHY 105 PHYSICAL SCIENCE 4 Credits

This course is a survey of fundamental concepts in the physical sciences for students not majoring in science or

engineering. Topics include measurement, forces, laws of motion, electricity, light, sound, atomic structure, modern physics, nuclear structure, astronomy, and meteorology. Lab exercises support and supplement the lecture topics.

PHY 111 THEORY OF OPTICS 3 Credits

This course introduces the physics of optics and light. Topics covered include the nature of light, reflection, and refraction and image formation for simple optical systems. Instructor provides laboratory demonstrations of the principles presented. Prerequisite: "C" or better in MTH 109 or equivalent.

PHY 113 ASTRONOMY 4 Credits

This is an introductory course in astronomy. The major topics covered are: historic works of Aristotle, Ptolemy, Brahe, Kepler, and Copernicus; age and origin of the Solar System with descriptions of the planets and their satellites; and structure and evaluation of the Sun and other stars. Additional topics include: nature of light, atomic structure, gravitation, and relativity. Lecture and laboratory work is supported by individual assistance and computer activities. Prerequisite: Placement or grade of "C" or better in MTH 092.

PHY 114 METEOROLOGY 4 Credits

This course covers the composition and structure of the atmosphere, the flows of energy to, from and through the atmosphere, and the resulting motions produced from small to planetary scales. The physical principles of atmospheric phenomena are stressed to provide an understanding of weather's impact on humans, particularly the impact of severe weather. Methods of analysis are developed through the study of current weather as meteorological data are delivered via the Internet. Prerequisite: Grade of "C" or better in MTH 092.

PHY 203 GENERAL PHYSICS III 5 Credits

This course is a continuation of PHY 103-104 which completes the introductory physics sequence of engineering majors. The theory and applications of the following topics are covered: Simple harmonic motion waves; oscillations with an introduction to Maxwell's Equations and its applications to microwaves; hydrodynamics; kinetic theory; physical and geometrical optics; theory of relativity; introduction to atomic theory; the periodic table; and elementary particles; Prerequisite: "C" or better in PHY 104 and MTH 122.

Political Science

POL 101 INTRODUCTION TO POLITICAL SCIENCE 3 Credits

This course explores systematically the "whys" and "hows" of politics. Political ideas, institutions, and practices are examined. Students develop useful tools for the exploration and discussion of political problems.

Theoretical concepts and their application are examined. Pre- or Co-requisites: ENG 096 and RDG 096 (passing grade of "C" or better), or placement.

POL 104 AMERICAN GOVERNMENT 3 Credits

This course examines the structure and processes of the American governmental system. The branches of government are examined in both their historical and contemporary settings. Pre- or Co-requisite: ENG 096 and RDG 096 (passing grade of "C" or better), or placement.

POL 107 MUNICIPAL GOVERNMENT 3 Credits

This course introduces students to the importance, structure, duties, and responsibilities of local government in providing essential services to its constituents. It examines the history of municipal government in New Jersey. Commission versus mayor-council forms of local government is explored. This course also includes analysis of the perceived and actual relationships between the legislative and administrative branches of local government and the relationship of municipal government to the county, state, and federal counterparts. The class is team taught by ECC faculty, various urban mayors, and other municipal officials in the State of New Jersey.

POL 204 URBAN POLITICS AND PLANNING 3 Credits

This course is designed to orient students to urban political systems. It includes study of institutions, informal operations and dynamics, and complexities associated with economic developments in contemporary urban society. Students analyze both primary and secondary sources of information and examine various planning and policy development suggestions put forth by social scientists and others to cope with existing problems. Each student conducts a case study of a particular public or private agency whose expressed purpose is to provide some social service to the metropolitan community. Prerequisite: "C" or better in POL 101.

POL 206 POLITICS OF BLACK LIBERATION 3 Credits

This course examines the implications of the concept and reality of power and ideologies on the response of Black Americans to their experience of oppression. The relationships between black organizations and the sources of national power as represented by political parties and pressure groups are considered. Prerequisite: "C" or better in POL 104.

POL 210 POLITICAL PARTIES 3 Credits

This course is designed to educate students on the political process. Discussions focus on how parties organize and function to influence public opinion. Manipulative tactics adopted by politicians, media, pressure groups, and party organizational machinery are also covered. Prerequisites: "C" or better in POL 101 or POL 104.

Psychology

PSY 101 GENERAL PSYCHOLOGY I 3 Credits **PERSONALITY AND SOCIAL ASPECTS**

This introductory course examines the history, methodology, definitions, and ideas relating to such concepts as personality formation, self-concept, defense mechanisms, emotions, and conditioning. Emphasis is placed on the relationship of these concepts to the student's understanding of self and others in everyday interactions. Pre- or Co-requisite: ENG 096 and RDG 096 (passing grade of "C" or better for each), or placement.

PSY 102 GENERAL PSYCHOLOGY II 3 Credits **PHYSICAL AND SENSORY ASPECTS**

This course examines the structure and function of our senses as starting points for all human consciousness, experience, and knowledge. Breakthrough methods of studying the brain are considered in their relationship to memory, forgetting, social cognition, perceptual illusions, evolution, and thinking across various cultures. The extension of psychology into the realms of artificial intelligence, robotics, and virtual reality are also a focus of study. Prerequisite: "C" or better in PSY 101.

PSY 205 THEORIES OF PERSONALITY 3 Credits

This course explores current approaches and theories of personality development and organization. Emphasizing healthy adult personality development, selective theories of personality that guide research, as represented by the psychoanalytic, sociocultural, trait, learning, sociobiological, and existential-humanistic paradigms, are presented and critically evaluated. Prerequisite: "C" or better in PSY 101.

PSY 209 ABNORMAL PSYCHOLOGY 3 Credits

This course examines the different types of mental illness that exist within modern society. The influence of heredity and environment upon mental illness is considered and recent therapeutic methods are critically examined. Prerequisite: "C" or better in PSY 101.

PSY 210 GROUP DYNAMICS 3 Credits

This course explores the fundamental concepts of understanding interpersonal behavior in the context of small groups. By integrating group theory and research with experiential activities, students gain a better understanding of group processes and improve their interpersonal skills as group members. The course is of special value to students entering mental health, social work, education, business, or similarly related professions in which the knowledge of group processes are beneficial. Prerequisite: "C" or better in PSY 101.

PSY 211 SOCIAL PSYCHOLOGY 3 Credits

This course is designed to help students understand and

explain social-psychological phenomena. Concepts such as conformity, fear, humor, gratitude, lying, selfishness and attitude, and impression formation are examined. Various methods are applied to enable students to understand the behavior and thoughts of individuals and groups. The course objective is to develop students' ability to independently analyze social-psychological phenomena. Prerequisite: "C" or better in PSY 101.

PSY 219 CHILD PSYCHOLOGY AND 3 Credits **DEVELOPMENT**

This course examines the interrelationships between the psychological and physical development of the child from birth through adolescence. Topics covered include physical and emotional influences on growth, intellectual development, the significance of interpersonal relations, and cultural aspects of personality development. Prerequisite: "C" or better in PSY 101.

PSY 220 EDUCATIONAL PSYCHOLOGY 3 Credits

The practical application of psychological principles to the educative process is explored. The theoretical ideas behind the practices are explained. Methods of student evaluation are considered. Techniques of motivating students are described and related to studies of efficient learning methods. Special problems of adjustment and their effects on school performance are discussed. Prerequisite: "C" or better in PSY 101.

PSY 225 CHILD AND ADOLESCENT 3 Credits **ABNORMAL PSYCHOLOGY**

This course focuses on the etiology, classification, diagnosis, and treatment of childhood disorders. Emphasizing the developmental aspects of child psychopathology, how children's and adolescents psychological disorders are distinguishable from those of adults is examined. Particular attention is also devoted to understanding how the mental health, education, health care, and juvenile justice systems provide services to children and adolescents with psychological disorders. Prerequisites: "C" or better in PSY 101.

PSY 232 HUMAN SEXUALITY 3 Credits

This course examines various theoretical perspectives on sexuality, such as its biological, psychological, social and cultural dimensions. Topics examined include, but are not limited to, male and female sexual anatomy, physiology, and response; sexuality over the life span; variations in sexual behavior and expression; sexual dysfunctions, paraphilias, and related therapies. Emphasis is placed on the human sexual experience as a vehicle for self-awareness, self-understanding, and self-acceptance. Prerequisites: "C" or better in PSY 101, SOC 101, or SOC 108.

PSY 250 THEORY AND PRACTICE OF 3 Credits **COUNSELING AND PSYCHOTHERAPY**

This course presents current theories and practices used in counseling and psychotherapy. Topics covered include legal

and ethical issues and therapies such as those classified as psychodynamic, cognitive, behavioral, group, and peer self-help groups. Prerequisite: "C" or better in PSY 101.

PSY 251 COUNSELING AND TREATMENT OF ADDICTIONS 3 Credits

This course provides an introduction to the individual, group, and family treatment of alcohol and drug dependency. The theoretical and historical basis, and the implications of a variety of treatment methods are considered including 12-step self-help programs, therapeutic communities, detoxification, rehabilitation, outpatient care, half-way houses, methadone, and employee and student assistance. Treatment planning by objectives and stages is stressed. Special topics of concern such as engagement, mandated treatment, enabling, and the treatment relationship are surveyed. This course is approved for 45 educational hours toward N.J. alcoholism counselor (CADC) certification or recertification.

Radiography

RTC 100 RADIOLOGIC TECHNOLOGY I LABORATORY 2 Credits

This course provides detailed information on the theory of X-ray techniques and its practical application in radiography. Seminars are conducted in the classroom/laboratory on radiographic film evaluation. Students learn to critique or differentiate between radiographs of diagnostic quality and non-diagnostic quality. Prerequisite: Formal acceptance into the program. Laboratory fee.

RTC 101 RADIOLOGIC POSITIONING PRINCIPLES I/LABORATORY 4 Credits

This course provides instruction, with related terminology, in radiographic positioning of lower and upper extremities, chests, and abdomens. Lecture is supplemented with demonstrations and opportunities for students to practice the skills in the radiographic room. Critiques of radiographic films are conducted in the classroom/laboratory. Prerequisite: Formal acceptance into the program. Laboratory fee.

RTC 102 RECORDING MEDIA/LABORATORY 1 Credit

This course is designed to develop the necessary knowledge and skills to perform darkroom procedures with accuracy and efficiency. Students are provided a full understanding of the chemical constituents of processing solutions and their function. Critiques of radiographic films are conducted. Prerequisite: Formal acceptance into the program. Laboratory fee.

RTC 103 PATIENT CARE/ETHICS 2 Credits

This course acquaints students with nursing procedures and techniques used in the general care of the patient. Emphasis is on the role of the technologist in various

nursing situations. Students are also instructed in the ethical principles and the responsibilities entailed by becoming a member of a paramedical profession. Prerequisite: Formal acceptance into the program.

RTC 104 RADIATION PROTECTION 2 Credits

This course develops students' knowledge of safety standards in operating radiation equipment. Students learn the principles of radiation protection and practical skills to ensure maximum safety for both patients and the equipment operator. Lecture is supplemented with demonstrations and opportunities for students to practice the skills in the radiographic room. Critiques of radiographic films are conducted in the classroom/laboratory. Co-requisites: RTC 100, RTC 101, RTC 102, and RTC 103.

RTC 105 RADIOLOGIC TECHNOLOGY II LABORATORY 2 Credits

Students gain, through problem solving and completing experiments, a thorough working knowledge of manipulating exposure factors. Students also learn the principles for constructing technique charts for all situations and all kilovoltage ranges. Critiques of radiographic films are conducted in the classroom/laboratory. Prerequisite: "C" or better in RTC 100. Laboratory fee.

RTC 106 RADIOLOGIC POSITIONING PRINCIPLES II/LABORATORY 4 Credits

This course is a continuation of RTC 101. Instruction is provided in radiographic positioning of the vertebral column, pelvic girdles, and bones of the thorax. Students are taught radiographic procedures using contrast media. Lecture is supplemented with demonstrations and opportunities for students to practice the skills in the radiographic room. Critiques of radiographic films are conducted in the classroom/laboratory. Prerequisite: "C" or better in RTC 101. Co-requisites: RTC 107 and RTC 108. Laboratory fee.

RTC 107 CONTRAST MEDIA (PHARMACOLOGY) 2 Credits

Students are further acquainted with procedures in radiography involving the use of contrast media. Detailed information is provided on the equipment and media used, and on the reactions and contradictions to these media. Critiques of radiographic films are conducted in the classroom/laboratory. Prerequisite: "C" or better in RTC 101. Co-requisites: RTC 106 and RTC 108.

RTC 108 CLINICAL RADIOGRAPHY I 1 Credit

Students are assigned to clinical affiliations for approximately 15 weeks, two days each week, to perform routine examinations under the supervision of a registered radiologic technologist. Critiques of radiographic films are conducted at the clinical site. Prerequisites: "C" or better in RTC 100, RTC 101, RTC 102, RTC 103, and RTC 104. Co-requisites: RTC 106 and RTC 107.

RTC 109 RADIOLOGIC POSITIONING PRINCIPLES III/LABORATORY 2 Credits

This course provides precise and detailed information, with related terminology, on the various positions of the skull, including routine positions, and positions with regard to facial bones, paranasal sinuses, and mastoid. Lecture is supplemented with demonstrations and opportunities for students to practice the skills in the radiographic room. Critiques of radiographic films are conducted in the classroom/laboratory. Prerequisite: "C" or better in RTC 108. Co-requisite: RTC 110. Laboratory fee.

RTC 110 RADIOLOGIC ADVANCE POSITIONING PRINCIPLES IV 1 Credit

Students gain, through problem solving and completion of experiments, a thorough working knowledge of special and troublesome procedures. This course is for students who have practiced the basic views and are aware of positioning limitations. Students learn alternate positioning skills to image various anatomical structures in the emergency room environment. Lecture is supplemented with demonstrations and opportunities for students to practice the skills in the radiographic room. Critiques of radiographic films are conducted in the classroom/laboratory. Prerequisites: "C" or better in RTC 101 and RTC 106. Co-requisite: RTC 109.

RTC 111 CLINICAL RADIOGRAPHY II 1 Credit

Students are assigned to clinical affiliations for approximately eight weeks, three days per week, to perform routine examinations under the supervision of a registered radiologic technologist. Critiques of radiographic films are conducted at the clinical site. Prerequisite: "C" or better in RTC 108. Co-requisites: RTC 109 and RTC 110.

RTC 112 CLINICAL RADIOGRAPHY III 2 Credits

Students are assigned to clinical affiliations for approximately eight weeks, five days per week, to perform all radiographic procedures under the supervision of a registered radiologic technologist. Critiques of radiographic films are conducted at the clinical site. Prerequisite: "C" or better in RTC 111.

RTC 200 RADIOGRAPHIC PATHOLOGY 2 Credits

This course deals with application of X-ray technology on seriously ill or injured patients to produce informative radiographs. Students learn about anatomical changes resulting from disease and/or injury and how to take radiographs that are most informative for diagnosis and treatment. Critiques of radiographic films are conducted at the classroom and clinical sites. Prerequisite: "C" or better in RTC 112. Co-requisites: RTC 201, RTC 202, RTC 203, RTC 204, and RTC 205.

RTC 201 RADIATION BIOLOGY/LABORATORY 2 Credits

This course provides basic information on the effects of radiation therapy and radioisotopes on biological systems.

It is geared toward students whose training is primarily in the field of diagnostic X-ray technology. Critiques of radiographic films are conducted in the classroom/laboratory, focusing on the effects of radiation as related to radiation biology and health physics. Prerequisite: "C" or better in RTC 112. Co-requisites: RTC 200 and RTC 202.

RTC 202 CLINICAL RADIOGRAPHY IV 2 Credits

Students are assigned to clinical affiliations for approximately 15 weeks, three days per week, to perform all radiographic procedures under the supervision of a registered technologist. Critiques of radiographic films are conducted at the clinical sites. Prerequisite: "C" or better in RTC 112. Co-requisites: RTC 200 and RTC 201.

RTC 203 SPECIAL PROCEDURES/LABORATORY 3 Credits

Students learn about the specialized and highly technical procedures in radiography, such as computerized axial tomography (CAT), magnetic resonance imaging (MRI), and ultrasound angiography, and the general indications for each examination. Quality control methods are also covered. Selected radiographs supplement anatomical review of the systems to be examined, prior to radiographic procedures. Lecture is supplemented with demonstrations and opportunities for students to practice the skills in the radiographic room. Critiques of radiographic films are conducted in the classroom/laboratory. Prerequisite: "C" or better in RTC 202. Co-requisites: RTC 204 and RTC 205. Laboratory fee.

RTC 204 PEDIATRIC/GERIATRIC RADIOGRAPHY 2 Credits

Pediatrics and geriatrics are specialized fields. It is important that the technologist follows definite procedural methods with young and elderly patients. Advantages include saving time, film, and energy, as well as minimizing the amount of radiation on the patient. This course provides detailed instruction in radiographic positioning, procedures, and equipment for pediatric and geriatric patients. Lecture is supplemented with demonstrations and opportunities for students to practice the skills in the radiographic room. Critiques of radiographic films are conducted. Prerequisite: "C" or better in RTC 202. Co-requisites: RTC 203 and RTC 205.

RTC 205 CLINICAL RADIOGRAPHY V 2 Credits

Students are assigned to clinical affiliations for approximately 15 weeks, three days per week, to assist in pediatric and geriatric procedures under the supervision of a registered technologist. Critiques of radiographic films are conducted at the clinical site. Prerequisite: "C" or better in RTC 202.

RTC 206 CLINICAL RADIOGRAPHY VI 2 Credits

Students are assigned to clinical affiliations for approximately eight weeks, five days per week. They rotate

through CT departments under the supervision of a registered technologist. They perform routine radiography until designated appointment for CT. Critiques of radiographic films are conducted, with focus on the effects of radiation as related to CT. Prerequisite: "C" or better in RTC 205.

RTC 207 CLINICAL RADIOGRAPHY VII 2 Credits

Students are assigned to clinical affiliations for approximately eight weeks, four days per week, for mastery of radiologic technology skills. Students perform all radiographic procedures including assisting in O.R. and special procedures under the supervision of a registered technologist. Critiques of radiographic films are conducted at the clinical sites. Successful completion of a comprehensive examination is required. Prerequisite: "C" or better in RTC 206.

Reading

RDG 096 READING FOUNDATIONS FOR COLLEGE STUDENTS 4.5 Credit

This is a reading skills course designed to increase the comprehension of transition-level students' ability to interpret text accurately and evaluate it logically. The course emphasizes a whole language approach; students learn to discuss, comprehend, and write about text as well as read it. Individualized tutoring is available in addition to traditional classroom instruction. Prerequisites: "C" or better in ENG 088 or placement.

RDG 096T READING FOUNDATIONS FOR COLLEGE STUDENTS (TUTORIAL) 1 Credit

Supplemental instruction of RDG 096 is a combination of self-directed web-based, classroom, and individualized "one-on-one" instruction with faculty as well as trained instructional assistants. Emphasis is on reinforcement of classroom and lecture as well as training in use of the College's web-based system for student information, registration, library usage, etc. Prerequisites: "C" or better in ENG 088 or placement.

Religion

REL 101 HEBREW & CHRISTIAN THOUGHT 3 Credits

This course will explore the basic tenets of Judaism and Christianity to compare and contrast the similarities and differences of these two faith communities. Special attention will be paid to the historical, social, and political dynamics that contributed to the evolution of these faith communities. The writings of Abraham Joshua Heschel, Maimonides and Saint Augustine will be part of the numerous readings assigned to the course. Pre- or Co-requisites: ENG 096 and RDG 096 (passing grade of "C" or better) or placement, or permission of the Divisional Chair.

REL 104 HISTORY & DEVELOPMENT OF ISLAMIC RELIGION 3 Credits

History of Islamic thought from the time of Muhammad to the present will be explored in this course. The Quran, theology and the law, mysticism and philosophy, sectarian modernism and legal reform, and contemporary evolution of the Islamic faith will be areas of study. The relationship between the social and geo political context of the evolution of Islam will be a major focus of the course. Islamic scholars and their individual place in the department and evolution of Islam will be introduced. Pre- or Co-requisite: ENG 096 and RDG 096 (passing grade of "C" or better) or placement, or permission of the Divisional Chair.

REL 105 COMPARATIVE RELIGION 3 Credits

This course is a basic introduction to the variety of the world's religions as well as methods for studying them. No prior experience in religious studies is assumed. We will survey and discuss the nature of religion: indigenous religions, Judaism, Christianity, Islam, Hinduism, Buddhism, Taoism and Confucianism. Concepts in Comparative Religion will be utilized to highlight thematic convergences and divergences of different forms of religiosity. Pre- or Co-requisite: ENG 096 and RDG 096 (passing grade of "C" or better) or placement, or permission of the Divisional Chair.

Respiratory Therapy (offered through UMDNJ - School of Health Related Professions)

RST 100 CORE CONCEPTS IN RESPIRATORY CARE 1 Credit

This course serves as an orientation to general patient assessment and examination. Topics covered include infection control, patient safety, interviewing and communication, record keeping, and clinical laboratory studies. Students learn, through lecture and demonstrations, the fundamentals underlying the skills to be practiced in the laboratory and then performed during clinical practice. This course must be taken concurrently with RST 110. Prerequisite: Formal acceptance into the program. Co-requisites: RST 110, RST 118, and RST 123.

RST 110 FUNDAMENTALS OF RESPIRATORY CARE 4 Credits

This course serves as an introduction to basic therapeutic modalities employed in contemporary respiratory care, including basic patient assessment, cardiopulmonary resuscitation, medical gas therapy, humidity and aerosol therapy, hyperinflation therapy, chest physical therapy, and infection control. This course must be taken concurrently with RST 100. Prerequisite: Formal acceptance into the program. Co-requisites: RST 100, RST 118, and RST 123. Laboratory fee.

RST 118 CLINICAL PRACTICE I 1 Credit

This course serves as an orientation to the hospital environment and to the basic respiratory care procedures covered in RST 110. Clinical instruction and supervised practice opportunities are provided in the areas of medical charting, infection control, basic patient assessment, and basic therapeutics. Clinical hours: 90. Prerequisite: Formal acceptance into the program. Co-requisites: RST 100, RST 110, and RST 123. Laboratory fee.

RST 123 APPLIED CARDIO-PULMONARY PATHOPHYSIOLOGY I 2 Credits

This course examines the anatomy and physiology of the cardiopulmonary system as it relates to respiratory care. Topics covered include basic anatomy of the pulmonary and cardiac systems, physiology of circulation, ventilation, gas exchange and transport, acid-base balance, and control of respiration. An overview of the pathophysiology and treatment of common disorders of the cardiopulmonary system is also provided. Prerequisite: Formal acceptance into the program. Co-requisites: RST 100, RST 110, and RST 118. Laboratory fee.

RST 125 PRINCIPLES OF VENTILATORY SUPPORT 4 Credits

This course serves as an introduction to the physiologic principles and techniques of artificial ventilatory support. Topics covered include airway management, indications for and application of mechanical ventilation, functional operation of mechanical ventilators, and basic monitoring and management of the patient in respiratory failure. Lecture hours: 30. Laboratory hours: 45. Prerequisites: "C" or better in RST 100, RST 110, RST 118, and RST 123. Co-requisites: RST 128, RST 212, RST 213, and RST 223. Laboratory fee.

RST 128 CLINICAL PRACTICE II 2 Credits

Students further practice and master basic respiratory care procedures introduced in RST 118. They are also introduced to airway management skills and principles of intensive respiratory care, including patient assessment and basic ventilator monitoring. Clinical hours: 180. Prerequisites: "C" or better in RST 100, RST 110, RST 118, and RST 123. Co-requisites: RST 125, RST 212, RST 213, and RST 223. Laboratory fee.

RST 138 CLINICAL PRACTICE III 3 Credits

Students develop, through supervised experience, the skills necessary to function independently in a critical care setting. Observational experience is also provided in pulmonary function testing and pediatric-neonatal respiratory care. Clinical hours: 180. Prerequisites: "C" or better in RST 125, RST 128, RST 212, RST 213, and RST 223. Co-requisite: RST 214, RST 225, and RST 237. Laboratory fee.

RST 212 CARDIOPULMONARY PHARMACOLOGY 2 Credits

This course provides an overview of drugs affecting the cardiopulmonary system, including various classes of bronchodilators, steroids, antimicrobials, skeletal muscle relaxants, central nervous system depressants, respiratory stimulants, diuretics, and cardiovascular agents, including ACLS, PALS, and neonatal resuscitation drugs. Prerequisites: "C" or better in RST 100, RST 110, RST 118, and RST 123. Co-requisites: RST 125, RST 128, RST 213, and RST 223. Laboratory fee.

RST 213 APPLIED CARDIOPULMONARY PATHOPHYSIOLOGY II 2 Credits

This course examines the pathophysiology of the disorders of ventilation, perfusion, and oxygenation, which result in cardiopulmonary failure. Emphasis is on diagnosis and treatment in the clinical setting. Clinical hours: 180. Prerequisite: "C" or better in RST 100, RST 110, RST 118, and RST 123. Co-requisites: RST 125, RST 128, RST 212, and RST 223.

RST 214 PATIENT MANAGEMENT - CRITICAL CARE 3 Credits

This course covers in depth the clinical management of the cardio-pulmonary patient in the critical care setting, emphasizing specialized respiratory assessment, advanced ventilatory management, basic interpretation of the chest film, hemo-dynamic monitoring, ECG interpretation, and the effects of cardiopulmonary disorders on other major body systems. Lecture hours: 30. Laboratory hours: 45. Prerequisites: "C" or better in RST 125, RST 128, RST 212, RST 213, and RST 223. Co-requisites: RST 138, RST 225, and RST 237. Laboratory fee.

RST 223 CARDIOPULMONARY EVALUATION 2 Credits

This is a lecture and laboratory course on invasive and non-invasive diagnostic and monitoring procedures including roentgenography, electrocardiography, pulmonary function testing, hemodynamic monitoring, arterial blood gas analysis, patient interviewing, and physical assessment. Prerequisites: "C" or better in RST 100, RST 110, RST 118, and RST 123. Co-requisites: RST 125, RST 128, RST 212, and RST 213. Laboratory fee.

RST 225 PEDIATRIC/NEONATAL RESPIRATORY CARE 3 Credits

This course introduces the special respiratory care needs of the neonatal and pediatric patients. Topics covered include development of the respiratory system, care of the newborn, respiratory diseases, mechanical ventilation, oxygen and aerosol therapy, and emergency transport. Supervised pediatric and neonatal clinical experience occurs. Prerequisites: "C" or better in RST 125, RST 128, RST 212, RST 213, and RST 223. Co-requisites: RST 138, RST 214, and RST 237. Laboratory fee.

RST 237 LONG-TERM, HOME, REHABILITATIVE CARE 3 Credits

This course analyzes the goals and methods underlying provision of respiratory care in non-acute settings. Topics covered include standards and regulations governing non-acute respiratory care, team planning, patient selection, long-term care, and rehabilitation facilities. The course also deals with cost, reimbursement, and ethical issues. Prerequisites: "C" or better in RST 125, RST 128, RST 212, RST 213, and RST 223. Co-requisite: RST 138, RST 214, and RST 225. Laboratory fee.

Sociology

FPD 080 FOUNDATIONS OF PERSONAL DEVELOPMENT I 1.5 Credits

This is a counseling course designed to assist pre-college students in their personal adjustment to the college environment. The course addresses the development of a positive self-concept, effective interpersonal communication skills, and working knowledge of college systems. The course is limited to Special Programs students. Co-requisite: Any skills development course.

FPD 081 FOUNDATIONS OF PERSONAL DEVELOPMENT II 1.5 Credits

This is a counseling course designed to assist the pre-college student in viewing college education as a component in the career development process. Topics covered include realistic establishment of career/educational goals, pursuit of vocational goals, time management, and personal interaction. The course is limited to Special Programs students. Co-requisite: Any skills development course.

PSR 080 PROBLEM SOLVING AND REASONING SKILLS 1.5 Credits

This is a thinking skills course designed to help the pre-college level student learn to solve problems that pertain to course work and to everyday life situations. Emphasis is placed on developing the student's ability to think things through, make decisions, solve problems, and understand the processes of thinking and decision-making. This course is limited to Special Programs students. Co-requisite: Any skills development course.

SOC 101 INTRODUCTION TO SOCIOLOGY 3 Credits

This course introduces students to the idea of society as a framework within which all people live their lives, and to the factors or processes determining the structure or shape of society. Concepts and processes such as social institutions, social stratification, ideologies, and social change are discussed and clarified. Prerequisites: "C" or better in ENG 096 and RDG 096, or placement.

SOC 108 SOCIAL PROBLEMS 3 Credits

This course examines the causes of selected social problems. Emphasized are national social problems as well as those that affect urban areas. Prerequisites: "C" or better in ENG 096 and RDG 096, or placement. (SOC 101 is advised but not a prerequisite.)

SOC 111 HELPER THEORY 3 Credits

This course examines ways in which the helping professions intervene in individual, group, community, and societal processes with the goal of improving social functioning. Prerequisite: "C" or better in ENG 096 and RDG 096, or placement. (SOC 101 is advised but not a prerequisite.)

SOC 121 SOCIAL SERVICE POLICIES AND PROCEDURES I 3 Credits

This course examines from a historical perspective the processes involved in formulating social service policies and eligibility criteria, and in distribution of benefits. The course covers the relationship of social service agencies and institutions to federal, state, and municipal government and to policy development, and includes an introduction to the structure and mode of operation of these agencies and institutions. Prerequisite: "C" or better in SOC 101 or PSY 101.

SOC 122 SOCIAL SERVICE POLICIES AND PROCEDURES II 3 Credits

Designed to provide the theoretical and practical knowledge needed for entry levels of practice in social work, this course articulates the skills needed for social work practice and spells out the relationship between specific skills and service outcomes. Prerequisite: "C" or better in SOC 121.

SOC 125 THE DISABLED AND THE SOCIAL SERVICES 3 Credits

This course is an introduction to the field of disability. It includes discussion of types and characteristics of disability, the economic, psychological, and social effects on the disabled, and the function, value, and role of health and social agencies involved with the disabled. Prerequisite: "C" or better in SOC 101.

SOC 153 ALCOHOL AND SUBSTANCE ABUSE PREVENTION AND EDUCATION 3 Credits

This course provides an introduction to the individual, group, and social factors that predispose or create a risk for substance abusing behavior, the knowledge and skills needed for entry into the prevention profession, and the broad range of prevention activities and strategies utilized to reduce the risk or frequency of substance abusing behaviors. This course is approved as educational hours towards the CADDC credential. Prerequisite: "C" or better in SOC 101 or PSY 101 or permission of the instructor.

SOC 199 BEHAVIORAL SCIENCE FOR HEALTH PROFESSIONS 3 Credits

This course is a survey of the relationship between the social sciences and health fields. Topics covered include group differences in health and illness beliefs and behavior, relationships between providers and patients and among providers, sick roles, and sociocultural roots of health values, health policy, and a health organization. It is designed for majors in health and human services. Prerequisites: "C" or better in SOC 101 and PSY 101, or placement.

SOC 201 SOCIAL GERONTOLOGY 3 Credits

This course examines the role of the aged in today's society; the biological, psychological, and social aspects of aging; problems in the health of the aged; problems in retirement and leisure; the economics and politics of aging; issues confronting the aging person; and the prospects for the aged in tomorrow's society. Prerequisite: "C" or better in SOC 101 or PSY 101.

SOC 203 RACIAL AND CULTURAL MINORITIES 3 Credits

This course analyzes the influence and contributions of selected racial, ethnic, and cultural minorities in contemporary American life. Emphasis is placed on the structural elements in American society affecting the entry of such groups into the mainstream of American life. The social and psychological dynamics of prejudice and discrimination are examined. Prerequisite: "C" or better in SOC 101.

SOC 204 URBAN SOCIOLOGY 3 Credits

Urbanism is stressed as a way of life with distinct social relationships and values. Emphasis is on the social and physical environment of modern urban life, its relationships, processes, and implications, and various alternatives open to urban people. Prerequisite: "C" or better in SOC 101.

SOC 205 THE SOCIOLOGY OF THE BLACK COMMUNITY IN CONTEMPORARY AMERICA 3 Credits

This course examines the social forces operating in the Black community. Consideration is given to the changes in the philosophy of the Black movement and changes in attitudes about integration. White liberalism and Black leadership are particularly stressed. Prerequisite: "C" or better in SOC 101.

SOC 206 SOCIAL STRATIFICATION 3 Credits

This course considers the significance of social stratification as an aspect of the structure of social systems. It includes discussion of various stratification theories, historical trends, and cultural variations in stratification. Prerequisite: "C" or better in SOC 101.

SOC 207 UNDERSTANDING DEATH AND DYING 3 Credits

The course takes a close look at aspects of the dying process in such situations as murder, suicide, capital punishment, and grief. It examines the thoughts, feelings, and actions of the dying and of those affected by death so that the student can gain greater insight into the subtle relationships these factors have with each other and with death. This course is designed for all students seeking better understanding of death and the process of bereavement. Prerequisite: "C" or better in SOC 101 or PSY 101.

SOC 219 SOCIOLOGY OF THE FAMILY 3 Credits

This course is a sociological study of the family as an institution. Topics covered include historical development, the American system, child-rearing, and marriage. Prerequisite: "C" or better in SOC 101 or PSY 101.

SOC 228 HUMAN AND SOCIAL SERVICES FIELDWORK I 3 Credits

Students are placed in a voluntary internship capacity for a minimum of ten hours per week at a recognized human services agency, under the supervision of agency staff and an ECC faculty member. Students can gain first-hand knowledge of how human service agencies function. Evaluation conducted during and at the end of the semester is a cooperative effort by the agency and the faculty member responsible. Separate sections are offered for students pursuing careers in social work, mental health, alcoholism/substance abuse, and gerontology. Pre- or Co-requisites: PSY 101 and SOC 111 (passing grade of "C" or better), or permission of instructor. Co-requisite: SOC 229.

SOC 229 HUMAN AND SOCIAL SERVICES INTERNSHIP SEMINAR I 3 Credits

Students discuss and analyze situations encountered in their internship placement, receive specialized skills training in their professional specialization, and are instructed in how to prepare to enter the career market. Separate sections are offered for students pursuing careers in social work, mental health, alcoholism/substance abuse, and gerontology. Pre- or Co-requisite: PSY 101 and SOC 111 (passing grade of "C" or better), or permission of instructor. Co-requisite: SOC 228.

SOC 230 HUMAN AND SOCIAL SERVICES FIELDWORK II 3 Credits

This is the second semester internship placement in social work, mental health, or alcoholism/substance abuse, continuing SOC 228. Pre- or Co-requisites: PSY 101 and SOC 111 (passing grade of "C" or better), or permission of instructor. Co-requisite: SOC 231.

SOC 231 HUMAN AND SOCIAL SERVICES INTERNSHIP SEMINAR II 3 Credits

This second semester internship seminar continues the

work of SOC 229. Pre- or Co-requisites: PSY 101 and SOC 111 (passing grade of “C” or better), or permission of instructor. Co-requisite: SOC 230.

SOC 238 METHODS AND TECHNIQUES OF WORKING WITH ELDERLY 3 Credits

This course examines concepts and intervention strategies that are used in providing services to the elderly in our society. Prerequisite: “C” or better in SOC 101 or PSY 101.

SOC 250 SUBSTANCE USE AND ABUSE IN AMERICAN SOCIETY 3 Credits

The course examines the causes and varieties of chemical dependency and abuse. Topics covered include the effects of alcohol, sedatives, narcotics, stimulants, hallucinogens, polyaddiction, and abuse; the psychological, social, genetic, and cultural factors involved in their use and abuse; the progression of addiction; and the resultant medical conditions. (This course together with SOC 252 constitute the educational requirements for the Chemical Dependency Associate in New Jersey and are also approved as educational hours toward the CJC and CADC credential). Prerequisite: “C” or better in SOC 101 or PSY 101.

SOC 252 CASE MANAGEMENT OF ADDICTIONS 3 Credits

This course provides an introduction to the knowledge, skills, and attitudes necessary for addiction counselors to perform counseling functions, clinical evaluation, treatment planning, and case management. It introduces students to the professional and ethical responsibilities of professional practice. (This course, together with SOC 250, constitutes the educational requirements for the Chemical Dependency Associate in New Jersey and is also approved as educational hours toward the CJC and CADC credential). Prerequisite: “C” or better in SOC 101 or PSY 101.

Spanish

SPN 100 PRACTICAL SPANISH 3 Credits

This is an elementary course in speaking and understanding Spanish. Emphasis is on oral comprehension and oral expression in a variety of practical situations rather than on the form and function of the language. The course serves as an excellent tool for communication with Spanish-speaking people, both abroad and within our own Hispanic community. Content area may vary in accordance with student needs.

SPN 101 ELEMENTARY SPANISH I 3 Credits

This is the first half of a year's course for students with little or no background in the Spanish language. Listening comprehension, speaking, reading, and writing are developed within the limits of basic vocabulary, idioms and grammar.

SPN 102 ELEMENTARY SPANISH II 3 Credits

This course is a continuation of SPN 101. It is designed to expand students' knowledge of vocabulary and grammar to include multiple tenses and uses of the verb. The four language skills: listening comprehension, speaking, reading, and writing continue to be developed. Prerequisite: “C” or better in SPN 101 or placement.

SPN 110 ADVANCED SPANISH COMPOSITION 3 Credits

This course, designed for native speakers of Spanish, provides an intensive review of Spanish grammar and examines the problems of written composition in the Spanish language. This course is conducted in Spanish. Prerequisite: Placement.

SPN 201 INTERMEDIATE SPANISH I 3 Credits

This course thoroughly reviews Spanish grammar while continuing the aims of SPN 101-102. Facility in using the language is enhanced through more advanced reading selections and discussions in the language. Prerequisite: “C” or better in SPN 102 or placement.

SPN 202 INTERMEDIATE SPANISH II 3 Credits

This course is a continuation of SPN 201. It completes the review of Spanish grammar and focuses on further development of the four language skills: listening comprehension, speaking, reading, and writing. Prerequisite: “C” or better in SPN 201 or placement.

SPN 222 LATIN AMERICAN LITERATURE 3 Credits

This course, given in Spanish, is designed to acquaint students with some of the outstanding writers of Latin America from colonial times to the present. Prerequisite: “C” or better in SPN 110 or SPN 202, or placement.

SPN 225 CARIBBEAN LITERATURE 3 Credits

This course involves reading, interpretation, and analysis of selected authors and texts of Caribbean literature. It is taught in Spanish. Prerequisite: “C” or better in SPN 110 or SPN 202, or placement.

SPN 227 US LATINO LITERATURE 3 Credits

This course is an introduction to the literature of US Latino writers. It concentrates on their cultural roots and gives the student a better understanding of the sociocultural, political, and economic forces that shaped the literature. It addresses the development of literary trends, values, and prevailing social conditions as they are presented by Latino writers. Classes are conducted in Spanish. Prerequisites: “C” or better in SPN 110 or SPN 202, or placement.

Uniform Construction Code Administration

UCC 109 SUBCODE OFFICIAL 3 Credits

This course is designed to satisfy the official educational requirement for New Jersey State licensure as Uniform Construction Code Enforcement Subcode Official. The course covers in detail the administrative background and procedures of the office, the legal aspects of code enforcement, and related legislation.

UCC 110 CONSTRUCTION OFFICIAL 3 Credits

This course is designed to satisfy the educational requirement for licensure as a Construction Official. It provides students the technical and administrative knowledge to effectively enforce the Uniform Construction Code at the local level. Prerequisite: Completion of the educational program required for Subcode Official.

UCC 120 BUILDING INSPECTOR RCS 4 Credits

This course is designed to satisfy the educational requirement for licensure as Building Inspector RCS. The course is based on the BOCA National Building Code, the BOCA National Mechanical Code, and the CABO One and Two Family Dwelling Code. It covers techniques for evaluating structural design and materials, plan review, basic fire protection requirements, and field inspection and reporting as applied to Class III residential and small commercial structures. Reference is made to the New Jersey Uniform Construction Code.

UCC 121 BUILDING INSPECTOR ICS 6 Credits

This course is designed to satisfy the educational requirement for licensure as Building Inspector ICS. The course is based on the New Jersey Uniform Construction Code, the BOCA National Building Code, the National Mechanical Code, and the National Energy Conservation Code. It covers techniques for evaluating structural design, fire protection, and mechanical systems; plan analysis; and field inspection and reporting as applied to Class II industrial and commercial structures. Prerequisite: UCC 120.

UCC 130 ELECTRICAL INSPECTOR ICS 4 Credits

This course is designed to satisfy the educational requirement for licensure as Electrical Inspector ICS. The course covers the New Jersey Uniform Construction Code and the National Electrical Code. The course consists of 30 hours of instruction in systems design and 30 hours of instruction in plan review and field inspection techniques.

UCC 140 FIRE PROTECTION INSPECTOR ICS- PART I 4 Credits

This course is designed to satisfy the educational requirement for mastery of the Fire Protection Subcode for residential and small commercial structures. The course is based on the New Jersey Uniform Construction Code and

the BOCA National Building Code. It covers techniques for plan review, materials testing, field inspection, and report writing. It is Part I of a two-part 120-hour course required for licensure as Fire Protection Inspector ICS.

UCC 141 FIRE PROTECTION INSPECTOR ICS - PART II 4 Credits

This course covers techniques for plan review and field inspection of fire protection systems and electrical systems. It is a detailed study of the Code, focusing on its relation to fire prevention. It is Part II of the 120-hour course required for licensure as Fire Protection Inspector ICS. Prerequisite: Completion of UCC 140.

UCC 150 PLUMBING INSPECTOR ICS 6 Credits

This course is designed to satisfy the educational requirement for licensure as Plumbing Inspector ICS. The course is based on the New Jersey Uniform Construction Code as applied to Class II and Class III structures. It covers design, testing, and analysis techniques for evaluating water service, water distribution, and drainage systems. It also includes training in plan review and field inspection procedures and a study of New Jersey public health requirements.

UCC 160 ELEVATOR INSPECTOR HHS 6 Credits

This course is designed to satisfy the educational requirement for licensure as Elevator Inspector HHS (Hazardous and High-rise Structures). Instruction covers the subject areas specified by statute to ensure technical competence as applied to all structures. Subject areas that are covered include: Inspection and testing regulations, machinery and equipment, plan review, and inspection techniques.

UCC 220 BUILDING INSPECTOR HHS 4 Credits

This course is designed to satisfy the educational requirement for licensure as Building Inspector HHS (Hazardous and High-rise Structures). Instruction focuses on building technical competency in design analysis, materials and standards, and methods for securing compliance in advanced structural systems, advanced fire protection systems, and advanced mechanical systems, as applied to Class I and all other structures established in Subchapter 3 of the New Jersey Uniform Construction Code. Prerequisite: Completion of an educational program for Building Inspector ICS, or the equivalent.

UCC 230 ELECTRICAL INSPECTOR HHS 3 Credits

This course is designed to satisfy the educational requirement for licensure as Electrical Inspector HHS (Hazardous and High-rise Structures). The course is based on the New Jersey Uniform Construction Code and the National Electrical Code. It provides instruction intended to ensure technical competencies in advanced electrical systems, high-rise buildings, and hazardous locations identified in the electrical subcode. Prerequisite: Completion of an educational program meeting the requirements for Electrical Inspector ICS.

UCC 240 FIRE PROTECTION INSPECTOR HHS 4 Credits

This course is designed to satisfy the educational requirement for licensure as Fire Protection Inspector HHS (Hazardous and High-rise Structures). It provides the background of technical and administrative knowledge to effectively enforce the Uniform Construction Code at the local level, as applied to high-rise and hazardous structures. Prerequisite: Completion of an educational program meeting the requirements for Fire Protection Inspector ICS.

UCC 250 PLUMBING INSPECTOR HHS 4 Credits

This course is designed to satisfy the educational requirement for licensure as Plumbing Inspector HHS (Hazardous and High-rise Structures). The course is based on the New Jersey Uniform Construction Code and the National Plumbing Code. The course covers advanced plumbing system design and installation for Class I structures. Prerequisite: Completion of an educational program meeting the requirements for Plumbing Inspector ICS.

Uniform Fire Code**FSI 105 FIRE PREVENTION AND INSPECTION 6 Credits**

This course examines the principles of fire prevention and inspection, with emphasis on the standards designed to protect lives and property from fire and explosion. Based upon the New Jersey Uniform Fire Codes, it covers the regulations, administrative aspects, and enforcement provisions of life safety systems of buildings; safe use and maintenance of facilities; handling of hazardous materials; retrofit requirements of the code; and techniques for fire inspection and investigation. This course satisfies the education requirement for state certification of fire prevention inspectors.

FSI 205 FIRE OFFICIAL 3 Credits

This course is offered in conjunction with the New Jersey Division of Fire Safety. It provides a comprehensive review of the duties and responsibilities of an appointed Fire Official. It covers the organization and administration of a local enforcing agency as well as legal methods of code enforcement. This course is approved for credit toward Fire Official certification issued by the Department of Community Affairs pursuant to the Uniform Safety Act. This course is designed to assist fire service personnel, property managers, architects, engineers, builders, safety officials, and the public to understand the administrative requirements of the Uniform Fire Code, references standards, and enforcement procedures. Prerequisite: FSI 105.

Vision Care Technology**OPH 123 VISION CARE TECHNOLOGY 4 Credits**

This course teaches the use of basic lens measuring devices and gauges, LEAP system of blocking, and use of automatic and hand edging machinery. Standard frame alignment is

presented using zyl frames. Students learn skills needed to fabricate a pair of eyeglasses including use of lensometers and vertometers, and laying out single vision lenses in preparation for edging and final insertion into zyl frames. Prerequisite: Formal acceptance into the program. Co-requisite: OPH 126. Laboratory fee.

OPH 124 OPHTHALMIC LABORATORY II 4 Credits

Laboratory “finishing” procedures are practiced, such as neutralization and duplication, layout, edging, beveling of single vision and bifocal lenses, and insertion of lenses into plastic and combination frames. Students also learn lens drilling and mounting in rimless and semi-rimless mountings, the use of both hand and automatic equipment related to the finishing operation, the identification of spectacle frames and patterns, and the use of the lens hardening oven. Repair of frames and temples, and the interpretation of shop orders are also covered. Prerequisite: “C” or better in OPH 123. Co-requisite: OPH 127. Laboratory fee.

OPH 126 OPHTHALMIC MATERIALS I 3 Credits

This course provides an introduction to the field of ophthalmic optics. The roles of the ophthalmic laboratory technician, ophthalmic dispenser, optometrist, and ophthalmologist are explained. The course continues with the history of lenses, basic optical terminology, lens characteristics, the metric system, and the refraction of light. Instruction also covers calculation of lens curvature, lens power, and prism. Students are introduced to the gross anatomy of the eye, and the use of optical charts and graphs. Prerequisite: Formal acceptance into the program. Co-requisite: OPH 123.

OPH 127 OPHTHALMIC MATERIALS II 3 Credits

This course is a continuation of OPH 126. It covers calculations and formulae to compute marked and true power, lens thickness, and the relation of center to edge thickness. Performance of higher power lenses and the importance of lens position are considered. The function of bifocal and multifocal lenses, and the proper management of their related optical effects are also considered. Lectures also cover optical standards, tolerances, and introductory information on absorptive lenses and their applications. Prerequisite: “C” or better in OPH 126. Co-requisite: OPH 124.

OPH 201 OPHTHALMIC DISPENSING I 5 Credits

This course examines professional ethics, practices, and responsibilities, followed by an evaluation of absorptive lenses and optical coatings. The calculation and elimination of vertical imbalance, by various methods, is thoroughly presented. Lecture and laboratory sessions include techniques in ocular and facial measurements for single vision, multifocals, and lenses to correct Aphakia. The course covers proper techniques in adjusting plastic and metal frames, and the neutralizing and analysis of completed spectacles. Practical problems are presented for students to solve, the goal being to develop the skills necessary at the dispensing table. Prerequisites: “C” or better in OPH 123, 124, 126, and 127, or placement.

OPH 202 OPTHALMIC DISPENSING II 5 Credits

The psychology of dispensing is emphasized along with the procedures for proper management of the Presbyopic and low vision patient. The interpretation of complex prescriptions, i.e. the effect of changing lens position, crossing cylinders, and the design of Iseikonic lenses, is covered. Instruction is also offered in the fitting of progressive lenses and eyeglasses for occupational and vocational use, and in considerations of style and fashion. Lecture and laboratory sessions include techniques in adjusting metal and rimless frames, analyzing and neutralizing unknown spectacles, and frame repair. The class participates in simulated case histories. Prerequisite: "C" or better in OPH 201 or placement.

OPH 203 CONTACT LENSES I 3 Credits

This course provides an introduction to contact lenses. Topics covered include: the history of contact lenses, lens materials, the anatomy and physiology of the cornea, and corneal topography and its relation to lens design. Instruction is also offered in the use of the Keratometer and Slit Lamp, and the procedures required in the design and inspection of hard contact lenses. Prerequisites: "C" or better in OPH 124 and OPH 127. Co-requisite: OPH 201 or placement. Laboratory fee.

OPH 204 CONTACT LENSES II 3 Credits

Fitting requisites, lens-cornea relationships, and the fitting of soft contact lenses are presented. Emphasis is on lens parameters, residual astigmatism, and recognition of patient symptoms. The course covers extended wear, scleral, cosmetic, and therapeutic lens fitting methods, and also the signs, symptoms, and management of the Kerataconus patient. Instruction continues in the use of the Keratometer and Slit Lamp, and the basic fitting philosophy underlying rigid and gas permeable contact lens fitting. Refraction techniques are described and demonstrated. Prerequisite: "C" or better in OPH 203 or placement. Laboratory fee.

OPH 210 PRINCIPLES OF REFRACTION 3 Credits

This course is designed to develop students' knowledge of clinical refraction. Topics covered include etiology, types, symptoms, testing, and treatment of refraction anomalies of the eye; accommodation; versions, vergences; anisometropia and aniseikonia; asthenopia; patient history; procedures involved in preliminary testing; objective and subjective refraction; and basic techniques in retinoscopy. Prerequisite: "C" or better in OPH 201 and PHY 111.

OPH 273 SUPERVISED CLINICAL EXPERIENCE 3 Credits

This course offers students co-op experience, of which 20 percent is gained at the College's Ophthalmic Dispensary and the remaining, at a retail optical dispensary chosen from the department's approved site list. The entire hands-on experience is performed under the supervision of a licensed optician. Prerequisites: "C" or better in OPH 123, OPH 124, OPH 126, and OPH 127. Co-requisite: OPH 201 or OPH 202.

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Scott Mittman	Division of Biology and Chemistry
Michael King	Division of Business
Ladylease Goodridge White (Interim Chairperson)	Division of Engineering Technologies and Computer Sciences
João Sedycias	Division of Humanities
Carlos de la Torre	Division of Mathematics and Physics
Prisca Anuforo	Department of Nursing and Allied Health
Mamie Bridgeforth	Division of Social Sciences

FACULTY

Essex County College has both full-time and adjunct faculty members. All are expected to meet the same standards of academic preparation, course content, and dedication to students. In addition to a greater teaching load, full-time faculty have additional responsibilities, notably curriculum development, student advisement, and involvement in the life of the college.

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MISCIA, ROCCO

Director, ECC Police Academy

MORRISON, WAYNE

Associate Director, ECC Police Academy

MUKABI, MICAH

Assistant to the Dean, Student Affairs

NEWTON-BANKS, CHERYL

Director, Enrollment Services/West Essex Campus

PARM, RONALD

Associate Director, Campus Security

RAGAN, RENITA

Director, College YES Program

RAMOS RIBEIRO, JOANA

Assistant to the Dean, Community & Continuing Education

ROMANO, JOANNA

Director, Educational Opportunity Fund

ROSS, RONALD

Director, Auxiliary/Evening/Weekend Services

RUDDER, MARVA

Director, Bookstore

RUTHERFORD, MARYLYN

Director, Purchasing

SACCO, THOMAS

Associate Director, Training, Inc.

SHAPIRO, JEFF

Assistant to the Executive Vice President and Provost
Facilities Management and Planning

SHOCKLEY, BERTRAM

Associate Director, Business Services and
Workforce Training

SLADE, PATRICIA

Director, Student Life and Activities

SLATON, GWENDOLYN

Director, Library

VIEIRA, ELVIRA

Associate Dean, West Essex Campus

WEIS, ANNETTE

Director, Development, Grants

WILKERSON, CHERYL

Associate Director, Talent Search

TELEPHONE DIRECTORY OF ECC OFFICES

General Information	(973) 877-3000
Academic Affairs	(973) 877-3164
Academic Divisions/Departments:	
Allied Health	(973) 877-1868
Bilingual Education	(973) 877-3450
Biology and Chemistry	(973) 877-3430
Business	(973) 877-3222
Engineering Technologies and Computer Sciences	(973) 877-4400
Humanities	(973) 877-3319
Mathematics and Physics	(973) 877-3302
Nursing	(973) 877-1868
Social Sciences	(973) 877-3250
Admissions (Enrollment Services Express) – Main Campus	(973) 877-3100
Admissions – West Essex	(973) 877-6590
Adult Learning Center	(973) 877-1894
Athletics	(973) 877-3165
Bookstore – Main Campus	(973) 877-3137
Bookstore – West Essex Campus	(973) 877-6636
Bursar’s Office - Main Campus	(973) 877-3099
Bursar’s Office - West Essex Campus	(973) 877-6630
Campus Police	(973) 877-3312
Career Resource Center	(973) 877-3350
Child Development Center	(973) 877-3357
Community and Continuing Education	(973) 877-3106
Cooperative Education	(973) 877-3270
Customized Programs	(973) 877-3330
Dasher Student Center/Student Life & Activities	(973) 877-3208
Disability Support Services	(973) 877-3186
Educational Opportunity Fund (EOF) Program	(973) 877-3228
Evening & Weekend Services	(973) 877-3245
Executive Vice President and Provost	(973) 877-3023
Financial Aid	(973) 877-3200
FOCUS/Ironbound Centers	(973) 877-1878
Game Room	(973) 877-3206
Gateway to College Program	(973) 877-3122
GED Testing	(973) 877-3093
Health Care Management	(973) 877-3128
Information Technology	(973) 877-3515
International Student Office	(973) 877-3187
Learning Center	(973) 877-3484, 3440
Library - Main Campus	(973) 877-3238
Library - West Essex Campus	(973) 877-1888
Media Production Technology (MPT)	(973) 877-3275
On-Campus Continuing Education	(973) 877-3079
Police Academy	(973) 877-4350
President’s Office	(973) 877-4462
Public Relations	(973) 877-3053
Public Safety Department	(973) 877-3312
Recruitment and Marketing	(973) 877-1941
Registrar – Main Campus	(973) 877-3111
Registration – West Essex Campus	(973) 877-6590
Special Events (Auxiliary Services)	(973) 877-3055
Special Programs	(973) 877-3265
Student Affairs	(973) 877-3071
Summer Youth Programs	(973) 877-3416
Testing	(973) 877-3100
Theater	(973) 877-3055
Training, Inc.	(973) 877-3092
Transfer Student Services	(973) 877-3184
Tutoring “Learning Center”	(973) 877-3440
Veterans Affairs	(973) 877-3154
West Essex Campus	(973) 877-6590
WISE Women’s Center	(973) 877-3395
Workforce Programs	(973) 877-3479

DIRECTIONS

MAIN CAMPUS

303 University Avenue, Newark, NJ 07102 (973) 877-3000

BY CAR VIA MAJOR HIGHWAYS

GARDEN STATE PARKWAY TO ROUTE 280 EASTBOUND - Take GS Parkway exit 145 to Route 280 eastbound. Stay to the right on Rt. 280 following signs for Harrison. Get off at exit 14 (Martin Luther King Jr. Boulevard). Turn right onto King Blvd. and go through fourth light at Warren Street. ECC campus is located on both sides of King Blvd. and extends to the West Market Street intersection. For parking, turn right onto Warren Street. Go two blocks and turn left onto Colden Street and go one block to ECC Parking Lot D.

NJ TURNPIKE (I-95) TO ROUTE 280 WESTBOUND - Take NJ Turnpike exit 15 W and proceed on Route 280 westbound. After crossing the drawbridge, take the second Newark exit which is Martin Luther King Boulevard. Turn left onto King Blvd. and go through the fifth light at Warren Street. ECC campus is located on both sides of King Blvd. and extends to the West Market Street intersection.

(See GS Parkway directions for parking.)

FROM THE WEST OR EAST USING ROUTE 78 - Take Route 78 to exit 56 (W. Peddie St. & Elizabeth Ave.). Turn right on to W. Peddie St. and make a left at the first traffic light onto Elizabeth Ave. Drive north for approximately one mile and then make a left on to Martin Luther King Boulevard. Continue driving north on MLK Blvd. for about one mile to the Essex County College Campus, located at the intersection of West Market Street and Martin Luther King Blvd. For parking, turn left from Martin Luther King Blvd. onto West Market Street and go approximately 150 yards. Essex County College parking deck will be on your right, adjacent to ECC's Physical Education Bldg.

FROM OTHER HIGHWAYS - Highways 1 & 9, 22, 3, & 46 all connect with Route 21 which becomes McCarter Highway in Newark. At junction of McCarter Highway and Raymond Boulevard, turn left onto Raymond Blvd. and proceed to University Avenue. Turn left at University Ave., go to first light, and make right onto West Market Street. Proceed uphill to ECC campus which is located at the intersection of West Market St. and Martin Luther King Jr. Boulevard. Make right onto King Blvd. (See Route 78 directions for parking.)

BY PUBLIC TRANSPORTATION

AMTRAK, PATH, MOST NJ TRANSIT RAIL LINES TO NEWARK PENN STATION - At Penn Station, take the Newark City Subway to the second stop which is Washington Street. Follow signs to the University Avenue entrance to the ECC campus.

NJ TRANSIT MORRIS & ESSEX RAIL LINE - Get off at Newark (Broad Street). Walk seven blocks south on University Avenue to the ECC campus. You can also take NJ Transit bus #72 or #76, get off on University Ave. at Raymond Boulevard, and then walk one block south to ECC.

BUS TRANSPORTATION - More than 30 bus lines from suburban Essex County and other parts of the NJ/NY metropolitan area, including Newark Airport and New York City, come to downtown Newark. Follow signs to University Heights and ECC campus.

WEST ESSEX CAMPUS

730 Bloomfield Avenue, West Caldwell, NJ 07006 (973) 877-6590

BY CAR VIA MAJOR HIGHWAYS

ROUTE 80 EAST TO ROUTE 46 EAST - Follow Route 46 East until it divides at the sign for Newark/The Caldwells. Bear right at the sign and continue until the road becomes Bloomfield Avenue. Follow Bloomfield Avenue past Passaic Avenue. ECC is located on the right, just past the shopping center.

ROUTE 80 WEST - Take 80 West to exit 52 (Lincoln Park/Fairfield/The Caldwells). Keep bearing right at exit under the highway onto Passaic Avenue. Stay on Passaic Avenue and at the seventh traffic light make a left onto Bloomfield Avenue. ECC is located on the right, just past the shopping center.

GARDEN STATE PARKWAY TO ROUTE 280 WEST - Take GS Parkway North to exit 145 to Route 280 West. Proceed on 280 West to exit 5B (527 North, Caldwell). Continue on 527 (Livingston Avenue) to second traffic light. Turn right onto Eagle Rock Avenue and continue one block. Turn left onto Roseland Avenue. Follow Roseland Avenue until it ends at Bloomfield Avenue. Turn left onto Bloomfield Avenue and continue through five traffic lights. ECC is located on the left side of Bloomfield Avenue, immediately after the fifth light.

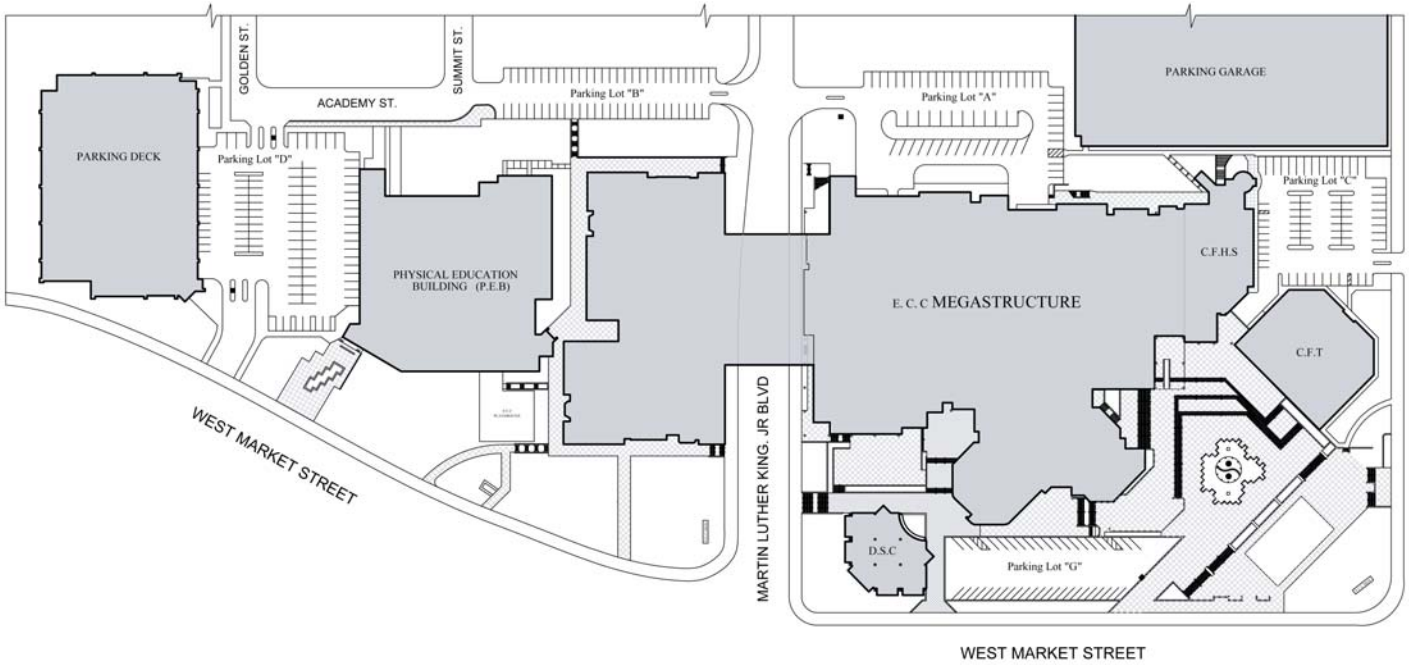
BLOOMFIELD AVENUE FROM NEWARK - Proceed on Bloomfield Avenue from Newark approximately 13 miles. Continue through Bloomfield, Glen Ridge, Montclair, Verona, and Caldwell into West Caldwell. ECC is located on the left, one block before Passaic Avenue intersection.

BY PUBLIC TRANSPORTATION

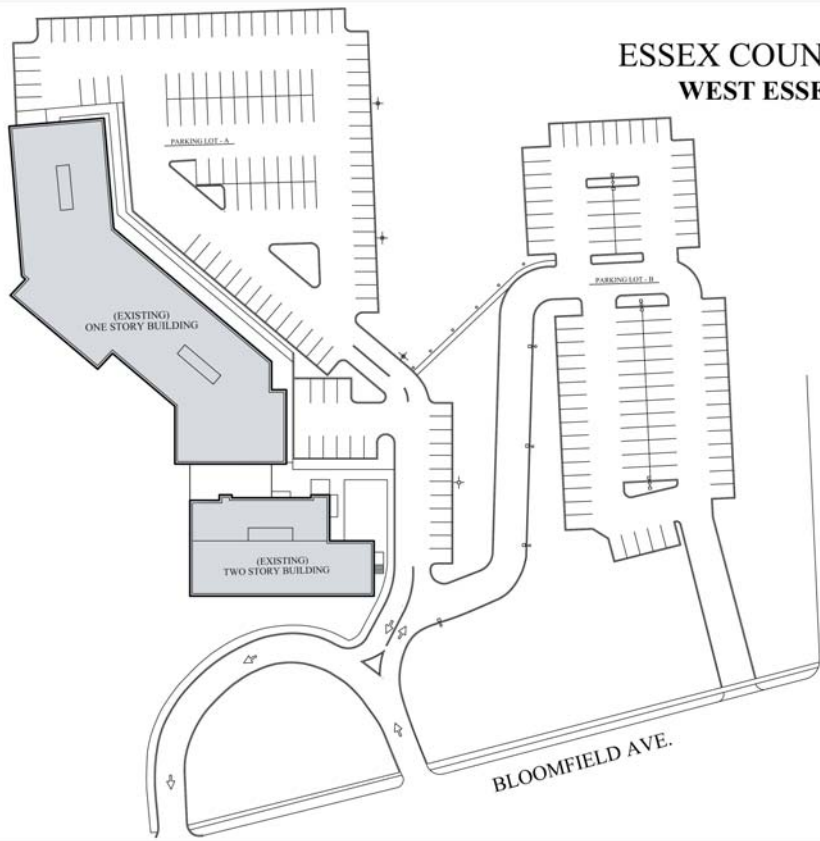
BUS FROM NEWARK - The #29 bus travels to the West Essex campus. Local lines connecting with the #29 at Broad Street Station in Newark are #13 (Broad/Clinton); #24 (Orange/Elizabeth); #27 (Mount Prospect); #38-48 (Harrison/Union); #40 (Kearny/Port Newark); and #52 (Park Avenue).

LOCAL NEWARK LINES - Connecting the #29 at other convenient locations: #7 - Newark City Subway connecting at Bloomfield Avenue in Newark; #11 - connecting at Route 23 and Bloomfield Avenue in Verona; and #20 or #34 - both connecting at Bloomfield Center in Bloomfield.

ESSEX COUNTY COLLEGE
NEWARK CAMPUS



ESSEX COUNTY COLLEGE
WEST ESSEX CAMPUS



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