

Union County College

UNION

These catalogs trace the history

of Union County College

from an emergency junior college in 1933 to today's

vital, multi-campus, educational center.

IUNIOR

COLLEGE

Welcome to Union County College and all that it has to offer! This biennial catalog spans the 75th anniversary celebration of this institution. Union County College is the oldest continuously operating 2-year college in New Jersey.

Union County College is proud of its heritage and of the more than one million students who have passed through its doors since 1933. The College was initially named Union County Junior College; shared space in Abraham Clark High School in Roselle; offered only evening courses; three curricula Arts/Sciences, Business Administration, Engineering; and enrolled 300 students. Over the years, the college's name and location continued to change. Union College moved to the present 48 acres Cranford Campus in 1960 and in 1982 our name changed to Union County College.

Though our name and location have changed over 75 years, our mission remains the same, to provide the citizens of Union County and the surrounding region access to excellent and affordable education. This includes the expansion and modernization of our two urban campuses in Plainfield and Elizabeth to meet the needs of the county's eastern and western cities. Today these campuses are vibrant and bustling. In addition, a new state of the art building is currently under construction in Elizabeth that will provide not only an additional 132,000 square feet of instructional space, but also a floor dedicated to foster the economic and workforce development of Union County.

As Union County College's President, I have overseen over \$90,000,000 of education improvements on our four campuses. These include: the Student Commons, the Center for Visual Arts and Communications and the addition and renovation of the MacKay Library in Cranford, the Logos and Building 2 in Plainfield, the Lessner and Kellogg Buildings in Elizabeth and the Regional Health Education Center with UMDNJ in Scotch Plains.

The college's very first students had only three curricula from which to choose, a far cry from today's student who can choose from over 90 Programs of study. In addition our students are aided by dozens of Articulation Agreements with Baccalaureate Degree granting Colleges and Universities throughout the nation.

This catalog will familiarize you with Union County College, its current academic offerings, and services.

Sincerely,

NIOR COLLEGES

EW JERSEY

r. Thomas H. Brown

Dr. Thomas H. Brown President



Union County Junior College Opens it's Doors on October 16, 1933

This "emergency junior college" began as an evening-only school within the halls of Abraham Clark High School in Roselle. Full funding for the first year was \$17,400.

- Of the thirteen original faculty, all held masters degrees, and five held doctoral degrees. This extraordinary level of scholarship surpassed the nationwide four-year college average.
- The 1933 weekly faculty salary was just \$21.
- Opened as part of the Emergency Relief Administration, annual cost per student at Union County Junior College in 1933 was \$68.17, total enrollment was 173 students.



Today, with over 90 Programs of Study, four campuses and record enrollments, Union County College is proud to continue a

Tradition of **Academic Excellence**

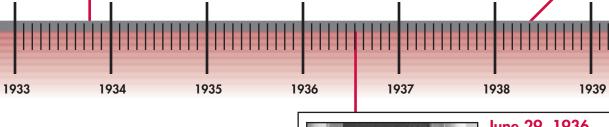
For more than seven decades, Union County College has been helping each new generation of students meet the challenges of change. Whether you are career-minded or transfer-oriented, UCC has a program to suit you. The College is firmly committed to scholarship by providing a solid liberal arts foundation while, at the same time, offering new programs and courses to meet the needs of a rapidly developing society.

All four UCC campuses boast modern facilities and advanced data and voice infrastructures to support the latest in computer hardware and software. All credit students are offered college

e-mail accounts through which they can communicate with faculty, fellow students, and the world of knowledge and information available online. Distance learning courses allow you to learn at home or from almost anywhere, with classes taught online or by videotape.

In 1936 a movement began to remove "County" from the name of the school. In 1938 the school was renamed "Union Junior College."

1940





June 29, 1936 Commencement

40 students graduate, 27 continuing on to colleges and universities across the country. The faculty is, for the first time, dressed in full academic regalia. Even more important, UCC has a reputation for providing its diverse student body with a nurturing and supportive environment. Student services, from counseling and financial aid to the one-on-one tutoring provided by the Academic Learning Centers, are in place to ensure student success.

If you are interested in pursuing a bachelor's degree at less than half the cost of a 4-year college, the economics of spending the first two years at Union County College, coupled with the 50+ dual admissions and transfer/articulation agreements that the College has in place, can ease the road to junior year status at a long list of colleges and universities throughout the U.S.

At UCC, you will have the chance to participate in a range of activities. These include a five-star chapter of the honor society of Phi Theta Kappa, a modern fitness center, and championship athletic programs.

Whether you are a recent high school graduate, an adult returning to school, or an employee seeking additional training or a new career, Union County College can be your guide

on an educational journey on which you too can change your life.

UNION JUNIOR

ANNOUNCEMENT OF COURSES

1943

AND GENERAL INFORMATION

The 1940's, A Decade of Change

War had a profound effect on Colleges across the nation. Enrollments plummeted as students left higher education for military service, then soared as returning GI's flooded campuses under the GI Bill.

In 1945, UJC established the Veterans' Study Center, providing accelerated high school classes to returning GI's. For a time, veteran enrollment surpassed College enrollment, accounting for 87.5% of students on the dean's list.

An editorial in the Cranford Citizen & Chronicle hails UJC students as "the cream of the crop," declaring the College "one of the leading junior colleges in the Metropolitan area."



Growing Enrollment

1948's record enrollment puts UJC at capacity and the facilities are overflowing. Any growth will require a new location. In November, 1948 the Board authorizes \$56,000 to purchase the 56 acres known as the Nomahegan Tract.

1942 1941

December 7, 1941

The bombing of Pearl Harbor.

The College's First Charitable Gift

1945

In November, 1946, First Lady Eleanor Roosevelt sends UJC a check for \$100.



1946

1947 1948

1949

Tuition & Fees: 1949-50

Registration per semester\$5 Student activity fee\$2 Tuition per credit hour\$10

Today, YoU Can Choose

from over 90 Challenging Programs of Study including:

Business & Computer **Programs**

- Accounting
- Administrative Support
- Business Management
- Business Marketing
- Computer Science/Engineering
- Computer Information Systems
- Computer Science
- Computer Science/Mathematics
- Database Specialist
- End User Computing
- Help Desk
- Hospitality Management
- Information Processing
- Information Systems Technology
- Marketing, Advertising & Design
- Office Professional
- Programming
- Public Administration
- Sport Management

Communications & Media

- American Sign Language (ASL) /Deaf Studies
- ASL English Interpreting
- Audio Production
- Deaf-Blind Interpreting
- Desktop Publishing
- Film
- Game Design Creation
- Game Design DevelopmentInterpreters for the Deaf
- Interpreting Spoken Language
- Multimedia
- Multimedia Development
- Print Journalism
- Public Policy
- Public Relations
- Radio

The Union Junior College Graduating Class of 1951

The 1940's college veteran population was replaced in the 50's by

- Television
- Webmaster

Education

- Early Childhood (PreK-3)
- Grades 4-12

Engineering & Engineering Technologies

- Architecture
- Automotive Technology
- Civil/Construction Engineering
- Technology

 Computer Science/Engineering
 Electronics/Electromechanical Engineering Technology
- EngineeringEngineering Management
- Environmental Science
- Manufacturing Engineering Technology

 Mechanical Engineering
- Technology
 Technical Studies

Fine & Liberal Arts

- American Studies
- Drama
- Graphic Design
- Illustration
- International Studies
- Liberal Arts
- Liberal Studies
- Music
- Photography
- Psychology
- Social Services

- Women's Studies
- Visual Arts

Health Care

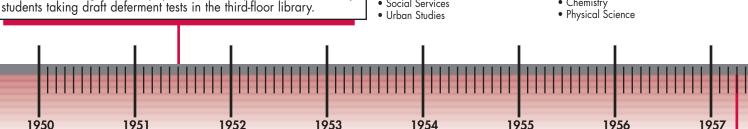
- Dental Assisting
- Dental Hygiene
- Emergency Health Science
- Gerontology
- Gerontology Activities
- Nuclear Medicine
- Nursing Physical Therapist Assistant
- Practical Nursing (LPN)
- Psychosocial Rehabilitation and Treatment
- Radiation Therapy
- Radiography, AmplifiedRespiratory Care

Law & Public Safety

- Corrections
- Criminal Justice
- Fire Science Technology
- Paralegal Studies
- Paramedic Didactic Training

Science

- Biology
- Biotechnology
- ChemistryPhysical Science



Our Growing History

The Historic Tree Grove located on the Cranford Campus near the Sperry Observatory is part of a long-term project at UCC. Each tree is the offspring of a tree noteworthy in American history.

The nearly 100 historic trees include the Charter Oak, America's First Delicious Apple, the Minuteman Silver Maple and the World Trade Center Sycamore.



Building for the

Growing a College, Then and Now.

Union County College operates major campuses in Cranford, Elizabeth, Plainfield, and Scotch Plains, N.J.



There are eight major buildings on the Cranford Campus, including the newly expanded Kenneth Campbell MacKay Library.

UCC's expanding Elizabeth Campus includes the Sidney F. Lessner Building and a 132,500 sq. ft. building currently

under construction just west of the Lessner Building. The new facility is to be named the Elizabeth I. Kelloga Building.

The Plainfield Campus takes up most of a city block between East Second and East Third Streets and Church Street and Roosevelt Avenue. It includes classrooms, labs and space for Emergency Medical Technician/Paramedic training and a state-of-the-art laboratory for American Sign Language and Deaf Studies.

In Scotch Plains, UCC shares a 40-acre campus with Union County Vocational-Technical Schools and the John H. Stamler Police Academy. The College and the University of Medicine and Dentistry of New Jersey jointly operate the Regional Health Education Center in the College's 65,000 sa. ft. Health Technologies Building, which has also been designated as the fifth campus of UMDNJ.



Groundbreaking for the Nomahegan Building

1958



1962



1964

April 1957, **Accreditation for UJC**

1959

UJC's 20-year quest for accreditation is achieved with recognition by the Middle States Commission. Changes that follow include academic affiliations, an honors program, and a chapter of the prestigious Phi Theta Kappa international honor society.

Fundraising builds the Cranford campus

1961

1960

The library was dedicated in 1960, and by fall '63, the Campus Center is complete with a theater, language labs, lounge, snack bar, and recreational facilities.

Sperry Observatory

1963

The most unusual building on the Cranford campus was dedicated on May 20, 1962, the William Miller Sperry Observatory. Built during the '60s race to stars, it houses two telescopes, a lecture hall, library, darkroom and exhibit area. În 1968, a federal grant funded classes at the Observatory for 500 elementary and secondary teachers in NJ.

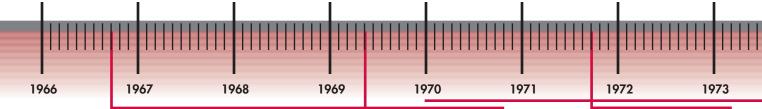
And a state of the art science building

1965

In 1965, a federal grant funded construction of the Science building. Dedicated in the fall of 1967, it was NJ's first completely air conditioned, electrically heated college building. It houses an IBM 1130 computer that cost as much as the entire construction of the Sperry Observatory.



The Panorama of Student Life at UCC



The education and skills students gain at Union County College are not acquired solely in the classroom, but from the totality of their college experience. The diversity of the UCC student body provides a rich community for cultural and intellectual exchanges and events. In addition to fielding championship athletic teams, the College supports an active Student Government Association (SGA) that sponsors multicultural events, activities, and performances both on campus and off. First-run movies, concerts, parties, and

theatrical performances are available year-round to enrich the days spent at Union County College.

Clubs and organizations

Join a group from this growing list, or start a new club:

- Alliance
- Architecture Club
 - Art Society
- Asian Students' Association
- Black Student Heritage Club
 - Business Management Organization
- Catholic Student Organization
- Cultural & Educational Programs Advisory Committee
 - Cheerleading Club
 - Communications Club
 - Foreign Student Voice (Literary Magazine)
- International Cultural Exchange
 - Mixed Martial Arts
- Performing & Creative Arts Club
- Physics & Engineering Club
- The Scroll (Student Newspaper)
- The Sheaf (Literary Magazine)
- La Sociedad Hispanica de UCC
- Student Interpreters Group Network
 - Student Volunteer Organization

 - Television Production Club
 - Tennis Club
 - UCC Christian Fellowship
 - U.C.R. 530AM (College Radio Station)
 - World Language Club

Union is no longer "Junior," and is again the "County" College



In the fall of 1966, the Board officially eliminates the word junior from the title, to take effect September 1,1967.

Then in 1969, the College enters an agreement with the Union County Coordinating Agency for Higher Education to provide

college level programs. This prevents the agency from creating a new "County College." Funds are now available to keep tuition low for county residents.



Cooperative Nursing Programs

In fall 1971, the College enters cooperative Nursing Programs with Elizabeth General and Muhlenberg

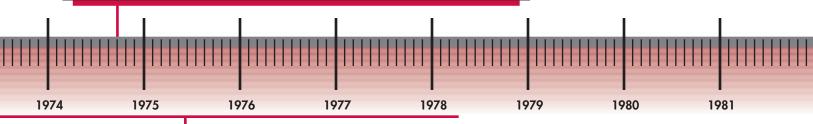


Hospital Schools of Nursing. These successful partnerships continue today.





In 1974, tuition is \$175 per semester for Union County residents. Women account for more than half the enrollment, and practically all Union College students are part-time.





The 70's are a Time for Expansion

In September 1970, Union College opens urban centers in Elizabeth and Plainfield. The new sites allow for growth and new programs including criminal justice and astronomy.

> Union proudly unveils the MacKay Library in summer, 1973, with an art gallery, seminar room, audio center and room for more than 100,000 volumes.

Intercollegiate Athletics

The College is a member of the Garden State Athletic Conference and Region XIX of the National Junior College Athletic Association. The College has six intercollegiate sports:

- Men's Basketball Co-ed Golf
- Men's Soccer
- Women's Basketball
- Men's Baseball and
- Women's Volleyball.



UCC provides a comprehensive athletic-counseling program. Student athletes receive academic, personal, career, and transfer counseling.

Fitness Center



The Campus Center is home to a Fitness Center, Gymnasium and more. The Fitness Center boasts cardiovascular machines, circuit training equipment, free weights, an aerobics studio, and locker rooms. Students may use the Fitness Center after presenting a photo I.D. and current class schedule. By arrangement, Elizabeth students may use the athletic facilities at the Elizabeth Y.M.C.A., and Plainfield students may use the athletic facilities at the Plainfield Y.W.C.A.

Honor Societies

UCC is proud to have five national honor societies on our campuses:

The Psi Chapter of the **Chi Alpha Epsilon** Academic Honor Society is for students in the Educational Opportunity Fund Program.

lota Xi is the UCC chapter of Phi Theta Kappa, promoting Scholarship, Leadership, Fellowship, and Service among students of two-year colleges.

The Omicron Beta Chapter of Tau Alpha Pi is for students in the engineeringtechnology programs.

Mu Alpha Theta promotes scholarship in mathematics at two-year colleges.

Psi Beta honor society is affiliated with the American Psychological Association. It promotes scholarship and an interest in psychology as a profession.

SGA

The Student Government **Association** (SGA) promotes group activities to further the educational, social, and physical welfare of the students at UCC through social, recreational, and cultural activities. The SGA also acts as an intermediary for the student body in dealings with the College administration, and participates in the governance of Union County College.

You Can **Get There** From UCC

After Graduation

A vital part of Union County College's mission is to transfer its araduates with junior-year status to four-year colleges



and universities throughout the United States and abroad. Over the years, the College has compiled an enviable record in carrying out this goal, as graduates have transferred to more than 500 colleges and universities throughout the world.





is created June 24. 1982. With the **COUNTY** signing of merger **COLLEGE** documents, the consolidation of

Union College and Union County Technical Institute (UCTI) in Scotch Plains is complete. The new UCC is part of the NJ community college system, with four campuses, 4,000 full and 5,000 part time students.

Today, UCC has dual admissions and transfer/articulation agreements with a growing list of colleges and universities as well as transfer agreements with New Jersey state colleges.

Articulation agreements facilitate transfer to specific colleges and programs, but students are not limited to transferring only to these institutions. The agreements spell out the program a UCC student must follow to enter the receiving college or university with full junior-year status.

UCC has unique Dual Admissions Agreements with these prestigious universities:

- Rutgers The State University: The Rutgers University Dual Degree Program (DDP) provides New Jersey high school graduates with an opportunity to earn a baccalaureate degree at Rutgers University by first earning an associate's degree at UCC.
- Fairleigh Dickinson University, Kean University, Montclair State University, New Jersey City University: Students who enroll in the joint admission program with UCC and these Universities should be guaranteed admission as juniors provided they have completed an Associate degree and fulfilled all the necessary criteria of the joint admissions program.
- Georgian Court University: Georgian Court University will reserve a place for UCC students enrolled in the joint admissions program. The student will be

1985

enrolled in a parallel program of choice, and will be accepted with full junior standing. The student must complete the Associate degree under which they were accepted at UCC and fulfill the criteria of the joint admissions program.

• NJ Institute of Technology: Students who enroll in the joint admissions program between UCC and NJIT will be guaranteed admission into any of several parallel programs at NJÍT provided they have completed an associate degree and fulfilled the criteria of the dual admissions program.

For specific programs and a list of articulation agreements, see pg. 211 of this catalog, or visit UCC online at www.ucc.edu



1982 1983

> 1982 Annual **Full Time Tuition:**

> > \$600.00

A National Shortage

UCC's professional nursing programs respond to the national nursing shortage. 100% of the 1989 Classes of the Elizabeth General Medical Center and Muhlenberg Regional Medial Center Schools of Nursing pass the National RN Licensure Exam.

1986

1987



1988

1989

1984



The 1990's: Doing More with Less

July 9, 1990 Dr. Thomas H. Brown joined the College as president. At once, he was faced with mandated spending cuts, a threatened strike, and ongoing capital improvements.

Citing the need to do more with less, Brown initiated an innovative Strategic Plan, reorganized the administration and placed greater emphasis on fundraising; economic and workforce development, and community education and community service.

The first President Bush cited education as a high priority in his 1990 State of the Union address, and Dr. Brown carefully positioned UCC to meet the educational needs of our community.





The Commons, Center of **Cranford Student Life**

The Cranford campus was enhanced in 1991 with the opening



of a new 43,000 sq. ft. student life building, now know as the Victor M. Richel Student Commons, In 1994, a state-of-the-art Visual Arts and Communications Center opened in the lower level of the MacKay Library and in '95 the addition of the Fitness Center and the Executive Education Center continued the growth of UCC's Cranford campus.



Dedicating the Plainfield and Elizabeth Campuses

After extensive renovations, in '92 Dr. Brown presided over the dedication of both the Lessner building, UCC's full-service Elizabeth Campus, and the Plainfield Campus which occupies nearly an entire city block.



Re-Accreditation For UCC

Rating UCC as "excellent" Middle States reaccredits the College.

Continued Growth in Continuing Education

In the 90's more than 10,000 students enrolled annually in UCC's Continuing Education Programs. Emphasis on community education spurred creation of a paramedic program, College for Kids, and classes with the Union County Police Academy.

1990 1991 1992 1993 1994 1995 1996 1997



September 18, 1989

Union County College took title to the headquarters building of Elizabethtown Gas Company, giving the College a permanent home in downtown Elizabeth.

Evidencing changing social attitudes, the College set a goal to be a smoke-free facility by the end of 1991.



Freeholder Scholars

The Union County Board of Chosen Freeholders established the first Freeholders Scholars Program in the nation in Fall, 1999. The scholarship pays tuition and fees at UCC for County residents who meet educational and financial criteria.

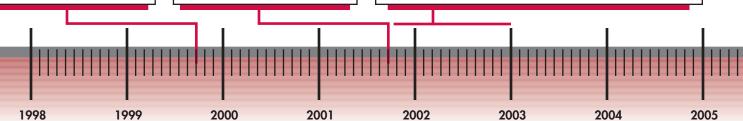


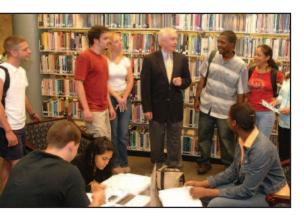
A Season of Change

In 2001, UCC launched several new programs including Deaf-Blind Interpreting, Radiation Therapy, and others. Later that same year, Trinitas School of Nursing moved from the former Elizabeth General Hospital to UCC's Elizabeth campus.

The 2001-2002 academic year was one of incredible highs and devastating lows across the nation. Six days into the Fall Semester the world was rocked by the horrors of September 11. The College community responded with blood drives, commemorative ceremonies, and collective and private reflection. In 2002 on the Elizabeth campus, the Theater Project debuted "What Happened: The September 11th Testimony Project," recounting the 9/11 experiences of more than 40 real-life characters.







Enrollment Flowchart:

- ✓ Choose your program. Research program options at www.ucc.edu or review the materials mailed to you, attend an Open House, or speak with an Enrollment Specialist. If you're still uncertain, consider the Liberal Arts program which allows for easy transition into another program (provided you file a Curriculum Change Form within the first 2 semesters). Visit UCC in person, Mon.-Thurs. 8:30am to 7:30pm Fri. 8:30am to 4:30pm or call 908-709-7596 (Cranford) or 908-965-6050 (Elizabeth).
- File an Admission Application. The \$35 application fee is payable by check or money order. International Students needing a student visa (F1) must have the application complete by July 15 for the Fall term and November 1 for the Spring term.
- ✓ After filing an application, send your educational documents (high school transcript, diploma, and college transcript(s) if applicable) and immunization record. TRANSFER students seeking credit must complete a Credit Evaluation Form. Request a a form in-person or by phone at (908) 412-3550.
- If you're seeking financial aid, file as early as possible. A free financial aid application is available from the Financial Aid Office. For quickest response visit http://www.fafsa.ed.gov. UCC's code is 002643 (required for filing). Attend a Financial Aid Workshop at one of the UCC campuses – details and dates are on the UCC website at http://www.ucc.edu/recruitment/fin aid workshops.htm. Students applying for financial aid must select a major. International students on an F1 Visa are ineligible.

Call 908-965-6031 Yes for E.S.L. Test FIRST: **Receive Your** E.S.L. Test Acceptance Required? File Your Return Test Waiver Letter from **Application** No Forms to **UCC** with Admissions Office for Admissions **Placement Testing** Test Required? & Financial Aid Information Yes Placement Test -NOTE: Former UCC students must complete a new application, **Course Placement** but are not required to pay an application fee.



Reaching ever higher

2006 brought the completion of the 3rd floor addition to MacKay library. The addition provided much needed instructional space and the library tower is a distinctive architectural centerpiece of the Cranford Campus.

A Tradition of Victory

The 39/'40 girls' basketball squad began a tradition of victory by capturing first place in the "Powderpuff League" topping Bergen and Morris. This was the first championship for a Union Team, but not the last. The 1977 women's team continued the tradition as Region XIX Basketball Champions with a string of 26

consecutive victories. With championships in '79, '81, '82, '86, '87, '88, '89, '90, '96, '97, '98, 2003, and 2007, the winning seasons proudly continue!

- 2006 2007 2008 2009 2010 and beyond
 - ✔ Placement Testing: After acceptance, the Admissions Office will send you College Placement Test information including exemption criteria. If you are exempt, complete an Application for Exemption. If you've taken a placement test at another New Jersey institution, send your scores to UCC's Assessment Center. ESL testing may be required in lieu of the placement test if your first language is not English.
 - Registration Counseling will take place within days of testing. You will be informed of the process.
 - ✓ Tuition is payable when you register for classes. Full-time incounty students (12 credits) should expect to pay approximately \$1,380.00 in tuition and fees (this does not include books or supplies). The full-time out-of-county student should expect approximately \$2,424.00. If you live outside Union County, and your county college doesn't offer the program or course you are taking at UCC, your tuition may be charged at the in-county rate. File a Charge Back Form, available from the admissions office.
 - ✔ Books and Supplies: Expect to spend about \$100 per course for books and supplies. Financial aid may be used towards books and supplies (voucher) provided you have funding left after paying your tuition and fees.

CONGRATULATIONS You're on Your Way!



Faculty Appointment or Walk-in Counseling & Registration Advisement

Register for Classes

Registration begins for Fall Term: 1st week in May Registration begins Spring Term: 1st week in November Registration begins Summer Term: Last week in January Register early for more course and

schedule options and to avoid long lines

Student Accounts Payment is due at the time of registration

Parking Permits @ Public Safety

Book Vouchers @ Book Store

Q: What advantage does UCC have over 4-year schools?

A: UCC focuses on the teaching and learning of all students and provides access to an excellent higher education at an affordable cost. UCC's programs are relevant to the needs of our society in preparing students for productive lives and careers.

Q:What is "Open Access"?

A: UCC is an open access institution. Admission is open to high school graduates, those with G.E.D. certificates and all persons 18 years of age or older. Students must take a placement test in English and Math, or otherwise meet placement standards in those subjects. The tests help the College identify students who may have trouble with college-level coursework and make sure they begin their college experience in the appropriate courses.

Q:Besides courses, what does UCC offer?

A: UCC is known for its nurturing environment. UCC's exceptional counseling services and one-on-one tutoring are available to all students through Academic Learning Centers. Small class sizes allow students to receive individualized faculty attention, and, unlike large four-year universities that often let graduate students (teaching assistants) conduct classes, all of UCC courses are taught by faculty members.

Q: Are there support services for students who've been away from school for a while?

A: UCC, in addition to academic support, offers flexible class schedules, on four conveniently located campuses. Classes are available mornings, afternoons, and weekends and you can earn credits faster with late start classes, winter session, and summer sessions. Many classes are taught online or through videotapes, providing the ultimate in scheduling flexibility.

Q:Does UCC cost less?

A: Tuition for Union County residents is less than half the per-credit cost of four-year colleges in our area. And, the Office of Financial Aid offers expert help pursuing tuition assistance and financial aid. County residents entering UCC as freshman with a high school record of high achievement may be eligible for NJ STARS or the Freeholder Scholars Program. Each provides free tuition to qualifying individuals pursuing an Associates degree.

Q:But I want a bachelor's degree, shouldn't I go to a 4-year school?

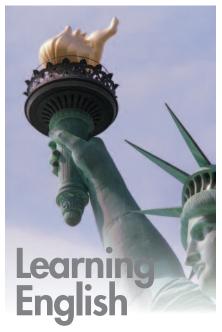
A: UCC has agreements with colleges and universities across the country. With an Associates degree from UCC, you can easily transfer to a four-year college or university with Junior year status to complete your baccalaureate. UCC alumni have transferred with advanced standing to more than 500 colleges and universities worldwide.

Q: How do community college grads do academically after they transfer to a four-year college?

A: A National Study found that community college graduates who are seniors at four-year colleges achieve a Grade Point Average (GPA) substantially higher than their fellow seniors who attended that college from the beginning of their freshman year.

Q:What else can I do at UCC?

A: UCC has Men's and Women's intercollegiate athletic teams, cultural, service and social clubs and events, a college radio station, student literary publications, and more. These are just some of the College's exciting activities beyond the classroom.



Within sight of New York City, located in the center of the immigration gateway, the Union County College campus in Elizabeth houses the UCC Institute for Intensive English. The Institute is one of the largest providers of English as a Second Language (ESL) instruction in the State of New Jersey. Students from 89 foreign nations and Puerto Rico are enrolled in the Institute. It offers a full-time program of concentrated instruction in English for speakers of other languages in order to enhance their English language abilities to further academic, career, and/or personal goals.

This catalog is filled with information about the programs, courses, and educational life at UCC. To learn more, visit us in person or go online at

www.ucc.edu

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Study rograms

UNION COUNTY COLLEGE

offers two-year programs leading to the Associate in Arts, Associate in Science, and the Associate in Applied Science degrees, and programs leading to the Certificate and to the Diploma. The course requirements for each program are outlined in this catalog.

All matriculated students, whether they plan to transfer to a four-year institution or complete their college careers at the end of their programs, are eligible for the Associate degree, the Certificate, or the Diploma if all graduation requirements set forth in this catalog have been met. The program outlines are offered as guidelines and courses do not necessarily need to be taken in the order suggested. Please note, however, that many courses require prerequisites or corequisites.

Academic Programs are subject to change. Students should contact the office of the vice president for academic affairs for the most current information.

The programs leading to the Associate in Arts degree parallel those offered in the freshman and sophomore years at four-year institutions. Students who satisfactorily complete their chosen programs will be able to continue their college education into their junior and senior years at four-year colleges or universities. The **Associate in Arts** degree is conferred upon completion of one of the following two-year programs:

- American Sign Language and Deaf Studies
- American Studies
- Audio Production
- Biology
- Business
- Chemistry
- Communications
- Computer Information Systems
- Computer Science/Mathematics
- Criminal Justice
- Desktop Publishing
- Drama/Fine Arts
- Early Childhood Elementary Education
- Education (Suggested Grades 4-12)
- Film
- Gerontology
- Graphic Design/Fine Arts
- Illustration/Fine Arts
- International Studies
- Liberal Arts
- Multimedia
- Music/Fine Arts
- Photography/Fine Arts
- Physical Science
- Print Journalism
- Psychology
- Public Administration
- Public Relations
- Radio
- Television
- Urban Studies
- Visual Arts/Fine Arts
- Women's/Gender Studies

The Associate in Science degree is conferred upon the completion of the following programs:

- Architecture
- Computer Science/Engineering
- Emergency Health Science
- Engineering
- Engineering Management
- Environmental Science
- Information Systems Technology
- Liberal Studies (Exploring Science and the Arts)
- Nuclear Medicine
- Cooperative Program in Professional Nursing in affiliation with Muhlenberg Regional Medical Center Harold B. and Dorothy A. Snyder Schools.
- Cooperative Program in Professional Nursing in affiliation with Trinitas School of Nursing
- Psychosocial Rehabilitation and Treatment
- Radiation Therapy
- Amplified Program in Radiography
- Respiratory Care
- Social Services
- Diagnostic Medical Sonography

The Associate in Applied Science degree is conferred upon the completion of the following programs:

- Accounting
- Administrative Support
- Administrative Support (Information Processing Option)
- American Sign Language English Interpreting
- Business Management
- Business Marketing
- Civil/Construction Engineering Technology
- Computer Science
- Dental Hygiene (joint degree with University of Medicine and Dentistry)
- Electronics/Electromechanical Engineering Technology
- Fire Science Technology
- Game Design Development
- Help Desk (Technology Support Specialist)
- Hospitality Management
- Manufacturing Engineering Technology
- Mechanical Engineering Technology
- Paralegal Studies
- Physical Therapist Assistant
- Sport Management
- Technical Studies

The **Diploma** is conferred upon completion of the Practical Nursing program. Various courses in the **Diploma** program are equivalent to courses required in other Associate degree programs.

The **Certificate** is conferred upon completion of the following programs:

- American Sign Language and Deaf Studies
- American Sign Language -English Interpreting
- Audio Production
- Biotechnology
- Corrections
- Criminal Justice
- Database Specialist
- Deaf/Blind Interpreting
- Dental Assisting
- End-User Computing
- Fire Science Technology
- Gerontology Activities
- Information Processing
- Interpreting Spoken Language
- Marketing, Advertising, and Design
- Multimedia Development
- Office Professional
- Paramedic Didactic Training Program
- Programming
- Public Policy
- Webmaster

While the course requirements specified in the following curriculum descriptions are normally required, students may request to waive or substitute courses which are available infrequently. Students wishing to do so should see the appropriate program coordinator, department chairperson, provost or vice president for academic affairs.

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ACCOUNTING

ASSOCIATE IN APPLIED SCIENCE DEGREE

Graduates of this Associate in Applied Science degree program are prepared for employment as junior accountants with large corporations. The program provides some of the needed academic background for a C.P.A.

Graduates may seek employment in industrial or general accounting or work in areas such as credit, collections (internal), governmental accounting, or payroll supervision. The program may be a "stepping stone" to law or employment with the Treasury Department or the Justice Department. Transfer of credits to a four-year college is conditional upon the receiving college or university. You should consult with the Program Coordinator prior to submitting applications.

See paragraph "Qualifications for Admission to Degree Programs" for desired high school backgrounds (see page 207).

The specific objectives of this program are that the graduate must be able to demonstrate:

- the ability to communicate effectively personally in the community and in a corporate or business setting;
- the ability to comprehend the underlying framework of accounting concepts and data;
- an understanding of all the segments of the accounting cycle and how they interrelate with each other:
- the ability to prepare a set of books and records (both manually and computerized) from the beginning analysis of transactions through the completion of financial statements;
- the ability to prepare Federal and New Jersey State Individual and Corporate Income Tax Returns;

- the ability to operate the computer to perform diversified accounting activities;
- the ability to prepare sales and payroll tax
- the ability to understand and apply accounting data for managerial applications;
- the ability to understand the role of economic principles as they relate to accounting;
- the ability to understand generally accepted accounting principles and be able to apply them functionally in accounting;
- the ability to understand and apply the principles of corporate accounting;
- the ability to prepare a statement of cash flow;
- the ability to understand the principles of Job Order and Process Cost Accounting;
- the ability to understand the principles for budgeting;
- the ability to understand the basics of business law principles, including contracts and the Uniform Commercial Code;
- the ability to understand and appreciate the role of general business concepts in a global context.

AFTER UCC

Graduates work as junior staff accountants, bookkeepers, loan service representatives, tax preparation assistants, credit and collection associates, and junior financial analysts.

RECOMMENDED SEQUENCE

		FIRST YEA	R		
Cour	SE#	Course	LEC.	Lab	Cr.
FIRST	SEMES	TER			
ACC	103	Accounting I	4		4
BUS	105	Organization & Management	3		3
CIS	1003	*Intro to Computer Applications	2	2	3
ENG	101	English Comp I	3	1	3
MAT		Algebra	3		3
					16
SECON	ND S E/	MESTER			
ACC	104	Accounting II	4		4
ECO	201	Principles of Economics I	3		3
ENG	122	Introductory Technic & Business Writing	al 3		3
MAT	127	Elementary Statistics	_		4
					14

	S	ECOND YEA	AR		
Cour	SE#	Course	LEC.	Lab	Cr.
FIRST	SEMES	TER			
ACC	203	Intermediate			
		Accounting I	4		4
ACC	211	Federal Taxes I	4		4
BUS	201	Business Law I	3		3
ACC	210	Microcomputers in			
		Accounting	2	2	3
Huma	Humanities (Must be chosen from Literature				re,
		Fine Arts, History, or	· Mo	dern	^
		Languages)			3
					17
SECON	ND SEA	MESTER			
ACC	204	Intermediate			
		Accounting II	4		4
ACC	205	Cost Accounting	4		4
ACC	212	Federal Taxes II	2	1	2
ACC	290	Co-op Ed Experience	Э		3
BUS		Business Law II	3		

*CIS 100 has a prerequisite of ADM 101.

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ADMINISTRATIVE SUPPORT

ASSOCIATE IN APPLIED SCIENCE DEGREE

This is a comprehensive two-year Associate in Applied Science degree program which prepares the graduate to develop a high degree of administrative support competence with personal qualities to satisfy the most exacting business standards. The program covers both the basic administrative management skills as well as advanced training for the achievement of professional status.



See paragraph "Qualifications for Admission to Degree Programs" for desired high school background (see page 207). Typing test is required.

Challenge exams for shorthand and keyboarding are given to those students who qualify.

The specific objectives of this program are that the graduate must be able to demonstrate:

- · critical thinking and problem-solving;
- professional communication skills;
- · the ability to manage time effectively, including the ability to establish priorities;
- the ability to keyboard at acceptable speeds/accuracy using correct document formatting;
- the ability to take notes and transcribe them in correct format using correct grammar and punctuation;
- the ability to use appropriate application packages including word processors, spreadsheets, and professional presentations;
- · the ability to perform the necessary elements of running an office effectively;
- the ability to work independently.

AFTER UCC

Graduates will have developed a high degree of administrative support competence with personal qualities to satisfy the most exacting business standards. The program covers both the basic administrative management skills as well as advanced training for the achievement of professional status.

RECOMMENDED SEQUENCE

		FIRST YEA	R		
Cours	E#	Course	LEC.	Lab	Cr.
FIRST S	SEMES	TER			
ENG	101	English Comp I	3	1	3
MAT	113	Business Mathematics	3		3
ADM	100	Notetaking	3		3
ADM	101	Keyboarding for the Computer I	1	2	2
ADM	131	Administrative Procedures	3		3
BUS	101	Intro to Contempora Business	ry 3		3
					17
SECON	ID SEA	MESTER			
ENG	122		al &		
		Business Writing	3		3
ADM	102	Keyboarding for the Computer II	1	2	2
ADM	135	Proofreading & Editing Skills	3		3
ADM	217	PowerPoint	2	2	3
CIS	120	The Internet	2	2	3
Electiv	'e	Humanities	3		3
					17

SECOND YEAR							
Course#	Course	LEC.	Lab	CR.			
FIRST SEMES	TER						
ACC 103	Accounting I	4		4			
ADM 140	Customer Service	3		3			
ADM 213	Word I	2	3				
ADM 215	Excel I	2	2	3			
BUS 110	Business & Technology	3		3			
				16			
SECOND SEA	MESTER						
ENG 129	Public Speaking OF	2					
ENG 128							
	Communication	3		3			
ADM 214		2	3	3			
ADM 216	Access	2	2	3			
Elective		3		3			
Elective	Social Science***	3		3			
				15			
Total				65			
	e from the following s e courses:	Socia	l				
BUS 105 BUS 201 BUS 202	ECO 202						

ASSOCIATE IN ARTS DEGREE

The American Sign Language and Deaf Studies Degree Program is designed for individuals who do not have a college degree and are interested in the field of Deaf Studies, linguistics, communications, psychology, social work, rehabilitation, education of the Deaf and other related areas. The program provides a multi-disciplinary and interdisciplinary approach in American Sign Language and Deaf Studies. Areas of scholarly pursuit include cultural and historical studies, linguistic examination, and literary analysis, as well as the study of the language in its conversational form. Graduates will be prepared for entrylevel positions working with Deaf persons or transfer to four-year degree programs. This program can be

completed either as a part-time or full-time student in a day or evening program.

Students are admitted to the ASL and Deaf Studies Program when they have demonstrated English competency and have satisfactorily completed the two semesters of the Pre-entry-level. Students are required to have satisfactorily completed ENG 101 and ENG 102 before taking ASL 201 (ASL 3) and ASL 205 (Linguistics of ASL).

Deaf and Hard of Hearing students are encouraged to participate in this program.

GENERAL PROGRAM REQUIREMENTS:

A grade of 'A', 'B', or 'C' in ASL 101- ASL I and ASL 102 - Visual Gestural Communications meets satisfactorily the prerequisite requirement to enroll in ASL 103 – ASL II, ASL 104 – Classifiers and Visual Imagery, and HUD 104 Fingerspelling. A grade of 'D' or 'F' in one of these courses does not allow the student to take the course sequences. The course(s) may be repeated once as this is the policy of Union County College.

A grade of 'A' or 'B' in ASL 103, ASL 104 and HUD 104 meets the prerequisites for ASL&DS and IDP. In proceeding courses (ASL 201, ASL 202, ASL 203, ASL 205, ASL 208, ASL 210) a grade of 'C' necessitates a conference with the instructor(s) and coordinator for consultation. A 'C' in more than one of these courses disqualifies the student from continuing in the program. A grade of 'D' or 'F' disqualifies the student from entry into or continuation of ASL&DS and ASL - English Interpreting Program.

Conferences with respective instructor(s) and coordinators are by appointment only. Information about the American Sign Language and Deaf Studies and Interpreters for Deaf Programs may be obtained at the ASL&DS and AEIP office or the Counseling Office at the Plainfield Campus.

The specific objectives of this program are that the graduate must be able to demonstrate:

- proficiency in the practices of communication with members of the Deaf
- competency in the use of American Sign Language and English;
- knowledge of the studies of American Sign Language as a distinct modern language, including scholarly pursuit of cultural and historical studies, linguistics and literacy analysis, as well as the language in its conversational and discourse styles;
- understanding of the social and cultural characteristics of American Deaf Culture, general and diverse American culture;
- understanding of the psychological and social factors affecting diverse populations within the Deaf community;
- effective written, spoken, and signed communication skills;
- · ability to learn independently and to direct his/her own learning;
- critical thinking and problem-solving skills, with emphasis on using community resources to solve specified problems;
- awareness of one's rights and responsibilities as a professional and/or a citizen in a world community.

AFTER UCC

Graduates will be prepared for entry-level positions working with Deaf persons or for transfer to four-year degree programs.

RECOMMENDED SEQUENCE +

PRE-ENTRY-LEVEL Course#

LEC. LAB CR.

COURSE

FALL SEMESTER

ASL	101	American Sign			
		language l	3.5	1.5	4
ASL	102	Visual-Gestural Com	nmuni	catio	n
		Techniques	1.5	1.5	2
ENG	101	English Comp I*	3	1	3
_	_				9
SPRING	g Sem	IESTER			
ASL	103	American Sign			
		Lanauaae II	3.5	1.5	4
ASL	104	ASL Classifiers	1.5	1.5	2
ENG	102	English Comp II*	3	1	3
HUD	104	Fingerspelling	0.5	1.5	1
					10

Cour	SE#	Course	LEC.	LAB	CR.
FALL S	SEMEST	ER			
ASL	201	American Sign Language III	2	3	3
ASL	205		an 3		3
SOC	101	Principles of Sociology	3		3
PSY	101	General Psychology	3		3
	G SEM				12
ASL	202	American Sign Language IV	2	3	3
ASL	208	American Deaf Culture	3		3
FIA		Intro to Drama I	3		3
MAT	117	Intro to Mathematical Ideas	3		3
PSY	207	Social Psychology	3		
					15

SECOND YEAR

Course#		COURSE	LEC.	LAB CR.
FALL S	EMEST	ER		
ASL	203	American Sign		
EV 10	100	Language V	3	3
ENG	128	Dynamics of Communication	3	3
FNG	216		3	3
LITO	210	Contemporary Literature*	3	3
HIS	201	Intro To Western		
		Civilization I	3	3
PSY	105	Group Dynamics	3	3
SPRIN	G S EM	ESTER		15
ASL	210	ASL/Deaf Literature	3	3
BIO		Intro to Biology OR		
		Human Biology	3	3 4
GOV	201	American Govt. &	2	2
FI		Politics	3	3
Electiv			3	3
SOC	206	Minorities in American Life	3	3
				16
				. •

- + This track is designed for those who are full time students. The track may differ for those who are part-time students.
 - *ENG 101 and ENG 102 must be completed before taking ASL 201.

ASSOCIATE IN APPLIED SCIENCE DEGREE



The American Sign Language-English Interpreting Program is designed for individuals who are interested in the field of American Sign Language-English Interpreting. The program provides a multi-disciplinary and interdisciplinary approach of instruction. The five-semester program (after the pre-entry-level is completed) is designed to equip students with knowledge and skills for entry-level sign language interpreting. Areas of scholarly pursuit include cultural and historical studies, linguistic examination, and literary analysis, as well as the study of the language in its conversational form. The courses within the program are geared to preparing students for evaluation for certification through the National Association of the Deaf - Registry of Interpreters for the Deaf National Interpreters Certificate. Graduates will be prepared for entry-level interpreting positions working with Deaf persons or transfer to four-year degree programs. This program can be completed either as a part-time or full-time student in a day or evening program.

Students are admitted to the American Sign Language-English Interpreting Program when they have demonstrated English competency and have satisfactorily completed the Pre-entrylevel courses of American Sign Language.

The specific objectives of this program are that the graduate must be able to demonstrate:

- proficiency in the practices of communications with members of the Deaf
- competency in the use of American Sign Language and English;
- knowledge of the studies of American Sign Language as a distinct modern language, including scholarly pursuit of cultural and historical studies, linguistics and literary analysis, as well as the language in its conversational and discourse styles;
- understanding of the psychological and social factors affecting diverse populations within the Deaf community;
- knowledge of the ethical and professional standards of interpreters working in the field with Deaf and Hard of Hearing persons;
- · understanding of types of interpretation and translations and the process of interpretation through the use of theoretical models;
- requisite skills and process tasks of American Sign Language-English interpretation;
- understanding of the field of interpretation from an historical perspective;
- understanding of contemporary issues in the field of interpreting and the Deaf community;
- · effective written, spoken, and signed communication skills;
- the ability to learn independently and to direct his/her own learning;
- critical thinking and problem-solving skills, with emphasis on using community resources to solve specific problems;
- awareness of one's rights and responsibilities as a professional and/or a citizen in a world community.

GENERAL PROGRAM REQUIREMENTS:

A grade of 'C' or better in ASL 101 - ASL I and ASL 102 - VGC I meets satisfactorily the prerequisite requirement to enroll in ASL 103 – ASL II, ASL 104 – VGC II, and HUD 104 – Fingerspelling.

A grade of 'B' or better in ASL 103, ASL 104 and HUD 104 meets the prerequisites for ASL&DS and IDP. In proceeding courses (ASL 201, ASL 202, ASL 205, ASL 208, ASL 210, HUD 105, HUD 106, HUD 103, HUD 108, HUD 215 and HUD 216) a grade of 'C' necessitates a conference with the instructor(s) and coordinator for consultation. A 'C' in more than one of three courses disqualifies the student from continuing in the program. A grade of 'D' or 'F' disqualifies the student from entry into or continuation of ASL&DS and ASL-English Interpreting Program.

Entry to third-year courses (HUD 108, HUD 106 and HUD 215) will be based on 'B' or better grades and demonstration of proficiency via examination. Permission to do Field Experience in Interpreting (HUD 216) will be based on demonstration of proficiency via examination and instructor of HUD 216.

AFTER UCC

Graduates will be prepared for entrylevel interpreting positions working with deaf persons or for transfer to four-year degree programs.

RECOMMENDED SEQUENCE OF COURSE ON NEXT PAGE

APPLIED SCIENCE DEGREE

continued from the preceding page

RECOMMENDED SEQUENCE +

PRE-ENTRY-LEVEL

ONE YEAR REQUIRED BEFORE ENTRY INTO PROGRAM

	ONE TEAK REGOINED DEFORE ENTRY INTO TH	COLCAIN				
Course#	Course	LEC.	Lab	Cr.		
Fall Semester						
ASL 101	American Sign Language I	3.5	1.5	4		
ASL 102	Visual-Gestural Communication Techniques	1.5	1.5	2		
ENG 101	English Comp I*	3	1	3		
				9		
SPRING SE	MESTER					
ASL 103	American Sign Language II	3.5	1.5	4		
ASL 104		1.5	1.5	2		
ENG 102	Proglish Comp II*	3	1	3		
HUD 104		0.5	1.5	1		
				10		

FIRST YEAR								
Five semester Program								
Course#	Course	LEC.	Lab	Cr.				
FALL SEMESTER								
ASL 201	American Sign Language III	2	3	3				
ASL 205	Linguistics of American Sign Language	3		3				
MAT 117	Intro to Mathematical Ideas	3		3				
HUS 101	Community Resources in Human Services	3		3				
PSY 101	General Psychology	3		3				
				15				
SPRING SEA	NESTER							
ASL 202	American Sign Language IV	2	3	3				
ASL 208	American Deaf Culture & History	3		3				
HUD 105	Interpreting Processes: Theory & Practice	2.5	1.5	3				
HUS 201	Externship in Human Services	3		3				
SOC 101	Principles of Sociology	3		3				
				15				

SECOND YEAR						
Course#	Course	LEC.	Lab	Cr.		
FALL SEMEST	ER					
GOV 201	American Govt. & Politics	3		3		
HUD 103	Text/Discourse Analysis for Interpreting	3		3		
HUD 108	Interpreting Process Application in					
	English to ASL	2	2.5	3 3		
Elective	Humanities	3		3		
SPRING SEM	ESTER					
BIO 101	Intro to Biology – OR –					
BIO 102	Human Biology	3	3	4		
HUD 106	Interpreting Process Application in					
	ASL to English	3	1	3		
HUD 110	Interpreter Role & Ethics	3		3 3 2		
HUD 215	Advanced Techniques of Interpreting			2		
	· · · · · · ·			12		
FALL SEMEST	er (Fifth semester)					
	Prevent. Measures against CTD in Interpr.	0.5	2	1		
	Field Work in Interpreting			3		
	, ,			4		

 $\,$ + This track is designed for those who are full time students. The track may differ for those who are part-time students or not taking all the courses as suggested in the track.

^{*} ENG 101 & 102 must be completed before taking ASL 201.

AMERICAN STUDIES

Option offered through Liberal Arts ASSOCIATE IN ARTS DEGREE

The American Studies Option provides opportunities for students who wish to understand the richness and diversity of American culture. This option offers a solid foundation in American history, politics, and literature accompanied by the study of related areas in the American experience. For many professions, such as teaching and law, this general education background is essential. In addition, the American Studies Option is also recommended to students who enter college without a definitive vocational goal and wish to explore the opportunities offered by many fields before deciding upon a career.



The specific objectives of this program are that the graduate must be able to demonstrate:

- an understanding of some of the major concepts in the areas of American history, politics, and literature;
- the ability to think critically about some of the major political issues that concern our nation today;
- an appreciation of the contributions that some American authors have made to developments in literature;
- · sensitivity to the problems faced by some of the various groups that have made up the American experience, i.e., slaves, immigrants, native Americans;
- familiarity with how knowledge of the humanities and the social sciences enables an individual to better appreciate the kinds of cultural developments that have taken place in America:
- an ability to communicate clearly in both the spoken and written word.

AFTER UCC

Graduates can transfer to a four-year college or university and are eligible to take advantage of the many transfer/articulation agreements Union County College has with some of the top four-year colleges and universities in the country. See a transfer counselor for details.

RECOMMENDED SEQUENCE

		FIRST YEA	R		
Cours	SE#	Course	LEC.	Lab	Cr.
FIRST	SEMES	TER			
ENG	101	English Comp I	3	1	3
HIS	101				
		Civilization I	3		3
Lab S	cience	e+ or Mathematics*			3-4
PSY	101	General Psychology	3		3
		FIA** or Modern			
		Languages			3
				15	-16
SECON	ND SEA	MESTER			
ENG	102	English Comp II	3	1	3
HIS		Intro to Western			
		Civilization II	3		3
Lab S	cience	e+ or Mathematics*			3-4
PSY	102	Psychology of			
		Personality	3		3
COM	** or	FIA**			
		or Modern Languag	es		3
				15	-16

	2	ECOND TEA	<u> </u>		
Cour	SE#	COURSE I	EC.	Lab Cr.	
FIRST	Semes	TER			
ENG	207	American Literature I	3	3	
ECO	201		_	•	
		Economics I	3	3	
HIS	201	,	3	3	
GOV	201	American Govt. & Politics	3	3	
SOC	101	Principles of			
		Sociology	3	3	
Electiv	/e***		3	3	
				18	
SECON	ND S E/	MESTER			
ENG	208	American Literature II	3	3	
ECO	202	Principles of			
		Economics II	3	3	
HIS	202	U.S. History Since 1865	3	3	
GOV	202	American National Govt 3		3	
SOC	206	Minorities in American Life	3	3	
Electiv	/ <u>*</u> **	, unorican Ello	3	3	
LICCII	7.0				
				18	
+A one-vegr science sequence is recommended					

one-year science sequence is recommended. MAT 117 or higher; see Liberal Arts Program guidelines under Mathematics course listings.

** See COM or FIA list of electives.

It is suggested that the American Studies student choose electives from the following list:

ASL 101, 102	COM 109, 209	HIS 105, 106
ASL 103, 104	CRJ 101, 205	HIS 215
ASL 208	ECO 205, 207	HRS (ALL)
AST 101, 102	ENG 128, 129	MAT 127
BIO 101, 102	ENG 227, 228	MAT 161, 162
BIO 103, 104	FIA 108, 111	PHI 205
BIO 109, 113	FIA 112, 117	PHY 101, 102
BIO 114, 118	FIA 120	PSY 105, 207
CHE 101, 102	GEY 101, 102	SOC 102, 205
CHE 106	GOV 203, 204	SOC 213
COM 101, 201	GOV 208	URS 101
	MOD. LANGUAGES (AL	L)

ARCHITECTURE

Option offered through Engineering Program ASSOCIATE IN SCIENCE DEGREE

This program is designed to prepare students who plan for a career in architecture to transfer to a five-year baccalaureate program.

The specific objectives of this program are that the graduate must be able to demonstrate:

- critical thinking and problem-solving skills in science, mathematics, and fundamentals of architecture;
- computer literacy in programming and use of word processing, and other software applications;
- an ability to use technology and library resources to research information related to architecture, mathematics, engineering, the humanities, and social science;
- an ability to communicate effectively by written, oral and graphical methods;



- an understanding of materials and methods of building construction, basics of structural analysis/design related to architecture, collect and analyze relevant data, and work as a member of a team;
- an appreciation of the need for a broad and liberal education and understand the impact of architectural solutions in a global/societal context;
- implementation of skills learned in architecture, science, social sciences, and the humanities into collaborative design projects for/with local communities;
- an ability to learn independently and an appreciation of the need for lifelong learning in the architectural field.

AFTER UCC

Graduates of the Architecture program who plan for a career in Architecture transfer to a five-year baccalaureate program.

RECOMMENDED SEQUENCE

		FIRST YEA	R		
Cour	SE#	Course	LEC.	LAB	CR.
FIRST	Semes	TER			
ARC	101	Architectural Design I	3	5	5
ARC	105	Intro to Architecture & Culture	3		3
ENG	101	English Comp I	3	1	3
FIA	119	History of Architecture I	3		3
FIA	109	Drawing I	1	4	3
SECON ARC		Architectural	2	E	E
ARC	102	Architectural Design II	3	5	5
ENG	102	0 1			
ENG	122	Introductory Technic Business Writing	al & 3	1	3
FIA	120	History of Architecture II	3		3
FIA	121	Architectural Graph Perspective	ics/ 1	4	3
MAT	143		atica 4		4
					18

	S	COND YE	AR		
Cour	SE#	Course	LEC.	Lab	Cr.
FIRST S	SEMES	TER			
ARC	205	Architectural CAD Design	2	3	3
CSC	100	Computer Programm Fundamentals OR	ing 2	2	3
CSC	101	Computer Algorithms	s 2	3	3
PHY	101	General Physics I	3		3
PHYL	101	General Physics Laboratory I		3	1
ARC	224		3		3
ARC	216	Materials &			
		Construction I	1	2	2
MAT	144	Elementary Mathema Analysis II*	atica 4	l	4
					19
SECON	ND SEA	MESTER			
ARC	206	Architectural 3D Design	2	3	3
PHY	102	General Physics II	3	-	3
PHYL		General Physics Laboratory II		3	1
ARC	225	•	3		3
ARC	217	Materials & Construction II	1	2	2
ARC	210	Portfolio Develop. & Presentation Method	•	3	2
Electiv	/e	Social Science	3 1	J	3
					17
*MAT	171,	MAT 172 recommer some transfer institut			nsult

with architecture faculty member.

AUDIO PRODUCTION

ASSOCIATE IN ARTS DEGREE

The Audio Production program is designed to provide students with a solid foundation for further study and employment in the growing field of Audio Production.

As a transfer program, the program provides a foundation in academic and general studies courses, which prepare students for further study at four-year programs in this discipline both locally and nationally.

Additionally, the program intends to create graduates with the requisite training and skills to begin working with industry standard equipment and software to compose and record their own compositions and compete for entry-level positions in the field.

Specifically, graduates must be able to demonstrate the ability to:

- recount the history of audio recording technology;
- in conducting research, understand the importance of qualifying source material, using time honored structures such as peer review and disciplinary standards;
- · demonstrate an understanding of the recording industry as a business;
- a level of comfort and proficiency with standard productivity software such as Adobe Audition, Cubase SX and Pro Tools, as well as an understanding of the ways in which these tools are applied in the audio production field;
- the ability to understand and apply all phases of audio production in the contemporary music studio environment;
- identify the fundamental process and sequence involved in the production of audio composition;
- identify the different roles and responsibilities of the recording studio staff members;
- identify the historical development of musical performance;
- understand the essentials of audio engineering, the fundamentals of digital imaging and video editing for New Media applications.

AFTER UCC

Graduates may transfer to four-year colleges or universities in Audio Production or a similar degree program and are eligible to take advantage of the many transfer/articulation agreements Union County College has with some of the top four-year colleges and universities in the country. See a transfer counselor for details.

RECOMMENDED SEQUENCE

	FIRST YEA	R		
Course#	Course	LEC.	Lab	Cr.
FIRST SEMES	TER			
COM 100	Communications Technologies	3	2	4
COM 101	Mass Communications	3		3
ENG 101	English Comp I	3	1	3
PSY 101	General Psychology	3		3
MAT	Any 4 credit mathematics course	4		4
				17
SECOND SE	MESTER			
COM 103	Intro to Radio Broadcasting	3		3
ENG 102	English Comp II	3	1	3
ENG 128	Dynamics of Commu	unica	tions	
ENG 129	Public Speaking	3		3
Elective	Social Science	3		3
Laboratory	Science	3	3	4
				16

SECOND YEAR Course# COURSE LEC. LAB CR. FIRST SEMESTER COM 203 Audio Production I 3 3 **ENG** 200-Level Literature 3 course 101 Intro to Western 3 Civilization I GOV 201 American Govt. & Politics 3 103 Fundamentals of 3 3 Music Social Science 3 3 Elective 18 SECOND SEMESTER COM 213 Audio Production II 3 200-Level Literature **FNG** 3 course HIS 102 Intro to Western 3 Civilization II GOV 202 American National 3 Govt Elective Humanities

AUTOMOTIVE TECHNOLOGY

ASSOCIATE IN APPLIED SCIENCE

This pilot program is a cooperative program between Union County Vocational-Technical School and Union County College. All courses are taught by UCC faculty. The AUT professors are ASE certified. The AUT courses will be offered only on the Scotch Plains campus of ÚCC at the state of the art automotive facility of the Vocational-Technical School.

The Automotive Technology Program is a competency-based course of study designed to train and prepare the serious student in eight automotive areas: Brakes, Steering & Suspension, Electrical & Electronic Repair, Engine Performance, Engine Repair, Manual Drive Trains, and Automatic Transmissions. Eligible Auto Technology students may participate in work activities such as internships, mentoring, apprenticeships and Cooperative Industrial Education.



The specific objectives of this program are that the graduate must be able to demonstrate:

- The ability to apply theory and hands-on practices to each of the eight ASE areas covered within the Automotive Technology Curriculum.
- The ability to perform automotive repair methods to business and industry standards.
- The ability to use a computer-based software program to generate information, technical service bulletins and procedures to properly diagnose and repair automobiles.
- The ability to diagnose an automotive complaint or problem using logical and critical thinking skills.
- The ability to develop employability skills required by industry.
- The ability to attain ASE certification and repair licensing required within the Automotive Technology field.

AFTER UCC

Upon graduating the student will be eligible to take ASE certification exams. **Union County Vocational School is an ASE** certified testing center. Graduates are qualified to work in all automotive service facilities. Employment opportunities include dealerships, independent & specialty shops, chain stores, municipalities, fleet and corporate facilities as well as self employment. This AAS degree is not transferable to a four year institution, but many of the nontechnology courses may transfer.

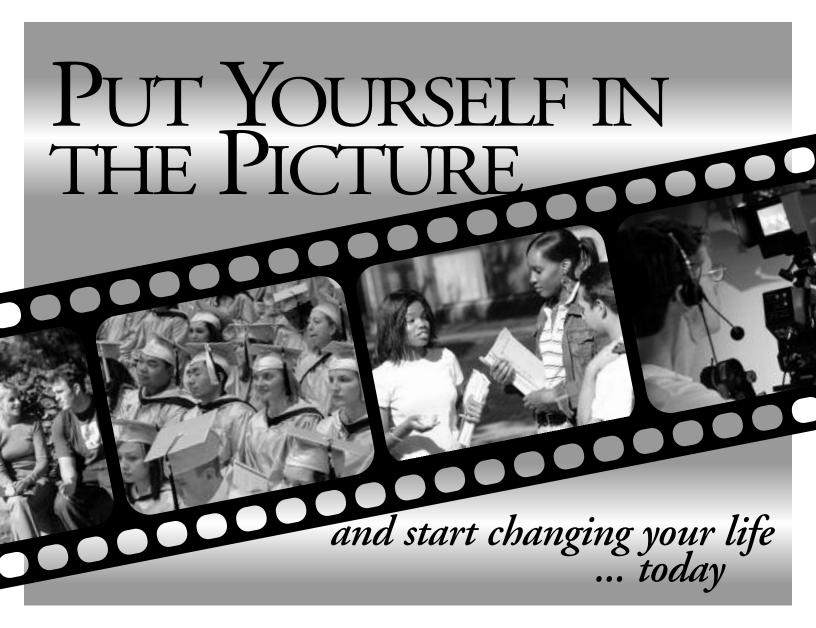
RECOMMENDED SEQUENCE

		FIRST YEAI	R		
Cours	SE#	Course	LEC.	Lab	CR.
FIRST	SEMES	TER ^{1,2}			
AUT	101	Steering/Suspension Systems	3	3	4
AUT	121	Automotive Electrical 1	3	3	4
SOC	ELE	Social Science	3	0	3
ENG	101	English Comp ³	3	0	3
MAT	119	Algebra ⁴	3	0	3
					17
2ND 5	SEMEST	TER			
AUT	102	Manual Drive Trains	3	3	4
AUT	103	Brake Systems	3	3	4
AUT	122	Automotive Electrical 2	3	3	4
AUT	131	Automotive Engine Performance 1	3	3	4
ENG	122	Technical Writing	3	0	3
					19
	S	ECOND YE	AR		
3RD S	EMEST	ER			

OKD 3	LINL	LIX			
AUT	201	Engine Repair	3	3	4
AUT	202	Automotive A/C &			
		Heating	3	3	4
AUT	232		^	•	,
		Performance 2	3	3	4
CSC	115	Intro To Programming	3	2	3
HUM	ELE	Humanities Elective	3	0	3
					18
4 _{TH} S	EMEST	ER ⁵			
AUT	203	Automatic			
		Transmission	3	3	4
AUT	223	Automotive			
		Electrical 3	3	3	4
AUT	233	Automotive Engine			
		Performance 3	3	3	4
ENG	128/	/129 Dynamics of			
		Communication OR	^	^	^
		Public Speaking	3	0	3
EET	111	Digital Computer	^	•	,
		Fundamentals	3	3	4
					10

Notes:

- 1 UCC 101 must be taken as a graduation requirement.
- 2 AUT 100 (3 lec-3 lab-4 credits) must be taken as a co/prerequisite or test out by permission of the Automotive Coordinator.
- 3 Course determined by English Placement test.
- 4 Course determined by Math Placement test.
- 5 An internship AUT 290 (6 credits) may be substituted for two AUT courses with approval from the Automotive Coordinator.



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- Personal Attention Over 90 Programs of Study
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 - Easy Transfer to 4 Year Colleges
 - History of Success Job Placement

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YoU Can Change Your Life



ASSOCIATE IN ARTS DEGREE

The Biology Department offers a degree program that combines basic biological courses with additional course work in chemistry, mathematics, and the liberal arts. The degree program prepares students primarily for advanced study at a four-year institution. Students should note that the Department has many articulation agreements with four-year colleges designed to facilitate transfer to these institutions.

Candidates for the program should present two years of high school algebra, one year of geometry or trigonometry, one year of biology, and one year of chemistry. High School Physics is also strongly recommended.

The specific objectives of this program are that the graduate must be able to demonstrate:

- an understanding of the scientific method and be able to utilize it to understand the real world;
- an understanding of living organisms as part of the world and their impact upon the world;
- an understanding of the terminology, concepts and principles of biology;
- an understanding of chemical relationships to biology;
- an understanding and appreciation of how biological issues have a local, national, and global impact on human beings;
- an appreciation of the positive and negative impact of biological advancements;



- a proficiency in utilizing basic laboratory and field methods, equipment and techniques;
- the ability to use the computer as a research and learning tool;
- the ability to utilize critical thinking skills to solve and understand problems;
- the ability to communicate effectively with others in a diverse society;
- the ability to continue to learn independently;
- an understanding and appreciation of the diversity of the living world.

AFTER UCC

Graduates can prepare for a career in biology or for advanced study at a fouryear institution. The Biology Department has many articulation agreements with four-year colleges designed to facilitate transfer to these institutions.

RECOMMENDED SEQUENCE

		FIRST YEAI	R		
Cour	SE#	Course	LEC.	Lab	Cr.
FIRST	Semes	TER			
BIO	111	The Biology of the			
		Organism	3	3	4
CHE	111	General Chemistry I	3	3	4
ENG	101	English Comp I	3	1	3
MAT	143	Elementary Mathema Analysis I or	atica		
MAT	1 <i>7</i> 1	Unified Calculus I	4		4
					15
SECON	ND SE/	MESTER			
BIO	112	Cell Biology	3	3	4
CHE	112	General Chemistry II	3	3	4
ENG	102	English Comp II	3	1	3
MAT	144	Elementary Mathema Analysis II or	atica	l	
MAT	172	Unified Calculus II	4		4

Humanities

<u>18</u>

Elective

S	ECOND YE	AR		
Course#	Course	LEC.	LAB	CR.
FIRST SEMES	TER			
Electives	Biology (2)			7-8
Elective	History			3
Elective	Social Science			3
Elective	Communications			3
			16	-17
SECOND SE	MESTER			
Elective	Biology			3-4
CIS 100				
	Applications	2	2	3
Elective	Humanities			3
Elective	Diversity			3
Elective	History			3
			15	-16

ASSOCIATE IN ARTS DEGREE

The Associate in Arts Degree in Business prepares students for a career in business or for advanced study at a four-year institution. The College has many articulation agreements with four-year colleges designed to facilitate transfer to these institutions. For further information, please see the Transfer Counselor. The degree requirements consist of general education requirements and electives in preparation for a major area of study.

See paragraph "Qualifications for Admission to Degree Program" for desired high school background (see page 207).



The specific objectives of this program are that the graduate must be able to demonstrate:

- the ability to establish and maintain accounting systems;
- knowledge of the principles and practices of American business;
- knowledge of the principles of microeconomics and macroeconomics;
- the ability to perform statistical procedures common to American business;
- critical thinking, problem-solving skills, and effective communication skills;

- an awareness of and concern for the ethical implications of institutional policies and individual practices;
- an awareness of the diverse factors that shape the world in order to keep pace with the changing society;
- the ability to use technology for learning and research;
- the ability to learn independently and to direct one's own learning.

AFTER UCC

Students in this program complete the first two years of their baccalaureate program with a solid background in accounting, management and marketing. Graduates transfer to senior colleges and universities and can take advantage of articulation agreements negotiated with senior receiving institutions.

RECOMMENDED SEQUENCE

	FIRST YEAI	R		
Course#	Course	LEC.	LAB	CR.
FIRST SEMES	TER			
ACC 103	Accounting I	4		4
ENG 101	English Comp I	3	1	3
HIS 101	Intro to Western Civilization I *** or			
Modern Lai	nguage***	3		3
	Mathematics*	3		3-4
PSY 101	General Psychology	3		3
			16	-17
SECOND SEA	MESTER			
ACC 104	Accounting II	4		4
BUS 101	Intro to Contempora Business	ry 3		3
ENG 102	English Comp II	3	1	3
HIS 102	Intro to Western			
	Civilization II ***or			
Modern La		3		3
Modern Lai		•	or or	3
Modern Lai PSY 102	nguage*** Psychology of Person Principles of	nality	or or	3
Modern Lai PSY 102	nguage*** Psychology of Person	•	or or	3

SECOND Course# **COURSE** LEC. LAB CR. FIRST SEMESTER 101 Intro to Information CIS 2 2 Systems * * 3 ECO 201 Principles of 3 3 Economics I 200-Level Literature **ENG** 3 Course Elective Laboratory Science+ 3 3 4 3 Elective **Business** 16 SECOND SEMESTER BUS 201 Business Law I 3 3 ECO 202 Principles of 3 Economics II MAT 146 Brief Calculus with Applications or MAT 246 Business Statistical Analysis 3-4 Elective **Humanities** Elective Laboratory Science+ 3 4

Students are encouraged to contact the specific institution as to transfer credit for the following business electives offered:

ACC 203, 204, 211, CIS 102, 201, PSY 102, BUS 105, 106, 107, 203, 205, 208, MAT 146, 246, SOC 101

- *See advisor to choose an appropriate mathematics course
- **CIS 100 may be preferred by some institutions to CIS 101. Students should ascertain which course is preferred by the institution they plan to transfer to.
- ***Must be a one year sequence in either.
- +One year laboratory science sequence is recommended.

16-17

BUSINESS MANAGEMENT

ASSOCIATE IN APPLIED SCIENCE DEGREE

Developed for the student who wishes to acquire additional management skills and is planning a program in preparation for a business career of his/her choice. Flexibility in course selection enables the student to achieve his/her specific educational, career and personal goals. The Business Management program has been designed as a career program in preparing students for first line and/or mid-management positions.



The specific objectives of this program are that the graduate must be able to demonstrate:

- an understanding of current management theories and principles used in the successful management of organizations;
- knowledge of the fundamentals of planning, organizing, leading, and controlling and understanding the environment under which these management functions are practiced;
- problem-solving skills and the ability to make decisions in the business environment using psychological and sociological insights;
- knowledge of psychological and sociological information in solving problems and in decision making;
- knowledge of the latest techniques of motivation, morale and team building to accomplish organizational objectives;
- an understanding of present national social issues and management's responsibility as well as the ramifications of issues in a global economy.

AFTER UCC

Graduates may work as managers, shift supervisors, management analysts and assistant managers of retail stores. While the career program is designed for students who expect to work in the profession immediately after graduation, many students elect to continue their studies at senior institutions.

RECOMMENDED SEQUENCE

		FIRST YEA	R				
Cour	SE#	Course	LEC.	Lab	CR.		
FIRST SEMESTER							
ACC	103	Accounting I	4		4		
BUS	101	Intro to Contempore Business	ary 3		3		
ECO	201	Principles of Econo	mics I	or			
ECO	202	Principles of					
		Economics II	3		3		
ENG	101	English Comp I	3	1	3		
MAT	113	Business Mathemat	ics3		3		
					16		
SECON	ND SE/	MESTER					
ACC	104	Accounting II	4		4		
BUS	105	Organization & Management	3		3		
CIS	100	Intro to Computer Applications	2	2	3		
ENG	122	Introductory Technic Writing or	cal &	Busir	ness		
ENG	128	The Dynamics of Communication			3		
PSY	101	General Psychology	y or				
SOC	101	Principles of Sociology	3		3		
					16		

SECOND TEAK						
Course#	Course	LEC.	LAB CR.			
FIRST SEM	IESTER					
BUS 20	1 Business Law I	3	3			
BUS 20	8 Principles of					
	Marketing	3	3			
Elective	History, Modern					
	Language	3	3			
Electives	Business, Adminis	tration				
	Support, or					
Compute	r (CIS, CSC) Courses	*	7			
			16			
SECOND S	Semester					
BUS 29	O Co-op Ed Experie	nce or				
ACC 29	O Co-op Ed Experie	nce	3			
Elective	General Educatio	n	3			
Electives	Electives Business, Administrative Support,					
	or					
Compute	r (CIS, CSC) Courses	*	10			
			16			

* A total of 17 credits in Business, Administrative Support, or Computer (CIS, CSC) courses must be taken.

BUSINESS MARKETING

ASSOCIATE IN APPLIED SCIENCE DEGREE

The Marketing Program prepares students with a fundamental knowledge of business procedures with an emphasis on a specialization in Marketing. Additionally, the program contains a substantial general education component to provide students with a more complete educational background. Although this program is not designed to be a transfer program, many of the courses would be acceptable for transfer. Upon completion of this program, students will be qualified to enter entry-level positions in advertising, marketing, public relations, and retailing and sales. Individuals currently employed in the Marketing area may wish to sharpen their skills by enrolling in certain courses or the entire program.

The specific objectives of this program are that the graduate must be able to demonstrate:

- an understanding of the marketing process;
- the ability to develop proficiencies in product planning, distribution, pricing, promotion, and other marketing activities;
- the ability to understand the role of advertising and sales promotion in a business organization;
- the ability to understand the place of marketing in the operations of a firm and in
- the ability to understand basic research concepts and practices applied to solving marketing problems;
- the ability to discuss the behavioral and social science concepts as they apply to understanding buying in retail organizations;
- the ability to describe the procedures and principles involved in buying in retail organizations;
- the ability to develop insights into successful retail store operation;
- the ability to discuss the role of the middleman in distributing goods;
- the ability to develop an understanding of the dynamics of the global economy, trade and development and its linkage with the U.S. economy.

AFTER UCC

Graduates are qualified to enter entrylevel positions in Advertising, Marketing, Public Relations, and Retailing and Sales.

RECOMMENDED SEQUENCE

FIRST YEAR							
Cour	SE#	Course	LEC.	LAB	CR.		
FIRST SEMESTER							
BUS	101	Intro to Business	3		3		
ACC	103	Accounting I	4		4		
CIS	100	Intro to Computer Applications*	2	2	3		
ENG	101	English Comp 1	3	1	3		
MAT	119	Algebra or					
MAT	113	Business Mathematic	cs3		3		
					16		
SECON	ND SE	MESTER					
ACC	104	Accounting II	4		4		
BUS	105	Organization & Management	3		3		
ENG	122	Introductory Technico Business Writing	al & 3	1	3		
ECO	201	Principles of	•		•		
		Economics I	3		3		
BUS	136	Retailing Techniques	3		3		
					16		

Cour	SE#	Course	LEC.	LAB CR.
FIRST	SEMES	TER		
BUS	208			
		Marketing	3	3
BUS	137	Salesmanship	3	3
BUS	201	Business Law I	3	3
BUS	200	Small Business		
		Management	3	3
Electi	ve	Humanities	3	3
BUS	138			
		Merchandising	3	3
				18
SECO	ND S E/	MESTER		
BUS	202	Business Law II	3	3
BUS	203	Principles of		
		Advertising	3	3
BUS	210	Marketing & the Glo	bal	
		Environment	3	3
BUS	290	Co-op Ed Experience	e or	
BUS	295	Special Projects	3	3
Free	Electiv	е	3	3
				15

* Required that students take ADM 101 prior to CIS 100.

CHEMISTRY

ASSOCIATE IN ARTS DEGREE

This program is designed for students who wish to pursue a baccalaureate degree in chemistry or biochemistry. In addition to the major courses in chemistry, it includes core courses in physics and mathematics as well as liberal arts electives.

Candidates for the program should present two years of algebra, one year each of geometry, chemistry, physics, and trigonometry, as high school entrance credits.

All students enrolled in the Chemistry Program must take a mathematics placement test. Test scores will determine the sequence of mathematics courses required.



Consultation with a Chemistry faculty member is advised.

The specific objectives of the program are that the student must be able to demonstrate:

- an understanding of how chemical theories explain the natural world;
- an ability to identify a problem and analyze it in terms of its significant parts and the information needed to solve it;
- an ability to differentiate between theory and practice in the chemical sciences;
- an ability to perform laboratory experiments and measurements, and to graph and analyze experimental data;
- an ability to comprehend and evaluate what they read and hear, and be able to communicate effectively.

AFTER UCC

Graduates can take advantage of the many transfer/articulation agreements Union County College has with some of the top four-year colleges and universities in the country. See a transfer counselor for details.

RECOMMENDED SEQUENCE

	FIRST YEAR	K				
Course#	Course	LEC.	LAB	Cr.		
FIRST SEMESTER						
ENG 101	English Comp I	3	1	3		
CHE 111	General Chemistry I	3	3	4		
PHY 111	Mechanics*	3	3	4		
MAT 171	Unified Calculus I	4		4		
				15		
SECOND SE	MESTER					
ENG 102	English Comp II	3	1	3		
CHE 112	General Chemistry I	l 3	3	4		
PHY 201	Electricity &					
	Magnetism*	3	3	4		
MAT 172	Unified Calculus II	4		4		
				15		

Course#	Course	LEC.	LAB	CR.
FIRST SEMES	STER			
CHE 211	Organic Chemistry	I 3	6	5
Elective	Mathematics or			
	Science**	3-4		3-4
Elective	General***	3		3
Elective	Humanities***	3		3
Elective	Social Science****	3		3
			17	<u>'-18</u>
SECOND SE	MESTER			
CHE 212 Elective	Organic Chemistry Mathematics or	II 3	6	5
21001170	Trialitation of			

SECOND YEAR

* PHY 101-102 may be substituted. Please consult with a Chemistry Department faculty member and/or advisor from your potential transfer institution.

Social Science**** 3

3

3

3

3

3

18

** Please choose from one of the following sequences: BIO 111-112 or MAT 271-272

Science**

General

Humanities***

Elective

Elective

Elective

- *** CIS 100 is required for students who lack computer literacy.
- **** Choose electives from the following:

HUMANITIES: SOCIAL SCIENCES: German (2 semester Economics sequence recommended) French (2 semester sequence recommended) Government Psychology English (200-Level literature course) Sociology

When choosing electives, the student should consult the catalogs of potential transfer institutions and/or consult with a faculty member of the Chemistry Department.

ASSOCIATE IN APPLIED SCIENCE DEGREE

This is a two-year program that prepares students for technical employment in field or office positions related to the design, layout, and construction of land subdivisions, buildings, streets and highways, bridges, storm drainage projects, water supply facilities, pollution control systems, and other public works infrastructures. Graduates receive the Associate in Applied Science degree and have the option of working with engineering or architectural firms, surveyors, building contractors, municipal engineering departments, public utility companies or construction inspection and material testing companies. They also are able to continue their education on a part-time or full-time basis at other colleges that offer a four-year Bachelor of Science Degree in Engineering Technology. Those colleges normally accept two full years of credit from graduates who have good academic standing.

See paragraph on "Qualifications for Admission to Degree Programs" for desired high school background (see page 207).

The specific objectives of this program are that the graduate shall be able to demonstrate:

- knowledge of basic construction methods and building material properties including structural steel, concrete and wood;
- the ability to apply computer-aided drafting skills on survey plats, topographic maps, profiles, sections, and engineering shop drawings;
- knowledge of standard laboratory and field soil tests, such as sieve analysis, moisture content, and liquid and plastic limits;
- the ability to perform as a knowledgeable, skillful, and productive member of a surveying crew, using standard electronic surveying instruments;
- knowledge of basic principles of statics and strength of materials to computer forces, stresses and strains in simple structural members;

- knowledge of the basic principles of fluid mechanics to calculate hydrostatic pressure, forces on submerged surfaces, flow rates and pressure gradients in pipelines and open channels;
- the ability to perform material quantity takeoffs and cost estimating calculations for excavation, site work, concrete, masonry, steel and wood construction;
- knowledge of the contractual arrangements and roles of the owner engineer or architect and builder in the process by which public and private infrastructure is designed and constructed in the USA;
- the ability to utilize computer software applications such as word-processing, spreadsheets, basic programming, and mathematical computing.

AFTER UCC

Graduates have the option of working with engineering or architectural firms, surveyors, building contractors, municipal engineering departments, public utility companies or construction inspection and material testing companies. They also are able to continue their education on a part-time or full-time basis at other colleges that offer a four-year Bachelor of Science degree in Engineering Technology.

RECOMMENDED SEQUENCE EIDCT VEAD

		FIKSI IEA	IK.				
Cour	SE#	Course	LEC.	LAB	CR.		
FIRST SEMESTER							
ENG	101	English Comp I	3	1	3		
MAT	143	Elementary Mathen Analysis I	natica 4		4		
CSC	115	Intro to Computer Programming	2	2	3		
CIT	104	Construction Management	3		3		
MET	109	•	2	3	3		
		-			16		
SECON	ND SE	MESTER					
ENG	122	Introductory Technic Writing	cal &	Busii	ness		
		(or ENG 102)	3	1	3		
MAT	144						
		Analysis II	4		4		
PHY	101	General Physics I	3		3		
PHYL	101	General Physics I Laboratory		3	1		
CIT	108	Soil Mechanics	2	2	3		
MET	112	Mechanics-Statics	3		3		
					17		

SECOND YEAR

Cour	SE#	Course	LEC.	LAB	CR.
FIRST	SEMES	TER			
PHY	102	General Physics II	3		3
PHYL	102	General Physics II Laboratory		3	1
CIT	205	Surveying I	3	3	4
CIT	210	Strength of Materials	3	1	3
CIT	215	Fluid Mechanics	3	1	3
Electiv	/e	Social Science			3
					17
SECON	ND SEA	MESTER			
CIT	201	Structural Design	3	3	4
CIT	206	Surveying II	3	3	4
CIT	203	Estimating	2		2
Electiv	/e	Humanities			3
Electiv	/e	Technical*			3
					16

*MAT 171 recommended for students transferring.

COMMUNICATIONS

ASSOCIATE IN ARTS DEGREE

The Communications curriculum is designed for transfer to a bachelor's program in communications or related discipline. Options are available for students who have decided that they are particularly interested in a certain field. Faculty advisors are available in the Communications program and students are encouraged to consult with a faculty advisor regarding appropriate option and course selection for their needs and interests.

The specific objectives of this program are that the graduate must be able to demonstrate:

- the ability to communicate verbally and in writing with a level of sophistication and fluency appropriate to college-level discourse;
- a recognition of the necessity of keeping abreast of current cultural, social and political issues and events as a cornerstone of citizenship in a democratic society;
- a level of comfort and proficiency with standard productivity software such as word processors, presentation managers and web browsers, as well as an understanding of the ways in which these tools are applied in the communications field:
- an awareness that learning is a complex, lifelong process and not an event, a phenomenon, not an outcome;
- a critical and active relationship with their culture's narratives and texts as well as a functional understanding of the various media used to convey them.



AFTER UCC

Graduates can prepare to transfer into a four-year college or university Communication program and are eligible to take advantage of the many transfer/articulation agreements Union County College has with some of the top four-year colleges and universities in the country. See a transfer counselor for details.

RECOMMENDED SEQUENCE

	FIRST YEA	R		
Course#	Course	LEC.	Lab	Cr.
FIRST SEME	STER			
COM 100	Communications Technologies	3	2	4
COM 101	Mass Communications	3		3
ENG 101	English Comp I	3	1	3
Laboratory	Science or			
MAT	Mathematics*			3-4
HIS 101	Intro to Western			
	Civilization I	3		3
			16	-17
SECOND SE	MESTER			
COM 201	Issues in Mass Med	dia 3		3
ENG 102	English Comp II	3	1	3
Laboratory	Science or			
MAT	Mathematics*			3-4
ENG 128	The Dynamics of C or	ommu	nica	tion
ENG 129	Public Speaking	3		3
HIS 102	Intro to Western			
	Civilization II	3		3
			15	-16

SECOND YEAR

Course#	Course	LEC.	LAB CR.				
FIRST SEMESTER							
COM	Elective	3	3				
ENG	200-Level	3	3				
Modern La	nguage	3	3				
GOV 201	American						
	Govt & Politics	3	3				
PSY 101	General Psychology	3	3				
Elective	Social Science	3	3				
			18				
SECOND SE	MESTER						
COM	Elective	3	3				
ENG	200-Level	3	3				
Modern La	nguage	3	3				
GOV 202	American National						
	Govt	3	3				
Elective	Social Science	3	3				
			15				

^{*}Mathematics requirement must be MAT 117 or higher

COMPUTER INFORMATION SYSTEMS

Option offered through Business ASSOCIATE IN ARTS DEGREE

The Computer Information Systems (CIS) curriculum is an option in the Business program. It is a two-year course of study leading to the Associate in Arts degree. It is designed as a transfer program through which students may enter four-year colleges and universities with junior-year standing. Unlike programs in Computer Science, the CIS program does not place a heavy emphasis on mathematics. It is, instead, heavily oriented toward application, less toward mathematical theory.

The CIS program is based on a model developed nationally by the Association of Information Technology Processing Professionals. The Associate degree program parallels the first two years of study at a four-year institution and leads to the Bachelor of Science degree in Computer Information Systems.

See paragraph "Qualifications for Admission to Degree Program" for desired high school background (see page 207).

The specific objectives of this program are that the graduate must be able to demonstrate:

- an understanding of the system development life cycle and knowledge of its application to development projects;
- an ability to apply the principles of information systems to systems project development within an organization;
- a capability to understand accounting systems;
- competency to create, interpret, and use program specifications and documentation;
- an ability to communicate using the Internet and E-mail;

- an awareness of the social, ethical, and economic implications of the computer and computer systems;
- an ability to produce detailed program logic plans.

AFTER UCC

Graduates complete the first two years of a bachelor's degree in Computer Information Systems to transfer to a senior institution with a solid background in programming and accounting.

RECOMMENDED SEQUENCE

		LIKSI LEW	X		
Cour	SE#	Course	LEC.	Lab	CR.
FIRST	SEMES	TER			
ACC	103	Accounting I	4		4
BUS	101	Intro to Contempora Business	ry 3		3
CIS	101	Intro to Information Systems	2	2	3
ENG	101	English Comp I	3	1	3
HIS		Intro to Western Civ	ilizat	ion I	*
Mode	rn Lai	nguage*	3		3
					16
SECON	ND S E/	MESTER			
ACC	104	Accounting II	4		4
CIS	102	Applications Program Development I	m 3	1	3
ENG	102	English Comp II	3	1	3
HIS	102	Intro to Western Civ	ilizat	ion I	*
Mode	rn Lai	nguage*	3		3
MAT		Mathematics***	3		3-4
PSY	101	General Psychology	3		3
				19	-20

	S	ECOND YE	AR	
Cour	SE#	Course	LEC.	LAB CR.
FIRST	SEMES	TER		
BUS	201	Business Law I	3	3
CIS	201	Applications Progra Development II	am 3	1 3
ECO	201	Principles of Economics I	3	3
Labor	atorv	Science	3	3 4
MAT	,	Mathematics***	3	3-4
				16-17
SECO	ND SE	MESTER		
CIS	202	Structured Systems		
		Analysis	3	3
ECO	202	Principles of		
		Economics II	3	3
PSY	102	Psychology of Perso	onality	or or
SOC	101			
		Sociology	3	3
Electi	ves**			6
				15
* A c	ne-ve	ar sequence in eithe	r.	
		recommended:		
		ENG 128, Fine Art	ts	

***See advisor to choose an appropriate mathematics course.

COMPUTER SCIENCE

ASSOCIATE IN APPLIED SCIENCE DEGREE

Computer Science is a two-year Associate in Applied Science degree program. A graduate of the program can be employed as an entry-level computer programmer, engineering assistant, computer operator, or may be able to continue his/her education in the computer field at a four-year degree-granting institution. The objective of the program is to develop logical thinking and problem-solving skills using current programming languages with modern computer systems. Hands-on software programming occupies a significant amount of the student's time. Computers for student use are available on each campus.

See paragraph "Qualifications for Admission to Degree Programs" for desired high school background (see page 207).

The specific objectives of this program are that the graduate must be able to demonstrate:

- the ability to communicate effectively with associates;
- a command of problem-solving techniques and an aptitude for critical thinking;
- a competency to prepare program documentation;
- the capability to design well-defined, logical programs;
- the capability to test and verify the accuracy and completeness of programs;
- an understanding of the ethical ramifications of the uses of the computer;
- a readiness to work effectively in a group situation;
- a familiarity with state-of-the-art concepts in computer science.

AFTER UCC

Graduates of this program can be employed as entry-level computer programmers, engineering assistants, computer operators, or may continue their education in the computer field at a four-year degree-granting institution.

RECOMMENDED SEQUENCE

		FIRST YEAI	3		
Cours	SE#	Course	LEC.	LAB	Cr.
FIRST S	SEMES	TER			
ACC	103	Accounting I	4		4
CSC	101	Computer Algorithm	s 2	3	3
ENG	101	English Comp I	3	1	3
MAT	119	Algebra	3		3
Electiv	/e	Humanities			3
					16
SECON	ID SE	MESTER			
ACC	104	Accounting II	4		4
CSC	102	Data Structures	2	2	3
Electiv	/e	Technical **	3		3
ENG	122	Introductory Technica	& lc	Busi	ness
		Writing	3	1	3
MAT	127	Elementary Statistics	4		4

|--|

Cour	SE#	Course	LEC.	LAB (CR.
FIRST	SEMES	TER			
BUS	105	Organization &	•		•
		Management	3		3
CIS	202	Structured Systems	Analy	sis &	
		Design	3	1	3
CSC	121	Assembly Language	13	1	3
CSC	126	Intro to Operating			
		Systems	3		3
ECO	201	Principles of			
		Economics I	3		3
					15
SECON	ND S E/	MESTER			
CSC	290	Co-op Ed Experience	ce*		3
Electiv	ves	Technical **			12
Electiv	ve				3
					18
* \ n .	alactiv	a approved by the C	oord	inato	r

				. •
'An	ele		approved by the Coordinate	or
		1	may be substituted.	
**Te	chn		Electives:	
CI	S	102	Applications Program Development I	3
CI	S	106	Visual J++	3
CI	S	120	The Internet	3
CI	S	130	Intro to Visual Basic	3 3 3 3
CI	S	132	Intermediate Visual Basic	3
CI	S	201	Applications Program Development II	3
CI	S	204	Data Base Management	3
CI	S	205	Data Communications & Networks	3
			Advanced C++ Programming	3
C	SC	218	Visual C++	3
C	SC	231	Organization & Architecture	3
CS	SC	285	Special Topics	1-3
			ar aguraga must ba sugagastullu	

Prerequisites for courses must be successfully completed prior to taking courses.

COMPUTER SCIENCE/ENGINEERING

Option offered through the **Professor Elmer Wolf Engineering Program** ASSOCIATE IN SCIENCE DEGREE

The Computer Science Option offers the first two years of a computer science curriculum and prepares graduates for successful transfer to bachelor's degree programs at leading engineering colleges throughout the country. Computer science, as an option in the Engineering program, studies theoretical and practical problems of system implementation involving both software and hardware. The program prepares the student for a career in the design and development of computer systems. Baccalaureate degree graduates understand hardware and software and can engineer computer systems for a variety of customer applications.

Union County College has dual admission agreements with New Jersey Institute of Technology and Rutgers University. These allow Union County College graduates to transfer with junior status without going through a second admission process. Union County College also has formal transfer agreements with many other colleges.

Applicants for the Computer Science Option must present two years of algebra and one year of geometry, trigonometry, chemistry, and physics, as high school entrance credits. Students deficient in any of these subjects must take the appropriate preparatory courses. All candidates are required to take a mathematics and a physics placement test.

The specific objectives of this program are that the graduate must be able to demonstrate:

- the ability to apply knowledge of computer system components, organization, and software operating systems;
- the ability to apply knowledge of computer algorithms, data structures, assembly language, and programming and data processing skills;
- critical thinking and mathematical problemsolving skills in calculus;
- an understanding of fundamental principles and problem-solving skills in chemistry and
- the ability to write and communicate effectively; and
- the ability to work as a team member.

AFTER UCC

Graduates will be prepared for careers in the design and development of computer systems. Graduates may also transfer to a 4-year institution.

RECOMMENDED SEQUENCE

		FIKSI TEAI	<u> </u>		
Cours	E#	Course	LEC.	Lab	Cr.
FIRST S	SEMES	TER			
CHE	111	General Chemistry I	3	3	4
CSC	101	Computer Algorithms	2	3	3
ENG	101	English Comp I	3	1	3
MAT	171	Unified Calculus I	4		4
EGG	105	Intro to Fundamental	s of		
		Engineering	3		3
					17
SECON	D SEA	MESTER			
ENG	102	English Comp II	3	1	3
CSC	102	Data Structures	2	2	3
MAT	172	Unified Calculus II	4		4
PHY	111	Mechanics	3		3
PHYL	111	Mechanics Laborator	У	3	1
HIS		Elective	3		3
					17

Cours	E#	Course	LEC.	LAB	Cr.
FIRST S	EMES	TER			
CSC	121	Assembly Language	13	1	3
MAT :		Unified Calculus III	4		4
PHY	201	Electricity &			
		Magnetism	3		3
PHYL 2	201	Electricity & Magnet	ism	_	_
		Laboratory		3	1
ECO		Principles of Econom	ics I	or	
ECO :	202	Principles of	2		3
- 1		Economics II	3		3
Elective	е	Psychology or Sociology	3		3
		•			17
SECON	d S e <i>i</i>	MESTER			
CSC	126	Intro to Operating			
		Systems	3		3
CSC	231	Computer Organiza		&	
		Architecture	3		3
MAT	267	Discrete	^		^
		Mathematics*	3		3
HIS		Elective	3		3
PED	101	Concepts of Adult	0		^
		Fitness	2		2
					14

* MAT 265 or MAT 272 may be substituted. Consult with the four-year transfer institution.

Option offered through Liberal Arts ASSOCIATE IN ARTS DEGREE

The Liberal Arts Computer Science/Mathematics Option is designed to follow the recommendations of the Association for Computing Machinery's (ACM) Curriculum Committee on Computer Science. The program provides students with a strong mathematics background, enabling them to design computer algorithms and use data structures

in the solution of scientific programming problems.



The specific objectives of this program are that the graduate must be able to demonstrate:

- critical thinking, effective communication skills, and problem-solving skills in the construction of computer algorithms;
- the ability to use data structures in the solution of scientific programming problems;
- an awareness of and concern for the ethical implications of institutional policies and individual practices;
- an awareness of his/her rights and responsibilities as a citizen of a world community;
- the ability to communicate with others in a diverse society;
- an awareness of the diverse technical and non-technical factors that shape the world in order to keep pace with the changing society;
- the ability to use computer and other technology for learning and research;
- the ability to learn independently and to direct his/her own learning.

AFTER UCC

Graduates will have completed a program parallel to the first two years of study at a four-year institution, and will be well prepared to transfer into a bachelor's degree program in Computer Science.

RECOMMENDED SEQUENCE

Cours	SE#	Course	LEC.	LAB	Cr.
FIRST S	SEMES	TER			
CSC	101	Computer Algorithm	s 2	2	3
ENG	101	English Comp I	3	1	3
HIS	101	Intro to Western Civ	ilizati	ion l	***
Mode	rn Lai	nguage***	3		3
MAT	171	Unified Calculus I	4		4
PSY	101	General Psychology	3		3
					16
SECON	ID S E/	MESTER			
CSC	102	Data Structures	2	2	3
ENG	102	English Comp II	3	1	3
HIS	102	Intro to Western Civilior	izatio	n II	***
Mode	rn Lai	nguage***	3		3
MAT		Unified Calculus II	4		4
PSY	102	Psychology of Personality	3		3
					16

SECOND YEAR

Course#	COURSE	LEC.	LAB CR.
FIRST SEMES	TER		
ECO 201	Principles of		
	Economics I	3	3
ENG	200-Level Literature	cour	se or
Modern Lai	nguage	3	3
CSC 121	Assembly Language	13	1 3
MAT 265		3	3
GOV 201	American Govt.		
	& Politics	3	3
Elective	General		3-4
			18-19
SECOND SEA	MESTER		
ECO 202	Principles of		
	Economics II	3	3
ENG	200-Level Literature	or	
Modern Lai	nguage	3	3
MAT 267	Discrete		
	Mathematics*	3	3
GOV 202	American National		
	Govt	3	3
Elective	General	3	3
Elective			3-4
·			18-19

- * MAT selection should be made in consultation with transfer advisor.
- ** Recommended electives are: MAT 246, MAT 271.
- *** A one-year sequence in either history or one language.
- It is suggested that the student choose electives from the following list:

AST 101-102	CSC 213
BIO 101	ENG 215
BIO 102, 103	GOV 205
BIO 104, 113, 109	HRS 103, 104, 203
BIO 114, 115, 116	PHI 205, 209
CHE 101, 102, 106	PHY 101, 102, 111
COM 106	PSV 213

ASSOCIATE IN ARTS DEGREE

The Criminal Justice Program is designed to develop law enforcement professionals, other criminal justice personnel and others who, after completion of the two-year program, will be prepared to continue their studies in fields such as police administration, public administration, legal studies, and management. See paragraph "Qualifications for Admission to Degree Program" for desired high school background (see page 207).

The specific objectives of this program are that the graduate must be able to demonstrate:

- knowledge of the field of criminal justice including police organization and administration and police management systems;
- awareness and concern about the ethical implications of criminal justice;
- awareness of his/her rights and responsibilities as an officer of the law and as a citizen of a world community;
- the ability to communicate effectively, both in writing and orally, with particular emphasis on police reports and interpersonal communication;
- awareness of the factors that shape the world in order to function effectively as a police officer in a multicultural society;
- an understanding of the characteristics of the social and psychological characteristics of offenders:
- an understanding of the dynamics of relationships between the diverse cultural and racial groups;
- the ability to apply critical thinking and problem-solving skills to specific criminal justice situations.



AFTER UCC

Graduates can continue their studies in fields such as police administration, public administration, legal studies, and management at a four-year college or university and are eligible to take advantage of the many transfer/articulation agreements Union County College has with some of the top four-year colleges and universities in the country. See a transfer counselor for details.

RECOMMENDED SEQUENCE

Cour	SE#	Course	LEC.	Lab	Cr.
FIRST	SEMES	TER			
CRJ	101	Intro to Criminal Justice	3		3
ENG	101	English Comp I	3	1	3 3 3
HIS		US History to 1865	3		3
Labor	atory	Science or			
MAT	ĺ	Mathematics*			3-4
PSY	101	General Psychology	3		3
				15	-16
_					
SECON	ND S E/	MESTER			
SECON CRJ		MESTER Police Organization Administration	& 3		3
CRJ	102	Police Organization		1	3
CRJ ENG	102 102	Police Organization Administration	3	1	3 3
CRJ ENG HIS	102 102 202	Police Organization Administration English Comp II US History	3	1	
CRJ ENG HIS	102 102 202 atory	Police Organization Administration English Comp II US History since 1865	3 3	•	3
CRJ ENG HIS Labor	102 102 202 atory	Police Organization Administration English Comp II US History since 1865 Science or	3 3	•	3

SECOND YEAR

15-16

Course#	Course	LEC.	LAB CR.
FIRST SEMES	STER		
CRJ 201	Police Managemen Systems	t 3	2
CRJ 203		·	3 3
ENG 128	•		inication
ENG 129	Public Speaking	3	3
GOV 201	& Politics	3	3
SOC 101	Principles of Sociology	3	3
Elective	Humanities		3
			18
SECOND SE	MESTER		
CRJ 205	Police Role in the Community	3	3
CRJ 206	Criminal Law or		
	Special Police Ope		is or
	Public Administration	on 3	3
GOV 202	American National Govt 3		3
SOC 206	Minorities in American Life	3	3
Electives	General		3-6
			15-18
EL .	l l f	r.	11.0

Electives may be chosen from any field. See program coordinator for specific recommendations.

*MAT 117 or higher.

DENTAL HYGIENE

ASSOCIATE IN APPLIED SCIENCE DEGREE

By virtue of an agreement between Union County College and the School of Health-Related Professions (SHRP) of the University of Medicine and Dentistry of New Jersey (UMDNJ), an A.A.S. degree in Dental Hygiene is conferred jointly by these two institutions. The general education courses are taught by Union County College and the professional courses are taught by the Department of Allied Dental Education, SHRP-UMDNJ at the Scotch Plains and Newark campuses. All students will be attending both Scotch Plains and Newark campuses. Enrollment is limited and admission to this program is competitive. Completion of this program entitles the student to sit for the National and Northeast Regional Board Examination for Dental Hygiene.

The program is accredited by the American Dental Association's Commission on Dental Accreditation.

A dental hygienist, under the supervision of a dentist, removes deposits from the teeth, applies agents which make teeth more resistant to decay, instructs groups and individuals in the proper care of teeth and surrounding tissues, charts disease and decay conditions for diagnosis and treatment by the dentist, and performs patient services delegated by the dentist.

The dental hygienist must possess manual dexterity, and good vision, health and oral hygiene habits.

Admission is limited. For admission information, contact the Union County College Admissions or Recruitment Office. Application deadline - April 1 dental classes begin January of each year.

Inextricably related to SHRP's overall mission, the mission of the SHRP-UMDNJ's Department of Allied Dental Education is to promote professional standards of excellence and leadership among its students and health professionals while meeting the health care needs of New Jersey residents through patient care, education, research, and service.



The Department's unique and innovative curriculum reflects the direction of allied dental practice and often presages the evolution of the profession. The Department seeks to develop new and innovative approaches to education while keeping pace with current treatment modalities and research strategies. The students develop a humanistic approach to health care delivery as well as critical thinking, problem-solving, independent decision making, and research skills which characterize the professional.

The Department strives to instill in its students and its members of the allied dental professions, a dedication to lifelong learning, and provides opportunities for continued growth within the health professions.

The specific objectives of this program are that the graduate must be able to:

- exhibit competency as clinicians through demonstrated performance on the Northeast Regional Board Dental Hygiene Examination and the National Board Examination and feedback from Employer Surveys;
- assume responsibility for health promotion and disease prevention for individuals and communities through participation in multiple dental health education projects;

- perform multiple, advanced level dental auxiliary functions as defined in the New Jersey State Dental Practice Act under the auspices of Dental Specialties II;
- obtain the RDH license;
- demonstrate professional development through membership in the Student American Dental Hygienists' Association and participation in related activities;
- display professionalism in the delivery of comprehensive dental health care through achievement of satisfactory grades in this section of the evaluation form for Clinical Services I, II, and III;
- prepare individuals for employment as dental hygienists;
- determine student satisfaction with educational programming;
- assess patient satisfaction with treatment service provided by students through data collection from the patient satisfaction

AFTER UCC

Graduates will sit for the National and Northeast Regional Examination for Dental Hygiene.

Students register for the professional phase courses at the UMDNJ Scotch Plains campus and pay the UMDNJ undergraduate tuition rate and fees.

The nature of the courses may require students to act as dental service providers and patients with fellow students.

Please note that the State Board of Dentistry of New Jersey conducts criminal background checks on all applicants.

RECOMMENDED SEQUENCE

	PR	RE-ADMISSION REC	QUIREME	NTS		
COURSE# COURSE LEC. LAB C						
**Pre-Admission Requirements						
BIO	105	Anatomy & Physiology I	3	3	4	
BIO	106	Anatomy & Physiology II	3	3	4	
BIO	108	Microbiology	3	3	4	
CHE	105	Chemistry-Health Sciences	3	3	4	
ENG	101	English Comp I	3	1	3	
PSY	101	General Psychology I	3		3	
					22	

** MUST BE COMPLETED PRIOR TO APPLICATION TO THE PROGRAM MINIMUM 2.5 GPA

FIRST YEAR					
Course#	Course	LEC.	Lab	Cr.	
FIRST SEMESTER					
ADEC 1110	Dental Head & Neck Anatomy	3		3	
ADEC 1209	Intro to Dental Professions	3	2	4	
DENH 1109	Intro to Clinical Dental Hygiene			4	
ADEC 1250	Dental Materials	2	3	3	
ADEC 1240	Medical Emergencies	1	1	1	
				15	
SECOND SEME	STER				
ADEC 1205	Dental Health Education	1		1	
ADEC 1219	Dental Radiology	2	3	3	
DENH 1231	Clinical Dental Hygiene I	3		3	
	Clinical Services I	1	12	3	
DENH 1280	Oral Embryology & Histology	2		2	
				12	

SECOND YEAR					
Course#	Course	LEC.	LAB	Cr.	
FIRST SEMESTER					
DENH 1220	Nutrition	2		2	
DENH 2300	Oral Pathology	2		2	
DENH 2310	Dental Health Ed/Community Dent. Health	2		2	
DENH 2320	Pharmacology & Oral Medicine			1	
DENH 2321	Periodontology I	2		2	
DENH 2332	Clinical Dental Hygiene II	2		2	
DENH 2349	Clinical Services II	1	12	3	
ADEC 1269	Dental Specialties I	1	1	1_	
				15	
SECOND SEMES	TER				
ADEC 2460	Practice Management	1		1	
DENH 2459	Dental Specialties II		3	1	
DENH 2419	Capstone Seminar	2		2	
DENH 2422	Periodontology II	2		2	
DENH 2449	Clinical Services III	1	12	3	
DENH 2453	Pain Control			1	
	_			10	

GENERAL EDUCATION REQUIREMENTS - THESE COURSES MUST BE COMPLETED BEFORE ENTERING THE PROFESSIONAL

PHASE OF THE PROGRAM IN JANUARY					
SOC	101	Principles of Sociology	3		
ENG	102	English Comp II	3		
ENG	129	Public Speaking	3		
Elective		History	3		
			12		

DENTAL HYGIENE

ASSOCIATE IN APPLIED SCIENCE DEGREE continued



DESKTOP PUBLISHING

Option offered through Communications ASSOCIATE IN ARTS DEGREE

This program is designed for transfer to a bachelor's degree-granting institution. Course work includes the theory and practice of using computers for combining word processing with graphic design to produce a variety of print material. Students are required to consult with an advisor regarding appropriate option and course selection for their needs and interests.

The specific objectives of this program are that the graduate must be able to demonstrate:

- the ability to communicate their ideas verbally and in writing with a level of sophistication and fluency appropriate to college-level discourse;
- a recognition of the necessity of keeping abreast of current cultural, social and political issues and events as a cornerstone of citizenship in a democratic society;
- a level of comfort and proficiency with standard productivity software such as word processors, presentation managers and web browsers, as well as an understanding of the ways in which these tools are applied in the communications field;

- an awareness that learning is a complex, lifelong process and not an event, a phenomenon, not an outcome;
- facility with the cutting-edge tools necessary to be competitive in the high-technology arena of desktop publishing and design;
- professional competence in the technical and theoretical skill-set that constitutes the working toolbox of today's desktop publishing and design specialists.



AFTER UCC

Graduates can prepare for a future career in the rapidly growing electronic publishing field, and transfer to a fouryear college or university.

RECOMMENDED SEQUENCE

		FIRST YEA	R		
Course	#	Course	LEC.	LAB	Cr.
First S	EMES	TER			
COM	100	Communications Technologies	3	2	4
COM	101	Mass Communications	3		3
ENG	101	English Comp I	3	1	3
PSY	101	General Psychology	3		3
Labora	tory	Science OR			
MAT	•	Mathematics*			3-4
				16	-17
SECONI	SEA	MESTER			
COM	107	Publication Editing & Design	3		3
ENG	102	English Comp II	3	1	3
Labora	tory	Science OR			
MAT		Mathematics*			3-4
ENG	128	The Dynamics of Co OR	mmu	nica	tion
ENG	129	Public Speaking	3		3
FIA	108	Appreciation of Art	3		3
				15	-16

SE	NI	V	$-\Lambda$	ь

Course#	Course	LEC.	Lab Cr.	
FIRST SEMESTER				
COM 207	Advanced Publicat Editing & Design	ion 3	3	
ENG	200-Level	3	3	
Modern La	nguage OR			
HIS 101	Intro to Western Civilization I	3	3	
GOV 201	American Govt. & Politics	3	3	
Elective	Humanities	3	3	
Elective	Social Science	3	3	
			18	

SECOND SEMESTED

JECOND JEMESIEK				
COM 102	Reporting & News \	Writing	g or	
COM 111	Mass Communication	on Ethi	cs OR	
COM 108	Principles & Practice	es		
	of Public Relations	3	3	
ENG	200-Level	3	3	
Modern Lar	nguage OR			
HIS 102	Intro to Western Civilization II	3	3	
GOV 202	American National			
	Govt	3	3	
Elective	Social Science	3	3	
			15	

* Mathematics requirement must be MAT 117 or higher



UNION COUNTY COLLEGE (UCC) has dual admissions or transfer agreements with prestigious colleges and universities



Cranford · Elizabeth Scotch Plains · Plainfield throughout the United States. Our agreements have been carefully structured to ensure qualified UCC graduates admission as Juniors to over fifty 4-year institutions.

As tuition at 4-year colleges continues to rise, consider the economic advantage of spending your first two years at UCC without sacrificing time or educational quality in your pursuit of a Bachelor's Degree.

- ▲ Over 90 challenging programs of study
- ▲ Distinguished faculty
- ▲ 4 convenient campúses
- ▲ Up-to-date technology
- ▲ Small class size
- ▲ Financial assistance



DRAMA/FINE ARTS

Option offered through Liberal Arts ASSOCIATE IN ARTS DEGREE

The drama option will include the study of European and modern theater as both "text" and "event", with reading, improvisation, field trips, playwrights, and directing used as techniques in the learning process. Students will also develop voice, body, and imagination through the art of acting and will put those skills to use in all forms of dramatic presentations.

See paragraph "Qualifications for Admission to Degree Program" for desired high school background (see page 207).

The specific objectives of this program are that the graduate must be able to demonstrate:

- critical thinking, problem-solving skills, and effective communication skills;
- an awareness of his/her rights and responsibilities as a citizen of a world community;
- the ability to communicate with others in a diverse society;
- an awareness of the diverse factors that shape the world in order to keep pace with the changing society;



- the ability to use technology for learning and research;
- the ability to learn independently and to direct his/her own learning;
- knowledge of the history and elements of drama;
- knowledge of the history and techniques of theater acting;
- the ability to perform effectively as an actor in a specified scene;
- the ability to apply critical thinking and problem-solving skills to situations involving theater.

AFTER UCC

Graduates from this program can transfer to a 4-year institution. Students receive an immersion in this demanding art, as well as a solid liberal arts base for transfer.

RECOMMENDED SEQUENCE

		FIRST YEA	\K		
Cour	SE#	Course	LEC.	Lab	Cr.
FIRST	SEMES	TER			
ENG	101	English Comp I	3	1	3
FIA	205	Intro to Drama I	3		3 3 3
Mode	rn Lai	nguage	3		3
HIS	101	Intro to Western Civilization I	3		3
MAT	127	Elementary Statistic	cs OR		
MAT	143	Elementary Mathe Analysis I	matica 4	l	4
					16
SECON	ND SE/	MESTER			
ENG	102	English Comp II	3	1	3
FIA	207	Acting I	3		3 3 3
Mode		nguage	3		3
HIS		Intro to Western Civilization II	3		3
Labor	atory	Science	3	1	4

5	ECONL	YEAR
COURSE#	Course	LEC. LA

16

Course#	COURSE	LEC.	LAB CR.		
FIRST SEMESTER					
ENG	200-Level Lite				
	course	3	3		
FIA 20	06 Intro to Dramo	all 3	3		
GOV 20	2 American Na	tional			
	Govt	3	3		
PSY 10)1 General Psycl	hology 3	3		
MAT 14	14 Elementary M Analysis II OF	athematica	l		
	ry Science		4		
			16		

C------

2 FCON	AD 2FV	MESTER		
ENG	128	Dynamics of Comm	nunicatio	on OR
ENG	129	Public Speaking	3	3
FIA	208	Acting II	3	3
GOV	201	American Govt. &	Politics	OR
		Intro to Philosophy	3	3
PSY	102	Psychology of Personality		
		Personality	3	3
FIA		Elective *	3	3
FIA		Diversity Course**	3	3
				10

- * Students can take a Fine Arts Course elective in Dance, Music, Graphic Design, Illustration, Photography, or Visual Arts to fulfill Fine Arts Course requirements.
- ** Students can take FIA 105 Music Appreciation, FIA 108 Art Appreciation, FIA 111 History of Art, FIA 112 History of Art II, or FIA 117 Music in the 20th Century to fulfill the Fine Arts Diversity Course requirements.

EARLY CHILDHOOD ELEMENTARY EDUCATION

SUGGESTED GRADES PRE-K-3 Option offered through Liberal Arts ASSOCIATE IN ARTS DEGREE

For students who wish to prepare themselves for an Associate degree or wish to transfer and earn a baccalaureate degree in Early Childhood Education or Elementary Education.

See paragraph "Qualifications for Admission to Degree Programs" for desired high school background (see page 207).

The specific objectives of this program are that the graduate must be able to demonstrate:

- the ability to apply understanding of psychological concepts to the learning behavior of the young child in order to address specified problems;
- an understanding of societal influences on the learning of the young child;
- an ability to apply understanding of group dynamics to the management of a group of young children;
- an ability to use visual art projects to further the growth and development of the young child;
- an understanding of the characteristics of effective teaching behaviors;
- an understanding of the organization and funding of school systems;
- the knowledge of the history of American education;
- an understanding of the implications for teaching of multiculturalism and pluralism;
- an understanding of procedures for integrating students with special needs into the classroom;
- an understanding of the roles of teachers, students, parents, administrators, and teacher associations in American education;
- effective written and spoken communication skills;
- an awareness of and concern for the ethical implications of institutional policies and individual practices;
- an awareness of his/her rights and responsibilities as a citizen of a world
- an awareness of the diverse factors that shape the world in order to keep pace with the changing society;
- the ability to learn independently and to direct his/her own learning.

RECOMMENDED SEQUENCE

	FIRST YEAR						
Course#	Course	LEC.	Lab	CR.			
FIRST SEMES	TER						
ENG 101	English Comp I	3	1	3			
Elective	Laboratory Science	3	3	4			
MAT 119		3		3			
	General Psychology	3		3			
	Principles of Sociology	3		3			
				16			
SECOND SE	MESTER						
ENG 102	English Comp II	3	1	3			
	Laboratory Science	3	3	4			
	Child Psychology	3		3			
	Social Problems	3		3			
Elective	FIA OR ENG*	3		3			
				16			

SECOND YEAR					
Course#	Course	LEC.	Lab	Cr.	
FIRST SEMES	TER				
PSY 211	Current Issues in Psychology	3		3	
ENG 128	Dynamics of Communication	3		3	
Elective	- 1 1	3		3	
	Educational Psychology	3		3	
EDU 215	Field Work in Education**	3		3	
HIS	2-semester sequence++	3		3	
				18	
SECOND SE	MESTER				
PED 107	Decisions for Wellness	3		3	
CIS 111	Integrating Technology in the Curriculum	2	2	3	
GEO 201	World Geography			3 3 3	
HIS	2-semester sequence++			3	
Electives	HIS 105, 106, SOC 206 OR SPA (choose one)	3		3	
				15	

*CHOOSE ONE FROM:	+CHOOSE ONE FROM

FIA 104 FIA 107 FIA 109 FIA 110 FIA 205 FNG	Basic Design Intro to Dance Drawing I Painting I Intro to Drama 2001 evel Literature	PSY 206 PSY 210 SOC 273	Psychology of Personality Adolescent Psychology Human Sexuality Marriage and Family Topics in Education
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⁺⁺HIS 101 & 102 OR HIS 201 & 202

Teacher Education majors must periodically consult with the Coordinator of Teacher Education to review the latest federal and state requirements for Teacher Certification (Teacher License).

Graduates of this program will transfer to a four-year college or university for a baccalaureate degree to work with students in early childhood education.

^{**}EDU 215 must be taken after EDU 205 or concurrently with EDU 205.

EDUCATION

SUGGESTED GRADES 4-12 Option offered through Liberal Arts ASSOCIATE IN ARTS DEGREE

For students who wish to prepare themselves for an Associate degree or wish to transfer and earn a baccalaureate degree in Education.

See paragraph "Qualifications for Admission to Degree Programs" for desired high school background (see page 207).

The specific objectives of this program are that the graduate must be able to demonstrate:

- the ability to apply understanding of group dynamics to the management of a given group of children aged nine to eighteen years;
- the ability to use visual art projects to further the growth and development of children aged nine to eighteen years;
- the ability to apply understanding of psychological concepts to the learning behavior of children aged nine to eighteen years;
- an understanding of the characteristics of effective teaching behaviors;
- an understanding of the organization and funding of school systems;
- knowledge of the history of American education;
- an understanding of the implications for teaching of multiculturalism and pluralism;
- an understanding of procedures for integrating students with special needs into the classroom;
- an understanding of the roles of teachers, students, parents, administrators, and teacher associations in American education;
- effective written and spoken communication skills;
- an awareness of and concern for the ethical implications of institutional policies and individual practices;
- an awareness of his/her rights and responsibilities as a citizen of a world community;
- an awareness of the diverse factors that shape the world in order to keep pace with the changing society;
- the ability to learn independently and to direct his/her own learning.

RECOMMENDED SEQUENCE

FIRST YEAR						
Course#	Course	LEC.	Lab	Cr.		
FIRST SEMES	TER					
ENG 101	English Comp I	3	1	3		
Elective	Laboratory Science	3	3	4		
MAT 119		3		3		
HIS 201	U.S. History To 1865	3		3		
PSY 101	General Psychology	3		3		
				16		
SECOND SE	MESTER					
ENG 102	English Comp II	3	1	3		
	U.S. History Since 1865	3		3		
	Laboratory Science	3	3	4		
	Principles of Sociology	3		3		
MAT	Higher than MAT 119			3-4		
				<u> 16-17</u>		

SECOND YEAR					
Course#	Course	LEC.	Lab	Cr.	
FIRST SEMES	TER				
EDU 205	Educational Psychology	3		3	
Elective	FIA OR ENG OR PHI*	3		3	
HIS 101	Intro to Western Civilization I	3		3	
PSY 206	Adolescent Psychology	3		3	
	Current Issues in Psychology	3		3	
				15	
SECOND SE	MESTER				
EDU 215	Field Work in Education**	3		3	
ENG 128	Dynamics of Communication	3		3	
	Intro to Western Civilization II	3		3	
Elective	HIS 105 OR 106 OR SOC 206 OR EDU 216				
	OR SPA (choose one)	3		3	
Elective	PSY OR SOC OR EDU+	3		3	
Elective	FIA OR ENG OR PHI*	3		3	
				18	

*Choose one from:

FIA 104 Basic Design FIA 107 FIA 109 FIA 110 FIA 205 ENG Intro to Dance Drawing I Painting I Intro to Drama 200-Level Literature

+Choose one from:
PSY 102 Psycho
PSY 206 Adoles
PSY 210 Humar
SOC 273 Marrio Psychology of Personality Adolescent Psychology Human Sexuality Marriage and Family EDU 270 Topics in Education

**EDU 205 must be taken before or concurrently with EDU 215.

Teacher Education majors must periodically consult with the Coordinator of Teacher Education to review the latest federal and state requirements for Teacher Certification (Teacher License).

AFTER UCC

Graduates of this program will transfer to a four-year college or university for a baccalaureate degree to work with students in grades 4-12.

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ASSOCIATE IN APPLIED SCIENCE DEGREE

Electronics/Electromechanical/Engineering Technology students are prepared in the skills and understanding necessary to install and service equipment which combines electronic, electrical and mechanical components. Special emphasis is placed on computers, computer peripherals, robotics, automated manufacturing systems, fiber optic systems, and the operation of digital computers in automatic control systems. Considerable portions of the allotted laboratory hours are devoted to learning and practicing troubleshooting, repair, and maintenance procedures of electromechanical and electronic equipment.

See paragraph on "Qualifications for Admission to Degree Programs" or desired high school background (see page 207).



The specific objectives of this program are that the graduate must be able to demonstrate:

- the ability to effectively analyze and synthesize electromechanical, electrical and electronic systems and subsystems with minimal supervision;
- the ability to confidently and competently enter the job market on a semiprofessional level as a service technician in any situation requiring the installation, maintenance, repair, and operation of:
 - computers and computer peripherals;
 - control systems;
 - test, measurement, and instrumentation equipment;
 - electromechanical assemblies and subassemblies;
- · the ability to effectively communicate and present information in a logical and systematic manner;
- positive interaction interpersonally as a member of a technological team and/or employer representative;
- the initiative and skills to continue to educate oneself and remain abreast of the state-of-the-art through the review and interpretation of technical literature;
- · an awareness of community, societal, and ethical responsibilities and obligations associated with being awarded a college degree.

AFTER UCC

Graduates have the option of entering a Bachelor of Science in Technology program or accepting positions as field service representatives or laboratory technicians with firms in the computer and electronic fields.

RECOMMENDED SEQUENCE

FIRST YEAR					
Cour	SE#	Course	LEC.	LAB	CR.
FIRST	SEMES	TER			
CSC	115	Intro to Computer Programming	2	2	3
EET	101	Principles of DC Circuits	3	3	4
MET	109	Computer-Aided Drafting	2	3	3
ENG	101	English Comp I	3	1	3
MAT	143	Elementary Mathen Analysis I	natica 4		4
					17
SECON	ND SE	MESTER			
EET	102	Principles of AC Circuits	2	3	3
EET	111	Digital Computer Fundamentals	3	3	4
ENG	122	Introductory Technic Writing	cal & 3	Busii 1	ness 3
MAT	144	Elementary Mathen Analysis II	natica 4	l	4
PHY	101	General Physics I	3		3
PHYL	101	General Physics II Laboratory		3	1
					18

	SECOND YEAR					
Cour	SE#	Course	LEC.	LAB	Cr.	
FIRST SEMESTER						
EET	211	Computer Systems/ Microprocessors	3	3	4	
EET	213	Semiconductor Devices	4	3	5	
PHY	102	General Physics II	3		3	
PHYL	102	General Physics II Laboratory		3	1	
Electiv	/e	Humanities			3	
					16	

SECOND SEMESTER					
EET	204	Electromechanical D	evice	es &	
		Systems/Robotics	3	3	4
EET	265	Fiber Optic Commu	nicati	on	
		Systems	3	3	4
Electi	ve	Technical*			3
Electi	ve	Social Science			3
					14

*MAT 171 recommended for students transferring

ASSOCIATE IN SCIENCE DEGREE

This degree is designed for the certified EMT or Paramedic Health Practitioner. This degree will expand the student's education by adding general education courses required to earn an Associate degree. The program director will conduct an evaluation of the student's current certification. This review will include a review of transcripts and evidence of certification from a state agency and letter attesting to skill competency from applicable agency. Skills obtained in this degree will assist students to acquire further education through a bachelor's degree program.

The specific objectives of this degree are that the graduate will develop skill in:

- understanding cultural diversity as it relates to health care delivery;
- developing effective leadership skills necessary for advancement in health
- cultivating effective customer satisfaction as it relates to health
- implementing effective stress management techniques;
- understanding the importance of ethical practices in health care delivery;
- · utilizing effective marketing and public education programs for health care agencies;
- developing a general understanding of health care management;
- acquiring employee recruitment and retention skills.

The graduate will demonstrate:

- critical thinking skills;
- effective interpersonal communication skills;
- leadership skills;
- improved application of ethical sensitivity skills;
- professional responsibility in the delivery of health care.

RECOMMENDED SEQUENCE

PARAMEDIC TRACK I (currently certified)					
ENTRANCE: N	J STATE PARAMEDIC CERTIFICATION OR PMD 106, 107,	108, 109	32 (CREDITS	
Course#	Course	LEC.	Lab	Cr.	
FIRST SEMESTER	l .				
ENG 101 MAT 119*	English Comp I Algebra	3 3 3	1	3 3 3 4	
PSY 101 BIO 105	General Psychology Anatomy & Physiology I	3	3		
SECOND SEMESTER					
ENG 102 IDH 104	English Comp II Cultural Diversity & Healthcare	3 3 3	1	3 3 4	
BIO 106 HIS	Anatomy & Phyśiology II Elective OR	3	3	4	
HUG 101	Multidisciplinary Perspectives on Aging	3		3	
THIRD SEMESTE	D			13	
PSY 105 CIS 100	Group Dynamics** Intro to Computer Applications	3 2	2	3	
EHS 201 EHS 202	Health Care Leadership Fund. of Health Care Administration	3	Z	3 3 3 3	
	ters = 38 credits. Total degree credits = 70 credit	s.		12	

PAR/	MEDIC TRACK II (non-certified paramedic)				
Course#	Course	LEC.	LAB	Cr.	
FALL SEMESTER					
ENG 101	English Comp I	3	1	3	
MAT 119	Algebra*	3		3	
PSY 101 BIO 105	General Psychology	3 3 3 3	3	3 3 3 4	
BIO 105	Anatomy & Physiology I	ა	<u> </u>	13	
SPRING SEMEST	ED			13	
ENG 102	English Comp II	3	1	3	
IDH 104	Cultural Diversity & Healthcare	3 3 3	'	3 3 4	
BIO 106	Anatomy & Physiology II	3	3	4	
HIS	Elective OR				
HUG 101	Multidisciplinary Perspectives on Aging	3		3	
				13	
FALL SEMESTER		_		_	
PMD 106	Paramedic I	7		7	
PMD 107	Paramedic Procedures I	6		6	
				13	
SPRING SEMEST		_		10	
PMD 108	Paramedic II	7 6		10	
PMD 109	Paramedic Procedures II	0		9	
FALL SEMESTER				17	
PSY 105	Group Dynamics**	3		3	
CIS 100	Intro to Computer Applications	3 2 3 3	2	3 3 3 3	
EHS 201	Intro to Computer Applications Health Care Leadership	3	_	3	
EHS 202	Fund. of Health Care Administration	3			
Total degree	credits = 70 credits.			12	

Students may enter this degree either before or after NJ state certification as an EMT or Paramedic. Students already certified as NJ Paramedics must present the Program Director with copies of college transcripts, current certification card and a letter from an MICU Director and MICU Educator attesting to skill competency. Upon acceptance to the program, students will be awarded 32 credits for PMD 106, 107, 108, and 109.

The above sequence is only a guide. Coursework can be completed in a part-time or full-time schedule. Students should discuss specifics with the Paramedic Program Director.

^{*}A higher level Math will be accepted in place of MAT 119.

^{**} A 200-Level or higher Psychology will be accepted in place of PSY 105.

ASSOCIATE IN SCIENCE DEGREE continued



EMT TRACK

ENTRANCE: CPR CERTIFICATION OR EMT 100 1 CREDIT NJ STATE EMT CERTIFICATION OR EMT 102 **6** CREDITS

Course#	Course	LEC.	Lab	Cr.
FIRST SEMEST	ER			
LIS 105	Methods in Library Research	1		1
ENG 101	English Comp I	3	1	3
PSY 101	General Psychology	3		3
BIO 105	Anatomy & Physiology I	3	3	4
IDH 100	Dynamics of Health in Society	3		3
				14
SECOND SEM	ESTER			
ENG 102	English Comp II	3	1	3
BIO 106	Anatomy & Physiology II	3	3	4
HIS	Elective OR			
HUG 101	Multidisciplinary Perspectives on Aging	3		3
IDH 101	Fundamentals of Health & Disease	3		
IDH 104	Cultural Diversity & Healthcare	3		3 3
				16
THIRD SEMES	TER			
CIS 100	Intro to Computers	2	2	3
MAT 119	Algebra*	3		3
PSY 105	Group Dynamics**	3		3
IDH 103	Research for the Health Care Professional	3		3
IDH 261	Medical Terminology	3		3 3 3 3
				15
FOURTH SEM	ESTER			
IDH 212	Pathophysiology	3		3
EHS 200	Case Studies in Emergency Medicine	3		
EHS 201	Health Care Leadership	3		3
EHS 202	Fund. of Health Care Administration	3		3 3 3
				12

Four semesters = 57 credits. Total degree credits = 64 credits.

Students must possess current NJ state certification as an EMT to enter this degree program.

Students will present the Program Director with copies of college transcripts (if applicable), current EMT certification card and letter from training officer attesting to skill competency. Upon acceptance to the program, students will be awarded 7 credits for EMT 100 and EMT 102.

The above schedule is a guide. Coursework can be completed in a part-time or full-time schedule. Students should discuss specifics with the Program Director.

^{*}A higher level Math will be accepted in place of MAT 119.

^{**} A 200-Level or higher Psychology will be accepted in place of PSY 105.

ENGINEERING

Professor Elmer Wolf Engineering Program ASSOCIATE IN SCIENCE DEGREE

The Engineering program offers the first two years of a fouryear engineering curriculum and prepares graduates for transfer to bachelor's degree programs at leading engineering colleges throughout the country. The first two years are common to most fields of engineering (e.g., civil, electrical, and mechanical), but in the second year some students may begin to specialize in a field of their choice (e.g., chemical engineering).

Union County College has dual admissions and formal transfer agreements with New Jersey Institute of Technology, Rutgers University, and other colleges. Due to the diversity of engineering curricula in certain fields of specialization, it is sometimes necessary for graduates to take one or two additional courses before attaining junior status at the transferring college.

Applicants for the engineering program must present two years of algebra and one year of geometry, trigonometry, chemistry, and physics, as high school entrance credits. Students deficient in any of these subjects must take the appropriate preparatory courses. All engineering candidates are required to take a mathematics and a physics placement test; students who are not placed in MAT 171 will not take PHY 111 and will be limited to a maximum of 15 credit hours during the first semester.

The specific objectives of this program are that the graduate must be able to demonstrate:

- critical thinking and problem-solving skills in chemistry and physics, calculus and differential equations, engineering mechanics (i.e., statics, dynamics, and mechanics of materials), and fundamental electric circuits;
- computer-aided drafting (CAD) skills and knowledge of the principles of engineering graphics;
- the ability to apply knowledge of computer science, including computer programming skills using an appropriate programming language (e.g., C++);
- the ability to use appropriate computer software applications, including word processing, spreadsheets, and hand-held graphing calculators, in the study of science, mathematics, and engineering fundamentals;
- the ability to perform laboratory experiments and measurements, and to graph and analyze experimental data;
- the ability to work as a team member;
- the ability to write and communicate effectively.

AFTER UCC

Graduates are eligible to take advantage of the many transfer/articulation agreements Union County College has with some of the top four-year colleges and universities in the country. See a transfer counselor for details.

RECOMMENDED SEQUENCE

FIRST YEAR				
Course#	Course	LEC.	Lab	Cr.
FIRST SEMES	TER			
CHE 111	General Chemistry I	3	3	4
EGG 111	Engineering & Computer Graphics	1	3	2
ENG 101	English Comp I	3	1	3
MAT 171	Unified Calculus I	4		4
MAT 148	Intro to Graphics Calculators/Derive	1		1
EGG 105	Intro to Fundamentals of Engineering	3		3
				17
SECOND SE	MESTER			
ENG 122	Introductory Technical & Business Wri	iting or		
ENG 129	Public Speaking or			
ENG 102	English Comp II	3	1	3
Elective	See Note #1	3		3
MAT 172	Unified Calculus II	4		4
PHY 111	Mechanics	3		3
PHYL 111	Mechanics Laboratory		3	1
	Computer Algorithms	2	3	3
				17

SECOND YEAR					
Course#	Course	LEC.	Lab	Cr.	
FIRST SEMES	TER				
Elective	Technical (See Note #2)			3	
MAT 271	Unified Calculus III	4		4	
PHY 201	Electricity & Magnetism	3		3	
PHYL 201	Electricity & Magnetism Laboratory		3	1	
HIS 101	Intro to Western Civilization I or				
HIS 102	Intro to Western Civilization II	3		3	
				14	
SECOND SE	MESTER				
Elective	Technical (See Note #3)			4	
MAT 272	Differential Equations	4		4	
ECO 201	Principles of Economics I or				
ECO 202	Principles of Economics II	3		3	
Elective	Humanities	3		3	
Elective	See Note #4	3		3	
				17	

Please consult with Engineering faculty for transferability of courses to specific 4-year institutions.

NOTE #1: PSY 101 or SOC 101 recommended in this time slot for students who intend to major in Computer and Electrical Engineering; CHE 112/CHEL 112 recommended for all other engineering students.

NOTE #2: CHE 211/CHEL 211 recommended for Chemical Engineering students. MAT 265 recommended for Computer and Electrical Engineering students. EGG 201 recommended for all other Engineering students.

NOTE #3: CHE 212/CHEL 212 recommended for Chemical Engineering students. EGG 207/EGGL 207 recommended for Computer and Electrical engineering students. EGG 202 recommended for all other Engineering students.

NOTE #4: EGG 251 recommended for students in Computer and Electrical Engineering. PSY 101 or SOC 101 recommended for all other Engineering students.

Option offered through the **Professor Elmer Wolf Engineering Program** ASSOCIATE IN SCIENCE DEGREE

The Management Engineering Option is a transfer-oriented program designed for students who are interested in careers in industrial management, manufacturing operations, plant engineering, marketing, quality assurance, and other similar areas. This curriculum combines elements from science, mathematics, and business and provides the graduate with a broad range of transfer options.



Students who choose this program are advised to seek departmental advising during their first semester to tailor their course selection to their individual career objectives and to the demands of the receiving institution.

Applicants for the Management Engineering Option must present two years of algebra and one year of geometry, trigonometry, chemistry, and physics, as high school entrance credits. Students deficient in any of these subjects must take the appropriate preparatory courses. All candidates are required to take a mathematics placement test.

The specific objectives of this program are that the graduate must be able to demonstrate:

- the ability to apply calculus and statistical methods to the analysis of business problems;
- the ability to apply the fundamental principles of physics and chemistry to solutions of technical problems;
- the ability to use the computer to aid in the analysis of business problems, particularly in technical fields;
- the ability to apply the fundamental principles of accounting, business problems, and economics to solutions of problems in industry;
- the ability to write and communicate effectively;
- the ability to work as a team member.

AFTER UCC

Graduates can transfer to a four-year program or prepare for a career in industrial management and manufacturing operations, plant engineering, marketing, quality assurance, and other similar areas.

RECOMMENDED SEQUENCE

		FIRST YEA	R		
Cour	SE#	Course	LEC.	LAB	Cr.
FIRST	SEMES	TER			
BUS	105	Organization & Management	3		3
CHE	101	Chemistry I	3	3	4
ENG	101	English Comp I	3	1	3
MAT	171	Unified Calculus I	4		4
Electiv	ve	Humanities			3
					17
SECON	ND S E/	MESTER			
CHE	102	Chemistry II	3	3	4
CIS	100	Intro to Computer Applications	2	2	3
ENG	102	English Comp II	3	1	3
MAT	172	Unified Calculus II	4		4
Electiv	ve	Humanities			3
					17

	S	ECOND YE	AR		
Cour	SE#	Course	LEC.	Lab	Cr.
FIRST	SEMES	TER			
ACC	103	Accounting I	4		4
CIS	101	Intro to Information			
		Systems	2	2	3
ECO	201	Principles of			
		Economics I	3		3
MAT	127	Elementary Statistics	3		3
PHY	101	General Physics I	3		3
PHYL	101	General Physics I			
		Laboratory		3	1
					17
SECO	ND S E/	MESTER			
ACC	104	Accounting II	4		4
ECO	202	Principles of			
		Economics II	3		3
Electiv	ve	Note #1	3		3
PHY	102	General Physics II	3		3
PHYL	102	•			
		Laboratory		3	1
Electi	ve	General			3
					17

Note #1 ENG 200 or COM

Option offered through the **Professor Elmer Wolf Engineering Program** ASSOCIATE IN SCIENCE DEGREE

The Environmental Science Option offers the first two years of a bachelor's degree program with a major in environmental science or environmental engineering. It is designed for students who seek a career in some field of environmental protection, waste management, and pollution control.

Students who plan to transfer to an engineering program should take PHY 111-112 in lieu of PHY 101-102. Other course substitutions may be appropriate and students are encouraged to consult with a faculty advisor regarding appropriate course selections. Because of the diversity of undergraduate environmental programs, it may be necessary for students to take one or more second-year courses at their transfer institutions.

Applicants for the Environmental Science Option must present two years of algebra and one year of geometry, trigonometry, chemistry, and physics, as high school entrance credits. Students deficient in any of these subjects must take appropriate preparatory credits. All students are required to take a mathematics placement test.



The specific objectives of this program are that the graduate must be able to demonstrate:

- critical thinking and problem-solving skills in chemistry, physics, calculus, statistics, and economics:
- an understanding of ecological and geological principles and their relationship to problems involving environmental quality control;
- the ability to apply knowledge of computer science, including computer programming skills using an appropriate programming language (e.g., C++);
- the ability to perform laboratory experiments and measurements, and to graph and analyze experimental data;
- the ability to work as a team member;
- the ability to write and communicate effectively.

AFTER UCC

Graduates can expect to work in some field of environmental protection, waste management and pollution control.

RECOMMENDED SEQUENCE

		FIRST YEAR	K		
Cour	SE#	Course	LEC.	Lab	CR.
FIRST	SEMES	TER			
CHE	125	General Chemistry I	3		3
ENG	101	English Comp I	3	1	3
EGG	105	Intro to Fundamenta Engineering	ls of 3		3
MAT	171	Y	4		4
MAT	148	Intro to Graphics Calculators/Derive	1		1
PED	101	Concepts of Adult Fitness	2		2
					16
SECON	ND SE	MESTER			
CHE	112	General			
		Chemistry II	3	3	4
ENG	102	English Comp II	3	1	3
MAT	172	Unified Calculus II	4		4
PHY	111	Mechanics	3		3
PHYL	111	Mechanics Lab		3	1
HIS	101	Intro to Western Civilization I	3		3
					18

SECOND YEAR

COURSE

Course#

LEC. LAB CR.

FIRST	SEMES	TER			
CHE	221	Organic Chemistry I	3		3
ECO	201	Principles of			
		Economics I	3		3
GEY	101	Physical Geology	3	3	4
PHY	201	Electricity &			
		Magnetism	3		3
PHYL	201	Electricity &			
		Magnetism Lab		3	1
MAT	271	Unified Calculus III	4		4
					18
SECON	ND SEA	MESTER			
GEY	102	Historical Geology	3	3	4
Electiv	ve	Humanities *			3
CSC	101	Computer Algorithms	2	3	3
MAT	127	Elementary Statistics	4		4
Electiv	ve _	Social Science **	3		3
					17

- * 2nd History for transfer to NJIT
- ** PSY or SOC for transfer to NJIT

Option offered through Communications ASSOCIATE IN ARTS DEGREE



This program is designed for transfer to a bachelor's degree-granting institution. Course work includes film theory and criticism. Students are required to consult with an advisor regarding appropriate option and course selection for their needs and interests.

The specific objectives of this program are that the graduate must be able to demonstrate:

- the ability to communicate their ideas verbally and in writing with a level of sophistication and fluency appropriate to college-level discourse;
- a recognition of the necessity of keeping abreast of current cultural, social and political issues and events as a cornerstone of citizenship in a democratic society;
- a level of comfort and proficiency with standard productivity software such as word processors, presentation managers and web browsers, as well as an understanding of the ways in which these tools are applied in the communications field;
- an awareness that learning is a complex, lifelong process and not an event, a phenomenon, not an outcome;
- an understanding of the evolution of film as a medium, as well as a knowledge of the formal and thematic developments that constitute its history;
- hands-on experience in the creation of a number of student video projects.

AFTER UCC

Graduates can transfer to a bachelor's degree granting institution to major in Film, Journalism, Arts or any other Art/Humanities/Sciences program.

RECOMMENDED SEQUENCE

	FIRST YEA	R	
Course#	Course	LEC.	LAB CR.
FIRST SEMES	TER		
COM 100	Communications Technologies	3	2 4
COM 101	Mass Communications	3	3
ENG 101	English Comp I	3	1 3
PSY 101	General Psychology	3	3
Laboratory	Science OR		
MAT	Mathematics*		3-4
			16-17
SECOND SEA	MESTER		
COM 109	Intro to Film Study	3	3
ENG 102	English Comp II	3	1 3
Laboratory	Science OR		
MAT	Mathematics*		3-4
ENG 128	The Dynamics of Communication OR		
ENG 129	Public Speaking	3	3
Elective	Social Science	3	3
			15-16

Course#	Course	Lec	LAB CR.
		LEC.	LAB CK.
FIRST SEMES			
COM 209	Evolution of Film	3	3
ENG	200-Level	3	3
Modern Lai	nguage or		
HIS 101	Intro to Western		
	Civilization I	3	3
GOV 201			
	Politics	3	3
Elective	Humanities	3	3
Elective	Social Science	3	3
			18
SECOND SE	MESTER		
COM 216	Digital Video Editing	&	
	Multimedia Imaging	3	3
ENG	200-Level	3	3
Modern Lai	naugae OR		
	Intro to Western		
1.10 102	Civilization II	3	3
GOV 202	American National		
00, 202	Govt	3	3
Elective	Humanities	3	3
			15
	itics requirement must		

FIRE SCIENCE TECHNOLOGY

ASSOCIATE IN APPLIED SCIENCE DEGREE

Fire Science Technology is a two-year Associate degree program.

See paragraph on "Qualifications for Admission to Degree Programs" for desired high school background (see page 207).

The specific objectives of this program are that the graduate must be able to demonstrate:

- the ability to apply analytical skills to the reading of building blueprints and codes;
- knowledge of fire prevention, including fire prevention systems and building codes;
- the ability to apply problem-solving skills to specific fire ground situations;
- knowledge of fire fighting strategies and tactics;
- knowledge of the organization and management of fire departments;
- knowledge of the procedures and management involved with incident command;
- the application of problem-solving skills to the detection of fire and its causes;

- awareness and concern about the ethical implications of fire department and state government policies and individual
- the ability to communicate orally and in writing with others in a diverse society;
- an awareness of the diverse factors that shape the world, with particular application to fire science;
- the ability to use technology related to fire science;
- the ability to learn independently and to direct his/her own learning.



AFTER UCC

Graduates with this degree will have the basic knowledge necessary to begin a challenging career in fire protection.

RECOMMENDED SEQUENCE

		FIRST YEAR	?			
Cours	SE#	Course	LEC.	Lab	CR.	
FIRST SEMESTER						
ENG	101	English Comp I	3	1	3	
FST	103	Fire Protection	3		3	
MAT	117	Intro to				
		Mathematical Ideas	3		3	
PSY	101	General Psychology	3		3	
SOC	101					
		Sociology	3		3	
					15	
SECON	ND SE/	MESTER				
CHE	106	Consumer & Environ	men	tal		
		Chemistry	3	3	4	
ENG	122					
		Business Writing	3	1	3	
FST	102	Building Construction	1 3		3	
FST	105	Fire Prevention	3		3	
FST	106	Fire Fighting Tactics	3		3	
					16	

	2	ECOND YEA	<u> 1k</u>		
Cours	SE#	Course I	LEC.	LAB	Cr.
FIRST S	SEMES	TER			
FST	107	Hazardous Materials	3		3
FST	109	Fire Protection Systems	3		3
FST	113	Fire Department Orga Management	aniz 3	ation	1 & 3
FST	218	Fireground Strategies Concepts	& 3		3
Elective Humanities				3	
					15
SECON	ID SEA	MESTER			
CIS	100	Intro to Computer Applications	2	2	3
FST	108	Fire Hydraulics	3		3
FST	111	Fire Causes & Detection	3		3
FST	119		3		3
GOV			_		3
Electiv		Fire Science	-		3
					18

Graduates of the Union County Fire Academy will be granted 6 credits of advanced standing when they matriculate in the program.

Fire Science electives are to be selected from the following:

EMT 102 FST 112 FST 115

GAME DESIGN CREATION

ASSOCIATE IN APPLIED SCIENCE DEGREE

This program introduces students to the skills and knowledge required to compete for entrylevel positions in the fastest growing segment of the media field - the video game industry. Course work includes the fundamentals of game design, the elements of storytelling for digital media, graphic design, creative writing, digital video editing and multimedia content creation. Through the selection of elective tracks, students can focus their studies on animation, illustration, film and video or photography. Students are required to work with their faculty advisor regarding appropriate track options and course selection suitable to their needs and interests.



Upon successful completion of all program requirements, graduates will be able to:

- demonstrate an understanding of the gaming industry as a business;
- · recount the history of gaming and interactive entertainment;
- · identify influential and important games and interactive media:
- differentiate between a host of gaming genres;
- identify the elements of intelligent design;

- identify the fundamental process and sequence involved in the design of games;
- identify the different roles and responsibilities of the game design team members:
- · identify the historical development of storytelling;
- explain the elements of good storytelling;
- draft storyboards for use in a variety of media projects;
- understand the essentials of audio engineering, graphic arts design and video editing for gaming applications;
- · identify the elements of game logic, game balance and the importance of challenge and reward milestones.

RECOMMENDED SEQUENCE

	FIRST YEA	\R		
Course#	Course	LEC.	LAB	Cr.
FIRST SEMES	TER			
CSC 100	Computer Programs Fundamentals	ming 2	2	3
COM 105	Storytelling for Digi Media	tal 2	2	3
ENG 101	English Comp I	3	1	3 3
FIA 104	Basic Design	3		3
GDP 101	Fundamentals of Game Design	3		3
MAT 119	Algebra	3		3
				18
SECOND SEA	MESTER			
FIA 202	Graphic Design I	3		3
GDP 110	Game Design & Development I	3		3
GDP 115	The Business of Ga Design	me 3		3
COM 109	Intro to Film Study	3		3
Track Electi	ve			3
				15

SECOND TEAR							
Course#	Course	LEC.	Lab	Cr.			
FIRST SEMESTER							
ENG 102	English Comp II	3	1	3			
MAT 125	Survey of Special To		in	_			
	Mathematics	3		3			
PHY 125	Elements of Physics	3		3			
PHYL 125	Elements of Physics						
	Laboratory		2	1			
COM 112	Multimedia						
	Development I	3		3			
Track Electi	ve			3			
				16			
SECOND SEA	MESTER						
ENG 215	Creative Writing	3		3			
FIA 204	Graphic Design II	3		3			
COM 212	Multimedia						
	Development II	3		3			
COM 216	Digital Video Editing	& 3					
	Multimed. Imaging	3		3			
Track Electi	ve			3			

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TRACK ELECTIVES: Students can choose three electives by selecting one of the sequences below- (All courses are three credits)

ANIMATION TRACK

GDP 201 Principles of Animation GDP 210 Game Design and Development GDP 215 3D Game Programming

ILLUSTRATION TRACK

FIA 109 Drawing I FIA 209 Illustration I FIA 210 Illustration II

FILM AND VIDEO TRACK

COM 106 Intro to Television: Production & Theory COM 206 Television Field Production COM 209 The Evolution of Film

PHOTOGRAPHY TRACK

FIA 221 Black and White Photography I FIA 222 Black and White Photography II FIA 223 Color Photography 15

GAME DESIGN DEVELOPMENT

ASSOCIATE IN APPLIED SCIENCE DEGREE

Game Design Development is a comprehensive two-year program leading to an Associate in Applied Science degree. The program introduces students to a variety of programming and gaming concepts. Students learn the concepts of 3D graphics, particle systems, rendering, collision detection, and game algorithms. Students also gain an understanding of the connection between game design with physics and mathematics. For better design, students are also required to successfully complete fine arts and creative writing courses. The program provides students with the skills necessary for entry-level positions in the game design and development industry.



Upon successful completion of all program requirements, graduates will be able to:

- display a working knowledge and understanding of basic game design and development;
- understand basic game design terminology;
- recognize various types of games;
- demonstrate the ability to use current tools necessary to design and program interactive games;
- understand and discuss the role and importance of intellectual property, copyright, trademarks, and patents in
- demonstrate and use animation techniques in game design development;
- design and develop a game from creation to completion;
- discuss and explain the skills and concepts necessary to work in the game design industry including communication skills, interpersonal skills, time management skills, and verbal/non-verbal skills;
- locate, discern, and effectively use information to solve issues and/or problems;
- discuss and explain the importance of working independently as well as working as a team player;
- explain the value of good work ethics and professionalism.

AFTER UCC

Graduates can apply for entry-level positions in the field of Game Design, or may transfer to four-year colleges or universities in Game Design or a similar degree program.

RECOMMENDED SEQUENCE

Cour	SE#	Course	LEC.	Lab	Cr.
SEMES	TER 1				
BUS	101	Intro to Contempora Business	iry 3		3
CSC	100	Fundamentals of	2	2	3
ENG	101	Programming English Comp I	3	1	3
FIA	104	Basic Design	1	4	3
GDP	104	Fundamentals of	'	4	3
ODI	101	Game Design	3		3
MAT	119	Algebra*	3		3
					18
SEMES	TER 2				
COM	105	Storytelling for Digit Media	al 2	2	3
CIS	130	Intro to Visual Basic	2	2	3
GDP	110	Game Design &	0		0
CDD	115	Development I	3		3
GDP	115	The Business of Gaming	3		3
FIA	202	Graphic Design I	1	4	3
C	2				15
SEMES	_				
ENG	122	Introductory Technic Business Writing	al & 3	1	3
GDP	201	Principles of Animation	2	2	3
GDP	210	Game Design & Development II	2	2	3
MAT	143	Elementary Mathem	_	_	Ŭ
,,,,,,,,	0	Analysis I*	4		4
PHY	125	Elements of Physics	3		3
PHYL	125	Elements of Physics			_
		Laboratory		2	<u>1</u>
					17
SEMES					
		Creative Writing	3		3
GDP	215		2	2	2
GDP	280	Programming Game Development		2	3
GDF	200	Portfolio	3		3
Electiv	/e	Fine Arts	3		3
Electiv	/e	General Education	3		3
					15

Total 65 credits

* A higher level math course may be substituted. Please check with program coordinator

GERONTOLOGY

ASSOCIATE IN ARTS DEGREE

Gerontology is an innovative field for persons who want to work with older adults. The degree program prepares students for an entry-level position in the field of Activities with older adults, or for advanced study at a four-year institution in a related field such as Social Work, Recreation Therapy, Psychology, or Rehabilitation. This program is also suitable for those who are already employed in agencies which serve older adults.

See paragraph "Qualification for Admission to Degree Program" for desired high school background (see page 207).

The specific objectives of this program are that the graduate must be able to demonstrate:

- an understanding of group dynamics and an ability to encourage effective communication among a small group;
- effective written and oral communication skills;
- critical thinking and problem-solving skills, with emphasis on using community resources to solve specified problems;
- an understanding of the psychological effects of aging;
- an understanding of the social factors affecting diverse populations;
- an awareness of one's rights and responsibilities as a professional and as a citizen in a world community;
- the ability to learn independently and to direct his/her own learning.

In order to successfully complete this program, the student will be required to take the following courses and may be required to take additional electives. BE SURE TO CONFER WITH A UCC COUNSELOR WHEN PLANNING YOUR **COURSE SCHEDULE.**



AFTER UCC

Graduates can work in entry-level positions in the field of Activities with older adults, or transfer for advanced study at a four-year institution in a related field such as Social Work, Recreation Therapy, Psychology, or Rehabilitation. This program is also suitable for those who are already employed in agencies which serve older adults.

Courses in the Gerontology Degree & Activities Certificate programs fulfill academic requirements toward certification by the National Certification Council for Activity Professionals (NCCAP). Students are encouraged to also take the Modular Education Program for Activity Professionals (MEPAP) offered by NCCAP.

In order to transfer to certain B.A. programs, you will need to take particular Biology, History and Government courses. Please consult the Gerontology Director to plan your courses if you are considering transferring after you earn your Associate's degree.

RECOMMENDED SEQUENCE

		FIRST YEA	R		
Cour	SE#	Course	LEC.	Lab	Cr.
FIRST	SEMES	TER			
ENG	101	English Comp I	3	1	3
HUG	101	Multidisciplinary Per on Aging	spec 3	tives	3
HUS	101	Community Resource Human Services	es in 3		3
PSY	101	General Psychology	3		3
Mode	ern La	nguage	3		3
					15
SECON	ND S E/	MESTER			
ENG	102	English Comp II	3	1	3
Mode	ern La	nguage –			
		second semester	3		3
MAT		Mathematics 117 or higher	3		3
SOC	101	Principles of Sociology	3		3
CIS		Any 3-credit Computer Course			3
PSY	213	•	arch 3		3

18

COUR	SE#	COURSE	LEC.	LAB	CR.
FIRST	SEMES	TER			
ENG	128	The Dynamics of			
		Communication	3		3
HIS		Elective	3		3
SOC	206	Minorities in America	an Li	fe C)R
SOC	218	Women & Work	3		3
PSY	208	Abnormal			
		Psychology	3		3
BIO	105				
		Physiology I*	3	3	4
					16
SECON	ND SEA	MESTER			
GOV		Elective – any GOV			
		course	3		3
PSY	212	Psychology of Aging	3		3
FIA		Music or Art Elective	3		3
ENG		200-Level	3		3
BIO	106	Anatomy &			
		Physiology II**	3	3	4
	·				16

BIO 105 and BIO 106 are a two-semester sequence.

- *BIO 102, BIO 107 or any laboratory science may be substituted
- **BIO 118 Biology of Women or any 4credit elective course can be taken instead of this course

GRAPHIC DESIGN/FINE ARTS

Option offered through Liberal Arts ASSOCIATE IN ARTS DEGREE

The Fine Arts Option in Graphic Design is a Liberal Arts transferoriented curriculum that provides students, through a core of visual arts/design related courses, a theoretical and practical understanding of the commercial art area of Graphic Design. Utilizing skills and techniques learned through a combined lecture/studio experience, students are introduced to the various aspects of the graphic communication process including the development of roughs, comps, layouts, pasteups, and mechanicals in a Macintosh-equipped digital laboratory. A specific approach to beginning and advanced design problem-solving is emphasized. Additional topics of study include an analysis of graphic art production processes including photo digitizing, typography, and the use of illustration software programs.

See paragraph "Qualifications for Admission to Degree Programs" for desired high school background (see page 207).

The specific objectives of this program are that the graduate must be able to demonstrate:

- the theoretical and practical design skills involved in creating visuals combining images and typography;
- a knowledge of the use of diverse materials and various media traditionally employed in foundation-level graphic design studio
- a creative familiarity with traditional layout, comps, thumbnail, and sketch modes of visualization;
- a critical and aesthetic knowledge of the history of graphic design;
- a practical understanding of the use of tools of digital design, including specialized computer software and design software programs;
- a portfolio of work that demonstrates competency in graphic design and provides the necessary support material needed for transfer acceptance into a four-year program or for an entry-level vocational position.



AFTER UCC

Graduates can transfer to a related program at a four-year college or university and are eligible to take advantage of the many transfer/articulation agreements Union County College has with some of the top four-year colleges and universities in the country. See a transfer counselor for details.

RECOMMENDED SEQUENCE

Cour	SE#	Course	LEC.	LAB	CR.
FIRST	SEMES	TER			
ENG	101	English Comp I	3	1	3
FIA	104	Basic Design	3		3
Mode	rn Lai	nguage	3		3
HIS	101	Intro to Western Civilization I	3		3
MAT	127	Elementary Statisti	cs OR		
MAT	143	Elementary Mathe Analysis I	matica		4
					16
SECON	ND SE	MESTER			
ENG	102	English Comp II	3	1	3
FIA	109	Drawing I	3		3
Mode	rn Lai	nguage	3		3
HIS		Intro to Western			
		Civilization II	3		3
Labor	atory	Science	3	3	4
					16

	C	ECOND YE	ΛD	
Cour		Course		LAB CR.
FIRST	SEMES	TER		
ENG		200-Level Literature		
		Course	3	3
FIA	115	Drawing II	3	3
FIA	108	Art Appreciation	3	3
FIA	202	Graphic Design I	3	3
PSY	101	General Psychology	<i>,</i> 3	3
MAT	144	Elementary Mathem Analysis II OR	atics	
Labor	atory	Science		4
				19
SECO	ND S E/	MESTER		
FIA	204	Graphic Design II	3	3
FIA	224	Digital Imaging for Photography	Art & 3	3
PSY	102	Psychology of Personality	3	3
BUS	203	Principles of Advertising	3	3

* Students can take FIA 105 Music Appreciation, FIA 111 History of Art I, FIA 112 History of Art II, FIA 117 Music in the 20th Century to fulfill the Fine Arts Diversity Course requirement.

ENG 128 Dynamics of Communication OR

Diversity Course*

3

3

3

18

ENG 129 Public Speaking

Technology Support Specialist

ASSOCIATE IN APPLIED SCIENCE DEGREE



The Help Desk Program is a comprehensive two-year program leading to an Associate in Applied Science degree. The program will provide students with the skills necessary to enter one of the fastest growing occupations. As technology increases in complexity so will the demand for educating well-trained personnel. The help desk has become and will continue to be an integral element of most business organizations. A good help desk person needs specific technical skills as well as communication, customer service, and people skills.

Upon successful completion of all program requirements, graduates will be able to:

- differentiate and understand the role and function of current and emerging technologies;
- demonstrate proficiency in the use of computer applications including word processing, spreadsheets, presentation software, and databases;
- demonstrate proficiency in Internet and Web technologies;
- · demonstrate an understanding of programming concepts;
- discuss and explain the skills and concepts necessary to run an effective help desk including communication skills, interpersonal skills, time management skills, and verbal/non-verbal skills;
- · locate, discern, and effectively use information to solve issues and/or problems;
- discuss and explain the importance of working independently as well as working as a team player;
- · explain the value of good work ethics and professionalism;
- identify basic troubleshooting techniques;
- understand and explain the necessity of information security and privacy.

AFTER UCC

Graduates will have developed the skills necessary to work as help desk support personnel.

RECOMMENDED SEQUENCE

Course#	COURSE	LEC.	Lab	Cr.
SEMESTER 1				
Elective	Business see list below	3		3
CIS 107	Operating Systems f	or		
	Help Desk	3	1	3
CIS 113	Word I	2	3	3
CIS 120	The Internet	2	2	3
ADM 140	Customer Service	3		3
ENG 101	English Comp I	3	1	3
				18
SEMESTER 2				
CIS 140	Help Desk	3	1	3
CIS 115	Excel	2	2	3
CIS 121	HTML Programming	[*] 2	2	3
ENG 122	Introductory Technica			
	Business Writing	3	1	3
MAT 119	Algebra**	3		3
	-			15

SECOND YEAR

SEMESTER 3				
CIS 207	PC Troubleshooting & Repairs	2	2	3
CIS 116	Access	2	2	3
ENG 128	The Dynamics of Communication	3		3
Elective	Humanities			3
CIS 205	Data Communication & Networks	2	2	3
CSC 100	Fundamentals of Programming***	2	2	3
				18
SEMESTER 4				
CIS 117	PowerPoint	2	2	3
CIS 204	Database Management	2	2	3
Elective	Technology - see list below	3		
PSY 101	General Psychology****	3		3
CIS 210	Principles of			
	Information Security	3		3
				15

Total 66 credits

*CIS 122 may be substituted

** MAT 143 or a higher level math course may be substituted. Please check with program coordinator.

*** CIS 130 may be substituted

****SOC 101 may be substituted

BUS elective - BUS 101, BUS 105, BUS 107, BUS 200

Technology elective - CSC 290, CSC 285, CSC 101, ADM 214

HOSPITALITY MANAGEMENT

ASSOCIATE IN APPLIED SCIENCE DEGREE

The Hospitality Management program provides Union County College students with a strong business and customer service foundation required for careers in this dynamic and expanding, service-oriented industry of hospitality.



Specifically, the program objectives are that the graduates must be able to demonstrate:

- · critical thinking, decision making, and problem-solving skills;
- interpersonal and communication skills necessary in a diverse society;
- knowledge of basic computer concepts and their use in the hospitality industry;
- an awareness of the codes of ethics associated with hospitality management;
- a working knowledge of management including service, people, and facility;
- the ability to perform the necessary elements of managing within the hospitality industry;
- a working knowledge of the equipment associated with hospitality management available on the market and plan its arrangement, operation, and maintenance for efficiency;
- a working knowledge of sales and marketing in the hospitality industry;
- a working knowledge of hotel front office management and hospitality industry Marketing.

RECOMMENDED SEQUENCE PRE-REQUISITE Course# **C**OURSE LEC. LAB CR. UCC 101 First Year Seminar 2 ADM 101 Keyboarding for the 2 2 Computer I 4 SEMESTER 1 ADM 140 Customer Service 3 3 ENG 101 English Comp I 3 3 CIS 100 Intro to Computer 2 3 Applications BUS 105 Organization & 3 3 Management HSM 100 Intro to the Hospitality Industry 3 3 15 SEMESTER 2 ENG 122 Intro to Technical & Business 3 Writing 3 BUS 107 Personnel Management OR **Small Business** BUS 200 3 Management ACC 103 Accounting I 4 4 HSM 105 Planning & Control of Food & 3 Beverage Operations 3 HSM 110 Food & Beverage 3 Management 16 SEMESTER 3 ENG 128 Dynamics of Communication OR ENG 129 **Public Speaking** 3 3 Elective* Modern Language General Psychology 3 PSY 101 3 MAT 113 **Business Math** 3 HSM 210 Front Office Operations 3 Management HSM 220 Housekeeping Operations 3 Management <u>18</u> SEMESTER 4 Elective* Modern Language 3 MAT 117**Intro to Mathematical 3 Ideas BUS 110 **Business &** Technology 3 3 HSM 240 Hospitality Sales & 3 Marketing HSM 280 Internship in Hospitality Management 3 3 15

Total: 65 Credits

- * One-year sequence of a Modern Language
- ** A higher level math may be selected

ILLUSTRATION/FINE ARTS

Option offered through Liberal Arts ASSOCIATE IN ARTS DEGREE

The Fine Arts Option in Illustration is a Liberal Arts transfer-oriented curriculum that provides students, through a core of visual arts/illustration-related courses, a theoretical and practical understanding of the commercial art area of illustration. Utilizing skills and techniques learned through a combined lecture/studio experience, students are taught to creatively differentiate between product, journalistic, and advertising forms of illustration. Considerable time is focused on learning specific studio media and techniques including the use of pencil and dry media, pen and ink, watercolor, oil, gouache, tempera, and acrylic paint. Study also includes concentration on beginning and advanced visual problem-solving through use of illustration software in a Macintosh laboratory environment.



See paragraph "Qualifications for Admission to Degree Programs" for desired high school background (see page 207).

The specific objectives of this program are that the graduate must be able to demonstrate:

- a practical knowledge of the technique and materials used in textural and figurative depiction;
- a creative familiarity with traditional media of watercolor, colored pencil, ink wash, and gouache;
- · a critical and aesthetic knowledge of historical approaches to illustration;
- the applied skills involved in interfacing computers and digital software with the activities of illustration:
- a portfolio of work that demonstrates competency in illustration, and provides the necessary support material needed for transfer acceptance into a four-year program or for an entry-level vocational position.

AFTER UCC

Graduates can transfer to a myriad of four-year degree programs and are eligible to take advantage of the many transfer/articulation agreements Union County College has with some of the top four-year colleges and universities in the country. See a transfer counselor for details.

RECOMMENDED SEQUENCE

FIRST YEAR								
Cours	E#	Course	LEC.	LAB	Cr.			
FIRST SEMESTER								
ENG	101	English Comp I	3	1	3			
FIA	109	Drawing I	3		3			
Mode	rn Laı	nguage	3		3			
HIS	101	Intro to Western Civilization I	3		3			
MAT	127	Elementary Statistic	cs OR					
MAT	143	Elementary Mather Analysis I	matica 4		4			
		,			16			
SECON	ID S E/	MESTER						
ENG	102	English Comp II	3	1	3			
FIA	110	Painting I	3		3			
Mode	rn Laı	nguage	3		3			
HIS	102	Intro to Western	•		0			
		Civilization II	3		3			
FIA		Basic Design	3		3			
Labor	atory	Science	3	3	4			
	<u> </u>	_	<u> </u>		19			

SECOND TEAR						
Cours	SE#	Course	LEC.	LAB CR.		
FIRST S	SEMES	TER				
ENG		200-Level Literature				
		course	3	3		
FIA	115	Drawing II	3 3	3		
FIA	209	Illustration I	3	3 3 3		
PSY	101	General Psychology	3	3		
MAT	144	Elementary Mathem Analysis II OR	atica	l		
Labor	atory	Science		4		
				16		
SECON	ND S E/	MESTER				
FIA	210	Illustration II	3	3		
PSY	102	Psychology of	2	2		
DLIC	000	Personality	3	3		
BUS	203		3	3		
ENIC	120	Advertising	•	_		
ENG	128	Dynamics of Commu				
ENG	129	Public Speaking	3	3		
GOV	202	American National	Govt	OR		
PHI	205	Intro to Philosophy	3	3		
FIA		Diversity Course*		3		
				18		

SECOND YEAR

* Students can take FIA 105 Music Appreciation, FIA 108 Art Appreciation, FIA 111 History of Art, FIA 112 History of Art II, or FIA 117 Music in the 20th Century to fulfill the Fine Arts Diversity Course requirement.

ASSOCIATE IN SCIENCE DEGREE

Information systems (IS) technology changes are occurring across the US and the world. With these advances have also come changes in the ways that information can be accessed and shared. These have precipitated the need for well-educated IS professionals. This curriculum has been designed to meet the needs of current IS professionals as well as to prepare future IS professionals.

Information Systems positions are becoming more diversified. Students who complete the curriculum will have a strong foundation in interpersonal and communication skills, problemsolving skills, critical thinking skills, and ethics.

The specific objectives of this program are that the graduate must be able to demonstrate:

- provide students with information about the various careers available and skills necessary for these careers within the field of information systems;
- provide students with interpersonal and communication skills necessary in a diverse society;
- develop in students critical thinking skills and approaches for problemsolving;
- provide students with an understanding of databases and database management;
- develop in students an awareness of the Code of Ethics found in most IS professional organizations and a concern for the societal issues involved;
- promote in students a deep appreciation for the value of lifelong learning;
- develop in a diverse student community a recognition for the value of collaborative work in the contemporary business environment.



AFTER UCC

Graduates will work as an Information System professional in a variety of settings or transfer to a four-year degree program.

RECOMMENDED SEQUENCE

		FIRST YEA	R				
Cour	SE#	Course	LEC.	LAB	CR.		
FIRST SEMESTER							
ACC	103	Accounting I	3		4		
BUS	105	Organization & Management	3		3		
CIS	100	Intro to Computer					
		Applications	2	2	3		
ENG	101	English Comp I	3	1	3		
HIS	101	Western Civilization	I or				
Mode	rn Lai	nguage*	3		3		
					16		
SECON	ND SE/	MESTER					
CIS	101	Intro to Information					
		Systems	2	2	3		
ENG	102	English Comp II	3	1	3		
HIS	102	Western Civilization	ll or				
Mode	rn Lai	nguage*			3		
MAT		Mathematics**			3-4		
PSY	101	General Psychology	3		3		
				15	-16		

	5	ECOND TE	AK		
Cour	SE#	Course	LEC.	LAB	CR.
FIRST	SEMES	TER			
BUS	201	Business Law I	3		3
CIS	116	Access	2	2	3
ECO	201	Economics I or			
ECO	202	Economics II	3		3
Electiv	ve	Laboratory Science			4
ENG		English * * *			3
					16
SECO	ND S E/	MESTER			
CIS	202	Structured Systems			
		Analysis	3	1	3
CIS	204	2 0.0000	_	_	
		Management	2	1	3
Electi	ve	Humanities			3
MAT		Mathematics**			3-4
Electiv	ve	CIS/CSC			4
				16	-17

Total: 63-64 credits

NJ General Education Requirements:

Math/Science/Technology, Communications, History or Humanities and Social Studies.

- * A one-year sequence in either
- ** See advisor for appropriate mathematics course, check with transfer institution (two mathematics courses MAT 126 or higher)
- *** ENG 122, ENG 128 or ENG 129

Option offered through Liberal Arts ASSOCIATE IN ARTS DEGREE

The International Studies Option is designed for traditional transfer-oriented students seeking a baccalaureate or higher degree in international affairs leading to possible careers with multinational corporations, the federal government, or international organizations. Community leaders interested in foreign policy issues and business people seeking to expand their knowledge of the international economy within the global system may also find this program of interest.

The specific objectives of this program are that the graduate must be able to demonstrate:

- the ability to think critically about the global system;
- · a familiarity with the history and culture of those civilizations which have interacted with the West over the last several centuries;
- knowledge of the basic operation of the international system of sovereign states from the Treaty of Westphalia in 1648 to its current evolution;
- an understanding of the causes of war and the efforts made to produce alternative methods of conflict resolution, including collective security through the United Nations;
- an awareness of the roles played by intergovernmental organizations (IGOs), such as WTO, WHO, UNESCO, and non-governmental organizations (NGOs), such as the International Red Cross, Amnesty International, and Green Peace, in the global system;
- familiarity with the development and growth of the Global Economy;
- an understanding of the role of multinational corporations (MNCs) within the international system;
- familiarity with statistics so that students can analyze population trends, economic projections, and political data;
- sensitivity to the different value systems, ideologies, national interests, and alternative business practices of various cultures.

AFTER UCC

Graduates can transfer to a related program at a four-year college or university and are eligible to take advantage of the many transfer/articulation agreements Union County College has with some of the top fouryear colleges and universities in the country. See a transfer counselor for details.

RECOMMENDED SEQUENCE

FIRST YEAR				
Course#	Course	LEC.	Lab	Cr.
FIRST SEMES	TER			
CIS 110 ³	*Computer Literacy****	1	1	1
ENG 101	English Comp I	3	1	3
Modern Lai	nguage***	3		3
HIS 101	Intro to Western Civilization I**** or			
HIS 209	20th Century European History	3		3
	Intro to Mathematical Ideas**** or			
CIS 100	Intro to Computer Applications* or Higher			
	level Math/Science/Technology course	3		3
GEO 201	World Geography**	3		3
				16
SECOND SEA	MESTER			
ENG 102	English Comp II**** or			
	Introductory Technical & Business Writing	3	1	3
Modern Lai				3
HIS 102	Intro to Western Civilization II**** or			
HIS 215	American Experience in the 20th Century	3		3
ECO 201	Principles of Economics I	3		3
MAT 127	Elementary Statistics** or			
	Statistics course	4		4
				16

SECOND YEAR				
Course#	Course	LEC.	Lab	Cr.
FIRST SEMESTER				
BIO 103	Biology of People & the Environment**** or Other Laboratory Science	3	3	4
	Reporting & News Writing or			
ENG 129	Public Speaking	3		3
Modern La	nguage***	3		3
GOV 201	American Govt. & Politics	3		3
ECO 209	The International Economy**	3		3
				16
SECOND SE	MESTER			
ENG	200-Level Literature course	3		3
Modern La	nguage***	3		3
	American National Govt	3		3
GOV 207	International Politics**	3		3
Electives		6		6
				18

^{*}Requires Keyboarding Skills

Substitution courses must be within the Humanities General Education Requirement.

RECOMMENDED ELECTIVES:

BIO 101 Intro to Biology BUS 209 Intro to Global Business BUS 210 Marketing & the Global Environment CIS 126 E-Commerce Fundamentals ECO 202 Principles of Economics II ECO 205 Money & Banking

ENG 200-Level course FIA 111 History of Art I FIA 112 History of Art II GOV 204 Public Administration GOV 210 Third World, United Nations, & International Law Seminar MAT 246 Business Statistical Analysis

^{**}Specialization Courses within the Option

^{***}Completion of the intermediate level in a foreign language meets the language requirement.

^{****}Check with Transfer Counselor or Program Coordinator on the appropriate course choice

PRINT JOURNALISM

Option offered through Communications ASSOCIATE IN ARTS DEGREE

This program is designed for transfer to a bachelor's degree-granting institution. Course work includes theory and practice of reporting and writing news and features for print publications. Students are required to consult with an advisor regarding appropriate option and course selection for their needs and interests.

The specific objectives of this program are that the graduate must be able to demonstrate:

- the ability to communicate their ideas verbally and in writing with a level of sophistication and fluency appropriate to college-level discourse;
- a recognition of the necessity of keeping abreast of current cultural, social and political issues and events as a cornerstone of citizenship in a democratic society;
- a level of comfort and proficiency with standard productivity software such as word processors, presentation managers and web browsers, as well as an understanding of the ways in which these tools are applied in the communications field:
- an awareness that learning is a complex, lifelong process and not an event, a phenomenon, not an outcome;

- a critical and active relationship with their culture's narratives and texts as well as a functional understanding of the various media used to convey them;
- the ability to compose articles and headlines appropriate to style requirements of a variety of publications, from newsprint and magazine to online and interactive formats.



AFTER UCC

Graduates can transfer to a four-year degree program and are eligible to take advantage of the many transfer/articulation agreements Union County College has with some of the top four-year colleges and universities in the country. See a transfer counselor for details.

RECOMMENDED SEQUENCE

Cours	SE#	Course	LEC.	Lab	Cr.
FIRST S	SEMES	TER			
COM	101				_
		Communications	3		3
ENG	101	English Comp I	3	1	3
HIS	101				
		Civilization I	3		3
MAT		A 4-credit Mathem	atics		
		course	4		4
COM	100	Communications			
		Technologies	3		3
					_
					16
SECON	ID S E/	<u> </u>			
		MESTER			
		<u> </u>	3		16
COM	102	MESTER Reporting &	3 3		16
COM ENG	102 102	MESTER Reporting & News Writing English Comp II	3	3	16
COM ENG Labor	102 102 atory	MESTER Reporting & News Writing	3 3 3	•	3
COM ENG Labora ENG	102 102 atory 128	MESTER Reporting & News Writing English Comp II Science The Dynamics of C	3 3 3	•	3
COM ENG Labora ENG	102 102 atory 128 129	MESTER Reporting & News Writing English Comp II Science The Dynamics of COR	3 3 3 Commu	•	16

Course#	Course	LEC. L	ав Cr.
FIRST SEMES	TER		
COM 202	Advanced Reporting Writing OR	ng & Ne	WS
COM 107	Publication Editing	& Desig	n OR
COM 214	Communications Practicum I	3	3
ENG	200-Level	3	3
Modern Lar		3	3
GOV 201	American Govt. & Politics	3	3

			18
Elective	Social Science	3	3
	General Psychology	3	3
00 7 201	& Politics	3	3
	American Govt.		
Modern Lar	nguage	3	3
ENG	200-Level	3	3

				18	
SECOND SEMESTER					
COM 2		Advanced Publication Design OR	n Editii	ng &	
COM 2	15	Communications Prac	cticum	II OR	
COM 1		Mass Communication	1		
		Ethics	3	3	
ENG		200-Level	3	3	
Modern	Lan	guage	3	3	
GOV 2		American National Govt	3	3	
Elective		Humanities or Social			
		Science	3	3	
				15	

LIBERAL ART

ASSOCIATE IN ARTS DEGREE

The Liberal Arts program provides a broad foundation in a variety of subjects-languages and literature, the social sciences, mathematics, and the exact sciences. For many professions, such as teaching, law, government service, and social work, this background is essential. Many business organizations prefer employees with this general education rather than specialized training.

The Liberal Arts program is also recommended to students who enter college without a definite vocational goal who wish to explore the opportunities offered by many fields before deciding upon a career.

See paragraph "Qualifications for Admission to Degree Programs" for desired high school background (see page 207).



The specific objectives of this program are that the graduate must be able to demonstrate:

- critical thinking, problem-solving skills, and effective communication skills;
- an awareness of and concern for the ethical implications of institutional policies and individual practices;
- an awareness of his/her rights and responsibilities as a citizen of a world community;
- the ability to communicate with others in a diverse society;
- an awareness of the diverse factors that shape the world in order to keep pace with the changing society;
- the ability to use technology for learning and research;
- the ability to learn independently and to direct his/her own learning;
- the knowledge of the history and elements of drama:

- the knowledge of the history and techniques of theater acting;
- the ability to perform effectively as an actor in a specified scene;
- the knowledge of the history and practice of dance, music, and visual arts;
- the ability to apply critical thinking and problem-solving skills to situations involving acting, drama, visual arts, music or dance;
- the knowledge of the elements of painting and illustration;
- the ability to create a painting;
- the ability to create an illustration;
- the knowledge of the dynamics and structure of advertising in today's society, and the place of illustration in the advertising cultures;
- the ability to apply critical thinking and problem-solving skills to illustration-related problems.

AFTER UCC

Graduates of this program receive a broad-based education that allows them to transfer to a four-year college or university and major in Literature, the Social Sciences, Mathematics, and the exact Sciences. For many professions, such as Teaching, Law, Government Service and Social Work, this background is essential.

RECOMMENDED SEQUENCE

FIRST YEAR					
Cours	E#	Course	LEC.	LAB	Cr.
FIRST S	SEMES	TER			
ENG	101	English Comp I	3	1	3
Mode	rn Laı	nguage	3		3
HIS	101	Intro to Western Civilization I	3		3
MAT		Mathematics*			3-4
PSY	101	General Psychology	3		3
				15	-16
SECON	ID S E/	MESTER			
ENG	102	English Comp II	3	1	3
Mode	rn Laı	nguage	3		3
HIS	102	Intro to Western Civilization II	3		3
Labor	atory	Science**	3	3	4
PSY	102	Psychology of Personality	3		3

SECOND ILAN					
Course#	Course	LEC.	LAB CR.		
FIRST SEMESTER					
ECO 201	Principles of Economics I	3	3		
ENG	200-Level Literature course	3	3		
Modern La	nguage	3	3		
GOV 201	American Govt. & Politics	3	3		
Elective(s)	Mathematics, Scientechnology **	ice or	4-5		
			16-17		

16

Elective(s)	Mathematics, Science Technology **	e or	4-5
			16-17
SECOND SE	MESTER		
ECO 202	Principles of		
	Economics II	3	3
ENG	200-Level Literature		
	course	3	3
Modern La	nguage	3	3
GOV 202	American National		
	Govt	3	3
ENG 128	Dynamics of Commu	nica	tion OR
ENG 129	Public Speaking OR		
COM 101	Mass Communication	n 3	3
	Elective		0-3
			15-18

- * MAT 117 or higher. See Liberal Arts Programs guidelines under Mathematics course listings.
- ** A minimum of 12 credits is required in Mathematics, Science, and Technology. It is suggested that the liberal arts student choose

electives if	on the following	ig iisi.	
AST 101, 102	CRJ 205	HIS 205	PHY 101, 102
BIO 101, 102	ENG 128, 129	HIS 209	PHY 125
BIO 103, 104	FIA 111, 112	HRS (ALL)	PSY 206, 207
BIO 109, 113	GEY 101, 102	MAT 127	SOC 101, 102
BIO 114, 118	GOV 205	MAT 161	URS 101
CHE 101, 102	HIS 105, 106	MAT 162	
CHE 106	HIS 201, 202	PHI 205	

ASSOCIATE IN SCIENCE DEGREE

This program is for adults who have been away from secondary school at least four years. It provides an opportunity to explore different areas of study.

The A.S. degree is awarded upon satisfactory completion of no fewer than 64 credit hours of work selected from the various disciplines at the College, including a minimum of six to eight credit hours from each of the areas listed below.

See paragraph "Qualifications for Admission to Certificate and Degree Programs" for desired high school background (see page 207).

The specific objectives of this program are that the graduate must be able to demonstrate:

- critical thinking, problem-solving skills, and effective communication skills;
- an awareness of and concern for the ethical implications of institutional policies and individual practices;
- an awareness of his/her rights and responsibilities as a citizen of a world community;
- the ability to communicate with others in a diverse society;
- an awareness of the diverse factors that shape the world in order to keep pace with the changing society;
- the ability to use technology for learning and research;
- the ability to learn independently and to direct his/her own learning.



AFTER UCC

Graduates can transfer to a four-year college or university and are eligible to take advantage of the many transfer/articulation agreements Union County College has with some of the top four-year colleges and universities in the country. See a transfer counselor for details.

RECOMMENDED COURSES

CR.

1.	Business & Public Policy	6
2.	Communication	6
3.	Humanities	6
4.	Mathematics, Science & Te	chnology* 2-11
5.	Social Science	7-9
6	Flectives	31-33

- 1. Business and Public Policy: Business, Criminal Justice, Economics, Government, and Urban Studies.
- 2. Communication: Courses in oral and written communication.
- 3. Humanities: Fine Arts (Arts, Music, and Drama), French, German, History, Italian, Literature, Philosophy, and Spanish.
- 4. Mathematics, Science and Technology: Astronomy, Biology, Chemistry, Engineering, Geology, Mathematics, Physics, Computer Information Systems & Computer Science.
- 5. Social Science: Education, Psychology, and Sociology.
- 6. Electives: Credit courses chosen from any discipline.
- * A minimum of 3 credits in Mathematics and 4 credits in Science are required. The science course must be a laboratory science.

MANUFACTURING ENGINEERING

ASSOCIATE IN APPLIED SCIENCE DEGREE

This is a comprehensive two-year program which leads to an Associate in Applied Science degree. Manufacturing Engineering Technology, commonly associated with Computer Integrated Manufacturing (CIM), prepares its graduates to work in the automated environment created by computeraided design, robotics, computer-numerical controlled machinery, and inventory automation. The CIM curriculum combines electronics and microprocessors, mechanical design and manufacturing methods, and CAD/CAM and robotics to provide the specialized training required by the factories of the future. CIM graduates also have the option to pursue a Bachelor of Science Degree in Engineering Technology at a fouryear institution.

See paragraph on "Qualifications for Admission to Degree Programs" for desired high school background (see page 207).

The specific objectives of this program are that the graduate shall be able to demonstrate:

- an ability to apply computer-aided drafting (CAD) skills to prepare working detail, assembly and installation type engineering drawings to industrial standards;
- an ability to apply Geometric Dimensioning and Tolerancing (GD&T) techniques to engineering drawings;
- an ability to synthesize and integrate electro-mechanical devices such as actuators, motors, transducers, tachometers, amplifiers and sensors;
- an ability to troubleshoot digital circuits using digital test instruments such as pulse generators, oscilloscopes, and logic probes;
- an ability to select and specify materials for mechanical applications considering strength, weight, corrosion, finish, and cost;
- an ability to read schematic circuits showing counters, registers, encoders, decoders, multiplexers, and memory units;
- an ability to select and specify appropriate screw threads and fasteners considering size, thread form, and series and head type;
- an ability to use CAD/CAM software and hardware to create part geometry, generate a numerical control program, and operate a machine tool to produce an actual part;

- the knowledge of the basic principles of statics and strength of materials to compute forces, stresses, and strains in simple machines and machine frames;
- an ability to use standard ANSI tables for sizing and tolerancing of mating parts;
- an ability to utilize computer software applications such as word processing, spreadsheets, basic programming, and mathematical computing.

AFTER UCC

Graduates work in the automated environment created by computer-aided design, robotics, computer-numerical controlled machinery, and inventory automation.

RECOMMENDED SEQUENCE

		FIRST YEA	R			
Cour	SE#	Course	LEC.	LAB	Cr.	
FIRST SEMESTER						
ENG	101	English Comp I	3	1	3	
MAT	143	Elementary Mathem Analysis I	atica 4		4	
EET	101	Principles of DC Circuits	3	3	4	
MET	106	Engineering Materia Processes	als & 2	3	3	
MET	109	Computer-Aided Drafting	2	3	3	
					17	
SECON	ND SE/	MESTER				
ENG	122	Introductory Technic	al &	Busii	ness	
		Writing (or ENG 10	2) 3	1	3	
EET	102	Principals of AC Circuits	2	3	3	
MAT	144	Elementary Mathem Analysis II	atica 4	l	4	
MET	104	•	gs 3	1	3	
PHY	101	General Physics I	3		3	
PHYL	101	General Physics Laboratory I		3	1	

	S	ECOND YE	AR		
Cours	SE#	Course	LEC.	Lab	Cr.
FIRST S	SEMES	TER			
CSC	115	Intro to Computer Programming	2	2	3
EET	111	Digital Computer Fundamentals	3	3	4
MET	112	Mechanics-Statics	3		3
PHY	102	General Physics II	3		3
PHYL	102	General Physics II Laboratory		3	1
Electiv	⁄e	Social Science			3
					17
SECON	ID SEA	MESTER			
CIT	210	Strength of Materials	3	1	3
EET	211	Computer Systems/ Microprocessors	3	3	4
MET	219	CAD/CAM	2	3	3
Electiv	e e	Humanities			3
Electiv	e e	Technical*			3
					16

*MAT 171 Unified Calculus required for transfer to a 4-year institution

17

ASSOCIATE IN APPLIED SCIENCE DEGREE

Mechanical Engineering Technology (MET) is a comprehensive two-year program which leads to an Associate in Applied Science degree. MET graduates are prepared to work in engineering and manufacturing firms and research and development laboratories. Typical positions are in the areas of Computer-Aided Design (CAD), machinery and tool design, Computer Integrated Manufacturing (CIM), facilities design, electronic packaging, CAD/CAM and materials testing. MET graduates also have the option to pursue a Bachelor of Science Degree in Engineering Technology at a four-year institution.

See paragraph on "Qualifications for Admission to Degree Programs" for desired high school background (see page 207).

The specific objectives of this program are that the graduate shall be able to demonstrate:

- an ability to apply computer-aided drafting (CAD) skills to prepare working detail, assembly and installation type engineering drawings to industrial standards;
- an ability to apply Geometric Dimensioning and Tolerancing (GD&T) techniques to engineering drawings;
- an ability to select and specify materials for mechanical applications considering strength, weight, corrosion, finish, and cost;
- an ability to select and specify appropriate screw threads and fasteners considering size, thread form, and series and head type;
- an ability to use CAD/CAM software and hardware to create part geometry, generate a numerical control program, and operate a machine tool to produce an actual part;

- the knowledge of the basic principles of statics and strength of materials to compute forces, stresses and strains in simple machines and machine frames;
- knowledge of the basic principles of fluid mechanics to calculate hydrostatic pressure, forces on submerged surfaces, flow rates and pressure drops in pipelines;
- an ability to use standard ANSI tables for sizing and tolerancing of mating parts;
- an ability to utilize computer software applications such as word processing, spreadsheets, basic programming, and mathematical computing.

AFTER UCC

Graduates work in engineering and manufacturing firms and research and develop laboratories. Typical positions are in the areas of Computer-Aided Design, Machinery and Tool Design, Computer Integrated Manufacturing, Facilities Design, Electronic Packaging, CAD/CAM and Materials Testing. MET graduates also have the option to pursue a bachelor of science degree in Engineering Technology at a four-year institution.

RECOMMENDED SEQUENCE

		FIRST YEA	R				
Cour	SE#	Course	LEC.	LAB	CR.		
FIRST SEMESTER							
ENG	101	English Comp I	3	1	3		
MAT	143	Elementary Mathem Analysis I	natica 4	I	4		
CSC	115	Intro to Computer Programming	2	2	3		
MET	106	Engineering Materia Processing	als & 2	3	3		
MET	109	Computer-Aided Drafting	2	3	3		
					16		
SECON	ND SE	MESTER					
ENG	122	Introductory Technic Writing (or ENG 102	cal &) 3	Busin 1	ness 3		
MAT	144		•	I	4		
PHY	101	_ ' ! = ! .	3		3		
PHYL	101	General Physics I					

Laboratory

Drawings

MET 112 Mechanics-Statics

3

3

MET 104 Engineering

	S	COND YE	AR		
Cour	SE#	Course	LEC.	Lab	Cr.
FIRST	SEMES	TER			
PHY	102	General Physics II	3		3
PHYL	102	General Physics II Laboratory		3	1
CIT	215	Fluid Mechanics	3	1	3
CIT	210	Strength of Materials	3	1	3
EET	101	Principles of DC			
		Circuits	3	3	4
Electi	ve	Social Science	3		3
					17
SECO	ND SEA	MESTER			
EET	111	Digital Computer Fundamentals	3	3	4
CIT	201	Structural Design	3	3	4
MET	219	CAD/CAM	2	3	3
Electiv	ve	Humanities			3
Elective Te		Technical*			3
					17

* MAT 171 Unified Calculus required for Transfer to a 4-Year Institution

MULTIMEDIA

Option offered through Communications ASSOCIATE IN ARTS DEGREE

This program is designed for transfer to a bachelor's degree-granting institution. Students will learn the fundamentals of multimedia design and gain practical experience in the development of multimedia content through the fusion of audio, video, images and text. Students are required to consult with an advisor regarding appropriate option and course selection for their needs and interests.

The specific objectives of this program are that the graduate must be able to demonstrate:

- the ability to communicate their ideas verbally and in writing with a level of sophistication and fluency appropriate to college-level discourse;
- a recognition of the necessity of keeping abreast of current cultural, social and political issues and events as a cornerstone of citizenship in a democratic society;
- a level of comfort and proficiency with standard productivity software such as word processors, presentation managers and web browsers, as well as an understanding of the ways in which these tools are applied in the communications field;
- an awareness that learning is a complex, lifelong process and not an event, a phenomenon, not an outcome;
- facility with the cutting-edge tools necessary to be competitive in the high-technology arena of multimedia development and design;
- the ability to work effectively as a member of a team;
- professional competence in the technical and theoretical skill-set that constitutes the working toolbox of today's multimedia developer and web design specialist.



AFTER UCC

Graduates may transfer to a bachelor's degree-granting institution to major in Multimedia/Communications, Journalism, or various degree programs and are eligible to take advantage of the many transfer/articulation agreements Union County College has with some of the top four-year colleges and universities in the country. See a transfer counselor for details.

RECOMMENDED SEQUENCE

		FIRST YEA	R		
Cours	E#	Course	LEC.	Lab	Cr.
FIRST S	SEMES	TER			
COM	101	Mass			
		Communications	3	2	4
ENG	101	English Comp I	3	1	3
PSY	101	General Psychology	3		3
Labore	atory	Science OR			
MAT		A 4-credit Mathema	tics		
		course	4		4
COM	100	Communications			
		Technologies	3		3
					17
SECON	ID S E/	MESTER			
COM	112	Multimedia Dev I			
		- Presentations	3		3
ENG	102	English Comp II	3	1	3
Labore	atory	Science OR			
MAT	·	Mathematics*			3-4
ENG	128	The Dynamics of Co OR	mmu	nica	tion
ENG	129	Public Speaking	3		3
FIA	108	Appreciation of Arts	3		3

15-16

SECOND YEAR

Course#	Course	LEC.	LAB CR.
FIRST SEMES	TER		
COM 216	Digital Video Editing	&	
	Multimedia Imaging	3	3
ENG	200-Level	3	3
Modern Lai	nguage OR		
HIS 101	Intro to Western		
	Civilization I	3	3
GOV 201	American Govt.		
	& Politics	3	3
Elective	Humanities	3	3
Elective	Social Science	3	3
			18
SECOND SEA	MESTER		
COM 212	Multimedia Dev II		
	- Authoring	3	3
ENG	200-Level	3	3
Modern Lai	nguage OR		
HIS 102	Intro to Western		
	Civilization II	3	3
GOV 202	American National		
	Govt	3	3
Elective	Humanities	3	3
			15

* Mathematics requirement must be MAT 117 or higher

MUSIC/FINE ARTS

Option offered through Liberal Arts ASSOCIATE IN ARTS DEGREE

The study of music will include an exploration of the various styles and periods of music throughout history, as well as the acquisition of basic music skills such as reading music, playing simple instruments, and conducting song sessions. Discussions and listenings will illuminate the different forms of music.

See paragraph "Qualifications for Admission to Degree Programs" for desired high school background (see page 207).



The specific objectives of this program are that the graduate must be able to demonstrate:

- basic general musicianship skills;
- a basic understanding and appreciation of various musical styles;
- a general understanding of formal creative issues, including musical form, melody, harmony, rhythm, texture, motive, instruments, and orchestra;
- basic music theory, including notation, intervals, scales, and triads;
- the necessary knowledge for teaching general music at the elementary school level.

AFTER UCC

Graduates may transfer to a four-year college or university and are eligible to take advantage of the many transfer/articulation agreements Union County College has with some of the top four-year colleges and universities in the country. See a transfer counselor for details.

RECOMMENDED SEQUENCE

FIRST YEAR

Cours	SE#	Course	LEC.	Lab	Cr.			
FIRST S	FIRST SEMESTER							
ENG	101	English Comp I	3	1	3			
FIA	105	Music Appreciation	3		3			
Mode	rn Laı	nguage	3		3			
HIS	101	Intro to Western Civilization I	3		3			
MAT	127	Elementary Statistics	OR					
MAT	143	Elementary Mathem Analysis I	atica 4		4			
		. ,			16			
SECON	ID SE/	MESTER						
ENG	102	English Comp II	3	1	3			
FIA		Fundamentals of						
		Music	3		3			
Mode	rn Laı	nguage	3		3			
HIS	102	Intro to Western						
		Civilization II	3		3			
Laboratory Science 3 3					4			
					16			

SECOND YEAR

Course#		Course	LEC.	Lab	CR.			
FIRST SEMESTER								
ENG		200-Level Literature course	3		3			
FIA	117	Music in the 20th Century	3		3			
GOV	202	American National Govt	3		3			
PSY	101	General Psychology	3		3			
MAT	144	Elementary Mathematical Analysis II OR	atica					
		Science	3	3	4			
					16			

SECOND SEMESTER

OLCO!	ID OLI	MESIER		
ENG	128	Dynamics of Comm	unicatio	on or
		Public Speaking	3	3
FIA	106	History of Music	3	3
GOV	201	American Govt. &	Politics (or
PHI	205	Intro to Philosophy	3	3
PSY	102	Psychology of Personality	3	3
FIA		Fine Arts course*	3	3
FIA		Diversity course**	3	3
				12

- * Students can take a Fine Arts course elective in Dance, Drama, Photography, or Visual Arts to fulfill the Fine Arts Course requirement.
- ** Students can take FIA 108 Art Appreciation, FIA 111 History of Art I, or FIA 112 History of Art II to fulfill Fine Arts Diversity Course requirement.

You can get there from here!





Rutgers, founded in 1766, is the eighth oldest institution of higher education in the nation. Today, Rutgers is New Jersey's state university and premier public research institution.

Since 2002, more than 200 Union County College students have taken advantage of the unique Dual/Joint Admissions agreement between Rutgers and UCC.

This program allows UCC graduates to enter Rutgers as juniors provided they have completed an Associate degree and fulfilled the necessary criteria.

Speak with a UCC Admissions Counselor today, by calling 908-709-7103

Rutgers The State University of New Jersey

NUCLEAR MEDICINE

ASSOCIATE IN SCIENCE DEGREE

By virtue of an agreement between Union County College and the Muhlenberg Regional Medical Center Harold B. and Dorothy A. Snyder Schools, Plainfield, New Jersey, Union County College confers a degree of Associate in Science upon graduates of the Hospital-sponsored school who have fulfilled the requirements for the degree specified by Union County College.

Students in the program earn college credits in English, mathematics, biology, physics, chemistry, social sciences and humanities electives in classes and laboratories conducted at Union County College. Nuclear Medicine Technology courses are the primary responsibility of the program. Students must apply to Muhlenberg for admission to the Nuclear Medicine Technology Program by April 15 for the fall semester. At least half of the required science courses and English 101 must have been completed at the time of application. All prerequisite courses must be completed by December 31 to be considered for entry into the professional courses of the program.

ADMISSION INTO THE PROGRAM IS COMPETITIVE.

The Joint Review Committee on Educational Programs in Nuclear Medicine Technology and the New Jersey Department of Environmental Protection, Radiologic Technology Board of Examiners accredits Muhlenberg Regional Medical Center Harold B. and Dorothy A. Snyder School of Nuclear Medicine Technology.

Students are enrolled in the School of Nuclear Medicine Technology and are matriculated by Union County College. They are eligible to participate in all student activities at Union County College and have the same rights and privileges as all other college students.

Graduates are eligible to sit for the American Registry in Radiologic Technology, Nuclear Medicine Technology Certification Board, and the New Jersey State Licensure Examinations.

Students interested in the program should contact the Muhlenberg Regional Medical Center Harold B. and Dorothy A. Snyder School of Nuclear Medicine Technology at (908) 668-2844 or (908) 668-2400 for additional information.

Graduates of the School of Nuclear Medicine Technology will be able to:

- provide patient care as required in the nuclear medicine department;
- perform diagnostic nuclear medicine studies, including patient preparation, instrument preparation, patient positioning, study acquisition and computer processing;
- assist with therapeutic nuclear medicine procedures;
- utilize good communications skills, problemsolving skills, and conflict management techniques;
- prepare and administer radiopharmaceuticals, and non-radioactive pharmaceuticals as allowed by law;
- engage in good radiation safety practices;
- perform quality control procedures on nuclear medicine equipment;
- perform administrative duties as required of nuclear medicine technologists;
- practice the principles of medical ethics and adhere to the regulations and laws governing the practice of nuclear medicine technology;
- evaluate current issues in health care;
- evaluate scientific research for validity and applicability as it relates to the practice of nuclear medicine.

Leading to a Diploma in Nuclear Medicine Technology from Muhlenberg Regional Medical Center Harold B. and Dorothy A. Snyder Schools and an Associate in Science Degree from Union **County College**

Prior to beginning the Professional Nuclear Medicine Courses a minimum of 38 general education credits must be successfully completed. You can transfer a maximum of 22 credits from outside colleges without a previous B.S. Degree - If you are considering a B.S. degree after our program, please choose the proper science courses.







Cours	E#	Course	LEC.	Lab	CR
BIO	105	Anatomy & Physiology I	3	3	4
BIO	106	Anatomy & Physiology II	3	3	4
ENG	101	English Comp I	3		3
ENG	102	English Comp II	3		3
MAT	119	Algebra OR	3		3
MAT	143	Elementary Mathematical Analysis I	4		4
PSY	101	General Psychology	3		3
CHE	105	Chemistry-Health Sciences* or	3	3	4
CHE	111	General Chemistry I** and	3	3	4
CHE	112	Chemistry II**	3	3	4
PHY	125	Elements of Physics* or	3	2	4
PHY	101	General Physics I** and	3	3	4
PHY	102	General Physics II**	3	3	4
CIS	100	Intro to Computer Systems	2	2	3
SOC	101	Principles of Sociology OR	3		3
PSY	102	Psychology of Personality***	3		3
RNTM	101	Medical Terminology (online) OR	1		1
Any M	1edical	Terminology course – transferred			1-3
RADM	102	Radiation Mathematics (online) ***	k		2
Electiv	'e	Humanities	3		3

SPRING SEMESTI RADM 102	Course er	LEC.	LAB	CR.
RADM 102	ER			CK.
	Radiation Mathematics (online)***			2
	ntro to Nuclear Medicine or Radiographers OR	1		1
NMTM 102 I	ntro to Nuclear Medicine or Non-Radiographers	3		3
	Nuclear Medicine Physics	3		3
NMTM 120 1	Nuclear Medicine Procedures I	4		4
	Nuclear Medicine nstrumentation I	3	3	4
	Radiation Biology & Radiation Protection	3		3
	Clinical Practicum - 2 days per week			0
Total Credits	<i>/</i> 1		1.	7-19
SUMMER SESSIO	N I & II			
NMTM 121 1	Nuclear Medicine Procedures II	4		4
	Nuclear Medicine Instrumentation II	3		3
NMTM 140 F	Radiochemistry & Radiopharmacy	4		4
	Clinical Practicum II	•		·
-	3 days per week			0
Total Credits				11
FALL SEMESTER				
	Health Care Today (online)			2
	Electrophysiology	1		1
	Nuclear Medicine Procedures III	2		2
	Nuclear Medicine Seminar I	1		1
	Nuclear Medicine Seminar II	2		2
	Clinical Practicum III	_		_
	4 days per week			0
Total Credits				8
WINTER SESSION	N			
	Clinical Practicum IV - 5 days per week			0
Notes				
	fulfill the requirements for an			
A	Associate degree only			
*** May be to	ourse for a baccalaureate degree aken either in fall before the progr semester professional courses	am o	r with	first



What is Distance Learning? Distance Learning courses

Distance Learning courses are flexible, learner-centered instruction that let you learn at home or from almost anywhere. For students with who need more flexibility than traditional courses offer, Distance Learning gives an opportunity to learn and earn college credit, no matter where you are or what your busy life demands.

How are distance learning courses different?

Distance learning courses are equivalent to traditional courses and have the same requirements as traditional courses. For example, some upper level courses require prerequisites. The difference is that most of the information is presented over the Internet or through a set of videotapes. For online courses students must have the required computers and software.* For Telecourses, students rent videotapes at the Media Center in Cranford by going to the Student Accounts office in MacDonald Hall.

What courses are available this way?

As you browse the course listings, look for this symbol to find courses available through distance learning. Telecourses are identified

by a "T" in the notes column of the schedule, and Online Courses by an "O."

Can I find out more about distance learning?

For more information, including answers to frequently asked questions, visit www.ucc.edu/DistanceEducation



Cranford · Elizabeth Scotch Plains · Plainfield

UCC IS ONE OF THE TOP PROVIDERS OF DISTANCE EDUCATION COURSES IN NEW JERSEY

ASSOCIATE IN SCIENCE DEGREE

By virtue of an agreement between the College and the Trinitas School of Nursing, Elizabeth, New Jersey, and the School of Nursing of the Muhlenberg Regional Medical Center Harold B. and Dorothy A. Snyder Schools, Plainfield, N.J., the College confers the degree of Associate in Science upon graduates of the Nursing Schools who have fulfilled the requirements for the degree specified by the College and who have received a Diploma in Nursing from one of the Schools. Graduates of the Schools of Nursing are eligible to sit for the National Council Licensing Examination for registered nurse licensure.



Students earn college credits in English, psychology, sociology, biology, and chemistry over the course of the programs in classes and laboratories conducted in the College. Nursing courses are conducted at the respective Schools of Nursing.

- The Trinitas School of Nursing and Muhlenberg Regional Medical Center School of Nursing are approved by the New Jersey State Board of Nursing to conduct programs in professional nursing and are fully accredited by the National League for Nursing Accrediting Commission.
- Trinitas School of Nursing offers day and evening division courses of study, as well as a program for Licensed Practical Nurses interested in continuing their nursing education. The RN Completion Program is designed for Licensed Practical Nurses who wish to return to school, but need to maintain their employment status. The program is offered 3 evenings per week for four semesters, with spring, summer, and fall semester courses. Classroom and clinical experiences will be designed to meet the specific needs of the LPN.
- The College of St. Elizabeth offers an RN/BSN and BSN/MSN ON SITE AT Trinitas School of Nursing.
- Muhlenberg Regional Medical Center School of Nursing offers a day or evening track in the nursing courses. Muhlenberg offers an Accelerated Program designed for individuals who have earned a baccalaureate or graduate degree in another discipline and wish to continue their studies in nursing. The nursing or clinical portion of the program is completed in one year by attending from January through December as a full-time day student. Muhlenberg also offers an LPN to RN Career Ladder Program. After successful completion of an LPN Transition course, the LPN program may be completed in 2 semesters.



Students are enrolled in the respective Schools of Nursing and are matriculated by the College. They are eligible to participate in all student activities at Union County College and they have the same rights and privileges as all other college students.

Graduates of the Cooperative Programs wishing to transfer into a Baccalaureate Nursing Program can expect that the basic program will be evaluated by the receiving institution and that transfer credits for selected courses taken in the Cooperative Programs are awarded at the discretion of the receiving institution. Articulation agreements with Kean University, Rutgers University and Wagner College for B.S.N. education have been established.

AFTER UCC

Nursing graduates may sit for the NCLEX examination of the National Council of State Boards of Nursing, Inc. in order to become licensed Registered Nurses (R.N.)

HAROLD B. and DOROTHY A. SNYDER Schools **SCHOOL OF NURSING**

Students interested in receiving additional information about, or an application to the program should contact the Director of Admission and Recruitment Services, Muhlenberg Regional Medical Center Harold B. and Dorothy A. Snyder Schools, Park Avenue and Randolph Road, Plainfield, N.J., 07061.

The specific objectives of this program are that the graduate must be able to demonstrate:

- the ability to function as a graduate professional nurse within structured health settings;
- the ability to provide competent nursing care through application of nursing theory and concepts from the behavioral and natural sciences, the humanities, ethical principles, and legal standards;
- the ability to accept accountability/responsibility for professional practice as a nurse;
- the ability to teach clients practices related to the promotion, maintenance, and restoration of health and to support and comfort the suffering and dying;
- the ability to cooperate with health team members to facilitate optimal health of clients in primary, secondary, and tertiary settings;
- the ability to select appropriate communication, coordination, and collaborative skills when interacting with individuals and groups;
- the ability to learn independently and engage in lifelong learning;
- the ability to apply critical thinking to nursing care situations.

AFTER UCC

Graduates of these programs can either work in the Nursing/Health professions or continue their educational pursuits.

RECOMMENDED SEQUENCE – DAY AND EVENING DIVISIONS

GENERIC TRACK					
Course#	Course	Le	c.	Lab	CR.
FIRST SEMESTE BIO 105 CHE 105 ENG 101 NURM 100 NURM 119	Anatomy & Physiology I* Chemistry-Health Sciences** English Comp I Mathematics for Pharmacology Intro to Nursing Concepts		3 3 3 1 3	3 3 1	4 4 3 1 3
SECOND SEMESTER BIO 106 Anatomy & Physiology II* PSY 101 General Psychology NURM 121 Nursing I			3 3 4	3 12	15 4 3 8
THIRD SEMEST BIO 108 PSY 205 NURM 122	er Microbiology* Child Psychology Nursing II		3 3 4	3 12	15 4 3 8
FOURTH SEME SOC 101 ENG 102 NURM 221	STER Principles of Sociology English Comp II Nursing III		3 3 5	1 13.5	3 3 9
FIFTH SEMESTER NURM 222 Nursing IV Electives Humanities (2) 4.5 13.5				9 6	
Nursing Credits: 38 General Education Credits: 37 Total: 75			15		

ACCELERATED TRACK

COURSES AT UNION COUNTY COLLEGE (IF NECESSARY)

COURSE#	COURSE	LEC.	LAB	CK.
FIRST SEMESTER	R			
BIO 105	Anatomy & Physiology I*	3	3	4
BIO 106	Anatomy & Physiology II*	3	3	4
BIO 108	Microbiology*	3	3	4
CHE 105	Chemistry-Health Sciences**	3	3	4
ENG 101	English Comp I	3	1	3
ENG 102	English Comp II	3	1	3
PSY 101	General Psychology	3		3 3 3 3
PSY 205	Child Psychology	3 3		3
SOC 101	Principles of Sociology	3		3
	Mathematics for Pharmacology	1		1
Electives	Humanities (2)	-		6
	(=)			38
SPRING SEMES	TER			30
NURM 141	Accelerated Nursing	6.5	19.5	13
SUMMER SEME	STER			
NURM 241	Accelerated Nursing Summer+	6.8	20.6	11
FALL SEMESTER				
NURM 242	Accelerated Nursing	6.5	19.5	13
4 TI .	and the state of the first		r	1.1

- * These sciences must have been taken within the last five years to be transferable.
- ** The CHE 113/114 sequence is recommended for students considering BSN/MSN study.
- + Taught in a 12-week summer semester.

COLIDSE#

HAROLD B. and DOROTHY A. SNYDER Schools SCHOOL OF NURSING

RECOMMENDED SEQUENCE

LPN TO RN TRACK

COURSES AT UNION COUNTY COLLEGE (IF NECESSARY)

Coursi	E#	Course	LEC.	LAB	Cr.
FIRST S	EMESTE	R			
BIO	105	Anatomy & Physiology I*	3	3	4
BIO	106	Anatomy & Physiology II*	3	3	4
CHE	105	Chemistry-Health Sciences**	3	3	4
PSY	101	General Psychology	3		3
ENG	101	English Comp I	3	1	3
					18
SUMME	R S ESS	ION I			
NURM	120	LPN Transition Course	7.5	7.5	4
ENG	102	English Comp II	3	1	3
					7
SUMMER SESSION II					
SOC	101	Principles of Sociology	3		3
PSY :	205	Child Psychology	3		3
					6
SEMEST	er III				
NURM	122	Nursing II	4	12	8
BIO	108	Microbiology*	3	3	4
					12
SEMEST	er IV				
NURM	221	Nursing III	4.5	13.5	9
Elective	е	Humanities	3		3
					12
SEMEST	ER V				
NURM	222	Nursing IV	4.5	13.5	9
Elective	е	Humanities	3		3
					12

Muhlenberg has an articulation with Union County College's LPN Program. Therefore, Union County College's LPNs who graduated after September, 1997, may complete the nursing portion of the RN program with a three (3) week Transition course plus two (2) semesters.

Advanced standing awarded for: NURM 100 - 1 credit

NURM 119 - 3 credits
NURM 121 (upon passing NURM 120) - 8 credits
Advanced standing may be awarded for NURM 122.

Registration for summer session (general education courses only) is done at Muhlenberg.

^{*} These sciences must have been taken within the last five years to be transferable.

^{**} The CHE 113/114 sequence is recommended for students considering BSN/MSN study.

⁺ Taught in a 12-week summer semester

TRINITAS SCHOOL OF NURSING

ASSOCIATE IN SCIENCE DEGREE

Students interested in receiving additional information about, or an application to the program should contact Union County College. The Cranford campus number is (908) 709-7518 and the Elizabeth campus number is (908) 965-6050.

The specific curriculum objectives of this program are that the graduate will:

- demonstrate the role of the nurse within a variety of health care settings;
- act as a client advocate by recognizing the uniqueness and dignity of individuals, families, and groups by providing a caring environment;
- utilize the nursing process to provide nursing care to individuals, families, and groups of diverse cultural backgrounds;
- engage in the continuous process of learning and development within a dynamic society;
- demonstrate accountability by adhering to ethical guidelines and legal standards in the practice of nursing;
- teach practices related to the prevention of illness and the promotion and restoration of health to individuals, families, and groups;
- collaborate with health team members to facilitate the highest level of health for individuals, families, and groups;
- utilize appropriate interpersonal skills when interacting with individuals, families, and groups;
- · employ critical thinking in nursing practice.

AFTER UCC

Graduates of these programs can either work in the Nursing/Health professions or continue their educational pursuits.

RECOMMENDED SEQUENCE

Course#	DAY AND EVENING D	LEC.	LAB	Cr.
		LEC.	LAB	CR.
FIRST SEMEST				
BIO 105	Anatomy & Physiology I	3	3	4
CHE 105	Chemistry-Health Sciences*	3	3	4
ENG 101	English Comp I	3	1	3
NURE 130	Nursing Trends & Concepts	4		4
				15
SEMESTER II				
BIO 106	Anatomy & Physiology II	3	3	4
PSY 101	General Psychology	3		3
NURE 131	Nursing I	4	12	8
				15
SEMESTER III				
BIO 108	Microbiology	3	3	4
PSY 205	Child Psychology	3		3
NURE 132	Nursing II	4	12	8
				15
SEMESTER IV				
ENG 102	English Comp II	3	1	3
SOC 101	Principles of Sociology	3		3
NURE 231	Nursing III	4	12	8
	•			14

*The CHE 113/114 sequence is recommended for students considering BSN/MSN study. CHE 114 must be taken to fulfill the Chemistry component of CHE 113 if selected in the curriculum.

SEMESTER V					
NURE 232	Nursing IV	5	15	10	
Elective	Humanities (2)			6	
				16	Т

ADMISSION REQUIREMENTS TO THE SCHOOL OF NURSING ARE:

- Graduation from an accredited high school or Graduate Equivalency Diploma (GED);
- Satisfactory completion of ESL courses (if applicable).

VISIT US AT OUR WEBSITE AT WWW.UCC.EDU/GO/TRINITAS

TRINITAS SCHOOL OF NURSING

ASSOCIATE IN SCIENCE DEGREE

RN COMPLETION PROGRAM FOR LPNS

PREREQUISITES			
Course#	Course	Cr.	
BIO 105	Anatomy & Physiology I	4	
BIO 106	Anatomy & Physiology II	4	
BIO 108	Microbiology	4	
CHE 105	Chemistry for the Health Sciences or		
CHE 113	Inorganic Chemistry* &	4	
CHE 114	Organic Chemistry	4	
ENG 101	English Comp I	3	
ENG 102	English Comp II	3	
PSY 101	General Psychology	3	
PSY 205	Child Psychology	3	
SOC 101	Principles of Sociology	3	
Electives	Humanities	6	
	L.P.N. Licensed Practical Nurse Curriculum	12	

ALL PREREQUISITES AND BUY-BACK CREDITS MUST BE COMPLETED PRIOR TO ENTERING NURE 250.

Passing Grades in the Cooperative Program: "C" in BIO 105, BIO 106, BIO 108, CHE 105 or CHE 113/114 "C+" in all nursing courses

Course#	Course	LEC.	Lab	Cr.
SEMESTER I				
NURE 211	Bridge to Professional Nursing Concepts	3	0	3
NURE 212	Health & Physical Assessment	2	6	4
Semester II				
NURE 250	Nursing Care of the Client with a Medical/Surgical Health Deviation	3	9	6
SEMESTER III	, 0			
NURE 260/270	Nursing Care of Children & Their Families &	Nursing	Care o	f
	Women & the Childbearing Family	3	9	6
SEMESTER IV				
NURE 280/290	Nursing Care of the Client with Mental Illness Client with a Complex Multi-System & Medica			e of the
	Health Deviation	3	9	6
NURE 291	Leadership & Management	1	0	1

^{*} The CHE 113/114 sequence is recommended for students considering BSN/MSN study. CHE 114 must be taken to fulfill the chemistry component if CHE 113 is selected in the curriculum.

ADMISSION REQUIREMENTS: APPLICANTS TO THE RN COMPLETION PROGRAM WILL HAVE EVIDENCE OF:

- Graduation from an approved School of Practical Nursing;
- Current LPN license;
- Completion of College Placement Test/course or waiver requirement;
- GPA of 2.5;
- Completion of all prerequisites & buy-back credits;
- One year employment as an LPN in a health care setting.

VISIT US AT OUR WEBSITE AT WWW.UCC.EDU/GO/TRINITAS

PARALEGAL STUDIES

ASSOCIATE IN APPLIED SCIENCE DEGREE

The mission of the Paralegal Studies Program is to recognize the vital role that paralegals play in the practice of law, both in the public and private sectors. The program will prepare students to enter the profession with the requisite skills or to transfer to a four-year institution to complete their baccalaureate degree. This Program is also suitable for those students who have earned their B.A. or who are already employed in the legal field.

The specific objectives of this program are that the graduate must be able to:

- examine the roles played by paralegals in the American legal system, particularly the ethical regulations concerning the practice of law;
- demonstrate critical thinking and problem-solving skills;
- effectively communicate with others in a diverse society, maintaining a professional manner and client confidence:
- conduct legal research and other fact-gathering activities including client interviews and investigations using current and emerging technologies;
- demonstrate the ability to write clearly and accurately according to the standards of the legal profession;



- recognize the similarities and differences among the general areas of law;
- discuss the basic tenets of the diverse subjects of law and define the legal terms related to these areas:
- analyze and evaluate the relevant legal issues presented in various fact patterns;
- prepare various forms, pleadings, motions, discovery requests, and other documents in preparation for litigation and post-trial practice; and
- incorporate computer technology into law office management and data compilation systems, including client files and library maintenance.

AFTER UCC

This program is designed to prepare students to become professional paralegals and to prepare them for the Certified Legal Assistants Examination.

RECOMMENDED SEQUENCE FIRST YEAR

Cours	cc#	Course	lec	LAB	CD
FIRST S			LLC.	LAD	CK.
LGL	101		3		3
LGL	110	Legal Research	3		3
ENG	101	English Comp I	3	1	3
CIS	100				
		Applications'	2	2	3
MAT	127	Elementary Statistics	4		4
					15
SECON	ND SEA	MESTER			
LGL	120	Contract Law	3		3
LGL	111	Legal Writing	3		3
ENG	102	English Comp II	3	1	3
LGL	140	Property Law	3		3
Electiv	/e	Social Science	3		3
Electiv	/e	Laboratory Science	4		4
					19

	SECOND YEAR				
Cours	SE#	Course	LEC.	Lab Cr.	
FIRST S	FIRST SEMESTER				
LGL	210	Tort Law	3	3	
ENG	128		_	_	
		Communication	3	3	
LGL	220	Litigation I	3	3	
ECO	105	Basic Economics	3	3	
LGL		Elective	3	3	
				15	
SECON	ID SEA	MESTER			
GOV	201	American Govt. & Politics or			
GOV	202	American National			
		Govt	3	3	
Electiv	⁄e	Humanities	3	3	
LGL	240	Business			
		Organizations	3	3	
LGL	221	Litigation II	3	3	
LGL	215	Law Office			
		Management	3	2 3	
LGL		Elective	3	3	
				18	

LEGAL ELECTIVES:

LGL 230	Family Law
LGL 231	Criminal Law
IGI 235	Wills Trusts & Estates

All developmental requirements must be met before beginning core courses. MAT 119 may be required to transfer to certain four-year programs. Students interested in transfer should seek academic advising. The Science elective must have a laboratory component per the General Education Requirements. The American Bar Association (ABA) prohibits this science course to be from another occupational program like the health occupations courses or police science/criminal justice.

PHOTOGRAPHY/FINE ARTS

Option offered through Liberal Arts ASSOCIATE IN ARTS DEGREE

The Fine Arts Option in Photography is a Liberal Arts transfer-oriented curriculum that provides students, through a core of visual arts/photography-related courses, a theoretical and practical understanding of the artistic and commercial areas of photography. Utilizing skills and techniques learned through a combined lecture/studio/darkroom experience, students are taught the basics of black and white, color photography, and the history of photography which are applicable to the commercial and artistic environments.



A large component of this program focuses on developing studio photography skills, including darkroom techniques, standard and large format camera usage, studio lighting, theoretical and historical applications, and comprehensive portfolio development.

The specific objectives of this program are that the graduate must be able to demonstrate:

- a practical and theoretical understanding of general picture-taking skills including f/stop, shutter speed and depth of field control;
- the ability to process black and white negatives and color and black and white prints;
- a knowledge and familiarity of all darkroom and studio equipment including strobes, large format cameras, and light meters;
- an awareness of historical and contemporary issues of photographic practice and an ability to generate critical thinking and effective communication about art:
- a portfolio of work that demonstrates competency in photography and provides the necessary visual support material needed for transfer acceptance into a fouryear program or for an entry-level vocational position.

AFTER UCC

Graduates can transfer to a four-year college or university and are eligible to take advantage of the many transfer/articulation agreements Union County College has with some of the top four-year colleges and universities in the country. See a transfer counselor for details.

RECOMMENDED SEQUENCE

		FIRST YEA	\R		
Cour	SE#	Course	LEC.	LAB	CR.
FIRST	SEMES	TER			
ENG	101	English Comp I	3	1	3
HIS	101				
		Civilization I	3		3
Mode	ern La	nguage	3		3
MAT	127	Elementary Statistic	cs OR		
MAT	143	Elementary Mathe	matica		
		Analysis I	4		4
FIA	108	Art Appreciation	3		3
					16
SECON	ND S E/	MESTER			
ENG	102	English Comp II	3	1	3
HIS	102	Intro to Western			
		Civilization II	3		3
Mode	rn La	nguage	3		3
Labor	atory	Science	3	3	4
FIA		Black & White			
		Photography I	3		3
					16

SECOND YEAR

Cour	SE#	Course	LEC.	Lab Cr.
FIRST	SEMES	TER		
ENG		200-Level Literature		
		course	3	3
PSY	101	General Psychology	3	3
MAT	144	Elementary Mathemathemathemathemathemathemathemathem	atical	
Labor	atory	Science		4
FIA	222	Black & White Photography II	3	3
FIA	224	Digital Imaging for A Photography	Art & 3	3
FIA		Diversity Course*	3	3
				19

SECOND SEMESTER

ENG	128	Dynamics of Comm	unicat	ion OR
ENG	129	Public Speaking	3	3
PSY	102	Psychology of Personality	3	3
FIA	225	Advanced Digital In Art & Photography	naging 3	g for 3
BUS	203	Principles of Advertising	3	3
FIA	223	Color Photography	3	3
GOV	202	American National	Govt	OR
PHI	205	Intro to Philosophy	3	3
				18

* Students can take the FIA 105 Music Appreciation, FIA 111 History of Art I, FIA 112 History of Art II, or FIA 117 Music in the 20th Century to fulfill the Fine Arts Diversity course requirement.

YSICAL SCIENCE

ASSOCIATE IN ARTS DEGREE

The Physical Science program is concentrated in the areas of physics, chemistry, and/or geology, with the necessary foundation in mathematics. Languages and liberal arts electives round out the program.

Applicants for the Physical Science program must present two years of algebra and one year of geometry, trigonometry, chemistry, and physics and two years of a foreign language, as high school entrance credits. Students deficient in any of these subjects must take the appropriate preparatory courses. All candidates are required to take a mathematics placement test.



The specific objectives of this program are that the graduate must be able to demonstrate:

- critical thinking and problem-solving skills in chemistry and physics, calculus, and differential equations;
- the ability to apply knowledge of computer science, including computer programming skills using an appropriate computer language (e.g., C++);
- the ability to use appropriate computer software applications, including word processing, spreadsheets, and hand-held graphing calculators, in the study of science and mathematics;
- the ability to perform laboratory experiments and measurements, and to graph and analyze experimental data;
- the ability to work as a team member;
- the ability to write and communicate effectively.

AFTER UCC

Graduates can transfer to a four-year college or university and major in such fields as Physical Science, Chemistry, Mathematics or Physics and are eligible to take advantage of the many transfer/articulation agreements Union County College has with some of the top four-year colleges and universities in the country. See a transfer counselor for details.

RECOMMENDED SEQUENCE

FIRST YEAR

Course#	# (Course	LEC.	Lab	CR.
FIRST SE	MESTE	:R**			
CHE 1	11 (General Chemistry I	3	3	4
ENG 10	01 E	English Comp I	3	1	3
Modern	Lang	guage* (111 or 121)		3
MAT 17	71 L	Unified Calculus I	4		4
					14
SECOND	SEME	ESTER**			
CHE 1	12 (General Chemistry II	3	3	4
ENG 10	02 E	English Comp II	3	1	3
Modern	Lang	juage* (112 or 122)	3		3
MAT 17	72 l	Unified Calculus II	4		4
					14

SECOND YEAR

Course#	Course	LEC.	Lab	CR.
FIRST SEMES	STER			
CHE 201	Quantitative			
	Analysis or	3	6	5
CHE 211	Organic Chemistry	or 3	6	5
GEY 101	Physical Geology	3	3	4
CSC 101	Computer Algorithm	ns 2	3	3
MAT 271	Unified Calculus III	4		4
PHY 101	General Physics I	3		3
PHYL 101	General Physics I			
	Laboratory		3	1
Elective	Social Science			3
			18-	19
SECOND SE	MESTER			
CHE 202	Instrumental Analysi	is		
	or	2	6	4
CHE 212	Organic Chemistry	II		
	or	3	6	5
GEY 102	Historical Geology	3	3	4

*French or German recommended

MAT 272 Differential Equations 4 PHY 102 General Physics II

PHYL 102 General Physics II Laboratory

Electives

General

The following general electives are suggested for students in the Physical Science program:

3

6 18-19

3

AST 101, 102	ENG 200-Level Literature
ECO 201, 202	GEY 101, 102
EGG 201, 202	MAT 127, 265
ENG 128, 129	PSY 101, 102

^{**}Physics majors should add PHY 111, PHYL 111 to their freshman year and substitute PHY 201, PHYL 201 for PHÝ 101, PHYL 101 and PHY 102, PHYL 102 in their sophomore year.

SICAL THERAPIST ASSISTANT

ASSOCIATE IN APPLIED SCIENCE DEGREE

This is a 68-credit Associate in Applied Science degree program accredited by the Commission on Accreditation in Physical Therapy Education. It is designed to prepare individuals for employment in physical therapy settings under the supervision of a Physical Therapist. Graduates are eligible to take the national licensure examination necessary for practice as a licensed Physical Therapist Assistant (PTA).

Course work prepares the student to perform basic physical therapy procedures and should not be considered as a direct vehicle of study towards an entry-level physical therapy academic program. The program demands that students attend classes full-time during the day. Hours for clinical practice may vary and travel to the clinical setting is the responsibility of the student.

See paragraphs "Qualifications for Admission to Degree Programs" and "Admission Requirements for Health Technologies" for desired high school background and admissions information (see page 207).

The specific objectives of this program are that the graduate must be able to demonstrate:

- critical thinking and problem-solving skills in the health care setting using appropriate measurement and assessment techniques using the knowledge of indications and contraindications of the disease process;
- the ability to appropriately observe and report important patient responses by recognizing abnormal and normal responses to treatment and by recognizing the need for treatment modifications in response to observations;
- the ability to understand the rights and responsibilities of returning the individual with a disability to a functioning member within the community using knowledge of the federal regulations regarding Americans with disabilities;
- basic competency in carrying out physical therapy interventions by obtaining necessary medical information, organizing the treatment program, demonstrating knowledge of indications and contraindications in patient care, under the supervision of a Physical Therapist;

- the ability to communicate effectively with the supervising therapist, appropriate medical personnel, families and patients, using appropriate oral and written medical terminology and recording this information in the patient record;
- the awareness of the current social, political, and economic aspects of health care by demonstrating appropriate assessment of the treatment plan's effectiveness and timely recommendation for reevaluation of the patient by the physical therapist.

AFTER UCC

Graduates are eligible to take the Licensure Examination necessary for practice as a Licensed Physical Therapist Assistant.

There is a limit to the number of seats available in the clinical phase of the PTA program. It is therefore imperative that each student contacts the Program Coordinator at (908) 412-3582. All students must complete a PTA Program Entrance Form prior to starting the clinical phase of the program. All students must complete 25 hours of volunteer work or work-related experience and must obtain a reference on the PTA Program Reference Form. Both of these forms are available in August from the Program Coordinator or the Health Technology Department Secretary, and must be returned no later than October 30.

Please note that it is always beneficial for students to complete additional non-clinical courses prior to the first semester of the clinical phase, thereby making the summer course load more manageable. Please call the Program Coordinator (908) 412-3582 for counseling on course selection.

If necessary, the Program Coordinator and the PTA Program Admissions Committee will make the final determination for admission to the program based on the professional reference and a written essay or interview.

RECOMMENDED SEQUENCE

	PRE-CLINICAL PHA	SE
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Cours	SE#	Course	LEC.	LAB	CR.
PRER	EQUI	SITE COURSE WOR	K		
ENG	101	English Comp I*	3	1	3
BIO	105	Anatomy &			
		Physiology I*+	3	3	4
MAT	119	Algebra*	3		3
PSY	101	General Psychology	* 3		3
HUG	101	Multidisciplinary Per	rspec	tives	on
		Aging*	3		3
					16

Cour	SE#	COURSE	LEC.	LAB	CR.
FIRST	SEMES	ter (Spring)			
PTA	115	Functional Anatomy	3	3	4
PTA	130	PT Procedures I	3	13	7
PTA	251	Independent Living	2		2
					13
SUMM	ER SE	SSION I			
ENG	102	English Comp II**	3	1	3
PTA	140	PT Procedures II	2	3	3
					6
SUMM	ER SE	SSION II			
BIO	106	Anatomy &			
		Physiology II+	3	3	4
SECO	ND S EA	Mester (Fall)			
PTA	217	Clinical Seminar			
		& Practice I	3	16	7
PTA	220	PT Procedures III	4	6	6
PTA	221	PT Procedures IV	3	3	4
					17
THIRD	SEMES	STER (SPRING)			
PTA	223	Clinical Seminar II	3		3
PTA	224	Clinical Practice II		40	9
					12

Total Program Credits (including all prerequisite course work) 68

- * Prerequisite (pre-clinical phase) course work must be passed with a grade of "C" or higher.
- ** English 102 may be completed during the winter session [before first semester (Spring)]. English 102 must be completed prior to beginning the second semester (Fall).
- + Students will only be permitted to take BIO 105 or BIO 106 two times. Students who are not able to pass these courses with a "C" or better on the second attempt, will not be eligible to register for the clinical phase of the program.
- All course work in the clinical phase of the PTA program must be passed with a grade of "C+" or better.

PRACTICAL NURSING

DIPLOMA

The Practical Nursing Program at Union County College is a four semester program leading to a Diploma. Currently, this curriculum plan is offered during the day, but courses may be offered during the evening and/or weekend hours. College courses may be taken during the evening or weekend hours, or as distance education offerings, as available. For daytime students, clinical rotations may be provided during the evening and/or weekend hours in order to obtain optimum client care experiences.

The curriculum incorporates theoretical knowledge from the biological and social sciences into the nursing framework. Students are able to apply information acquired in the classroom and skills laboratory to clinical client care experiences.

This program has received accreditation from the New Jersey Board of Nursing through 2014. It has also received accreditation from the National League for Nursing Accrediting Commission (NLNAC) through the fall of 2011. Graduates of this program are eligible to take the NCLEX-PN examination for Practical Nurse licensure. Licensed Practical Nurses provide client care in a variety of health care agencies under the direction of a Registered Nurse, and/or physician or dentist.

Students in the Practical Nursing program are required to have the following in order to participate in clinical nursing courses:

- Criminal background check
- CPR certification for the Healthcare provider
- Malpractice insurance
- Completed health records
- Official uniform

Additional information about program enrollment, policies, and courses is available at: www.ucc.edu/go/practicalnursing



CURRICULUM OBJECTIVES

The graduate of the Practical Nursing Program will:

- 1. Provide holistic care to clients from diverse multi-cultural backgrounds, experiencing a variety of self-care needs, within the context of the nursing process.
- 2. Collaborate with other members of the health care team.
- 3. Demonstrate accountability by practicing nursing within a legal and ethical framework.
- 4. Use effective verbal and written communication skills when interacting with clients, families, and other members of the health care team.
- 5. Assume accountability for personal and professional growth.
- 6. Apply critical thinking in interactions with clients, families, and other members of the health care team.
- 7. Incorporate contemporary knowledge and tools from nursing and the biological and social sciences into the care provided to clients at different developmental levels throughout the life span.

AFTER UCC

Graduates of this program are eligible to take the NCLEX-PN examination for Practical Nurse Licensure.

RECOMMENDED SEQUENCE

			/CLINICAL	ΙG
Course#	Course	ĘĊ.	₹	Скері
SEMESTER I				
ENG 101	English Comp I	3	1	3
BIO 102	Human Biology	3	3	4
PSY 101	General Psychology	3		3
PNU 190	Nursing Concepts	4	3	5
				15
SEMESTER II				
PNU 191	Adult Health I	7	9	10
Elective	(3 or 4 credits):			
	3 credit elective	3		3
	4 credit elective*	3	3	4
	_		13	-14
SEMESTER II	-			
PNU 210	Maternal, Pediatric, Mental Health	&		
	Nursing	6	9	9
PSY 205	Child Psychology	3		3
	, ,,			12
SEMESTER IN	/			
PNU 211	Adult Health II & Rol	е		
	Transition	8	12	12
				12
Total			52	-53

* Recommended science courses: BIO 105/106, BIO 108, CHE 105 or CHE 113

PSYCHOLOGY

Option offered through Liberal Arts ASSOCIATE IN ARTS DEGREE

This program is for those students who wish to transfer to a four-year institution and major in Psychology.

See paragraph on "Qualifications for Admission to Degree Programs" for desired high school background (see page 207).

The specific objectives of this program are that the graduate must be able to demonstrate:

- critical thinking, problem-solving skills, and effective communication skills;
- an awareness of and concern for the ethical implications of institutional policies and individual practices;
- an awareness of his/her rights and responsibilities as a citizen of a world community;
- the ability to communicate with others in a diverse society;
- an awareness of the diverse factors that shape the world in order to keep pace with the changing society;
- the ability to learn independently and to direct his/her own learning;
- the knowledge of the history of psychology;
- the ability to apply critical thinking and problem-solving skills in dealing with others;
- an understanding of the scientific method and how it is used in psychology and other social sciences;
- the ability to learn independently.

AFTER UCC

Graduates can transfer to a four-year degree program majoring in the Social Sciences or Liberal Arts, or other areas of interest and are eligible to take advantage of the many transfer/articulation agreements Union County College has with some of the top four-year colleges and universities in the country. See a transfer counselor for details.

RECOMMENDED SEQUENCE

	FIRST YEAR			
Course#	Course	LEC.	Lab	Cr.
FIRST SEMEST	ER			
ENG 101	English Comp I	3	1	3 3
HIS 101	Intro to Western Civilization I	3		3
Laboratory S	cience* or			
MAT	Mathematics+			3-4
PSY 101	General Psychology	3		3
Modern Lan	guage	3		3
15-16				
SECOND SEM	ESTER			
ENG 102	English Comp II	3	1	3
HIS 102	Intro to Western Civilization II	3	•	3 3
HIS 102 Laboratory S		3	·	3
Laboratory S		3	·	3 3-4
Laboratory S	Science* or			3-4
Laboratory S MAT	Science* or Mathematics+ Psychology of Personality	3	·	
Laboratory S MAT PSY 102	Science* or Mathematics+ Psychology of Personality	3		3-4

SECOND YEAR						
Course#	Course	LEC.	Lab	CR.		
THIRD SEMEST	TER					
ENG 128	Dynamics of Communication or					
ENG 129	Public Speaking	3		3		
SOC 101	Principles of Sociology	3		3		
CIS 100	Intro to Computer Applications	2	2	3		
PSY	200-Level Course	3		3		
PHI 205	Intro to Philosophy	3		3		
				15		
FOURTH SEMI	ESTER					
SOC 206	Minorities in American Life	3		3		
PSY	Elective	3		3		
Elective	Science (may be laboratory or non-laboratory) or					
MAT	Mathematics	3-4		3-4		
Electives	Humanities/Social Science	6		6		
			1	5-16		

^{*}A one-year science sequence is recommended

+MAT 117 or higher. MAT 127 (Elementary Statistics) is recommended.

It is suggested that electives be chosen from the following list:

PSY 206, 207, 208, 211, 212 SOC 102, 206, 273 HIS 105, 106, 201, 202, 205, 209 PHY 101, 102, 105 BIO 101, 102, 103, 104, 107, 109, 113 FIA 111, 112 CHE 101, 102, 106 GEY 101, 102 MAT 129, 171, 172 CRJ 205 AST 101, 102 ECO 201, 202 GOV 201, 202, 205 **URS 101** Modern Languages (all) **HUG 101**

ASSOCIATE IN SCIENCE DEGREE

Psychosocial rehabilitation (PSR) is a comprehensive treatment strategy for meeting the needs of people with severe mental illnesses. PSR practitioners assist people in obtaining the skills, support and resources they will need to achieve success and satisfaction in their social, vocational, educational and independent living environments. The overall goals of this field are promotion of recovery, community integration, and improved quality of life for people coping with psychiatric disabilities. There are ample career opportunities for PSR practitioners in a variety of rehabilitation programs and community mental health settings. The knowledge and skills of the PSR practitioner qualify him/her to provide supportive counseling, case management services, and vocational rehabilitation interventions. The practitioner is also prepared to facilitate skills training groups as well as psycho-education and support groups.

UMDNJ-SHRP'S PROGRAM

The UMDNJ School of Health Related Professions had the first undergraduate degree-granting program in this field in New Jersey. It is one of the few model programs of this type throughout the nation. Students in this program will complete two clinical placements at sites such as UMDNJ-UBHC, Bridgeway, Collaborative Support Programs of NJ, Harbor House, Project Live, and others.

DEGREE REQUIREMENTS:

Requirements for admission to the UCC general education phase of the program are: High School graduation or equivalent diploma (GED); English as a Second Language (ESL) placement test if required and completion of ESL courses if necessary; and completion of any necessary remedial courses as determined by the New Jersey Basic Skills Test.

To qualify for admission to the professional phase of the program offered by UMDNJ, students must complete 21 credits of their UCC general education requirements (including ENG 101, ENG 102) and UPR 101. A minimum GPA of 2.5 is also required.

In order to successfully complete this program, the student will be required to take the following courses. BE SURE TO CONFER WITH A UCC OR UMDNJ COUNSELOR WHEN PLANNING YOUR COURSE SCHEDULE.

GENERAL EDUCATION REQUIREMENTS – 31 CREDITS

ENG 101 English Comp I

PSY 101 General Psychology

CIS 100 Intro to Computer Applications

MAT 119 Algebra

SOC 101 Principles of Sociology

BIO 102 Human Biology

ENG 102 English Comp II

PSY 207 Social Psychology

PHI 205 Intro to Philosophy

ENG 128 Dynamics of Communication or ENG 129 Public Speaking

UMDNJ REQUIREMENTS – 3 CREDITS

UPR 101 Intro to Psychosocial Rehabilitation taken prior to entering professional phase

AFTER UCC

Graduates may transfer to Kean University, which offers a Joint Bachelor's Degree Program in Psychology & Psychiatric Rehabilitation with the UMDNJ School of Health Related Professions.

RECOMMENDED SEQUENCE

PROFESSIONAL PHASE OF PROGRAM

Course#	Course	LEC.	LAB	CR.
SEMESTER 1				
PSRT 1102	Communication Tech	niqu	es-	
	Interviewing			
	& Counseling*	2	2	3
PSRT 1103	Intro to Group			
	Dynamics*	2	2	3
PSRT 1204	Clinical Principles in			
	Psychosocial	^		^
	Rehabilitation*	2		3
				9
SEMESTER 2				
PSRT 1019	Clinical Practicum in			
	Psychosocial			
	Réhabilitation I*	3		6
PSRT 2121	Community Resource	,		
	Management*	3		3
				9
SEMESTER 3				
PSRT 2019	Clinical Practicum in			
10K1 2017	Psychosocial			
	Rehabilitation II*	3		6
PSRT 2231	Emerging Topics in			
	Psychosocial			
	Réhabilitation*	3		3
				9

* Students register through UMDNJ for PSRT courses and pay UMDNJ Undergraduate tuition rate and fees.

A total of 61 credits are required. The 31 credits of general education courses are provided by Union County College or may be transferred from other schools. The UMDNJ School of Health Related Professions provides the 30 credits of Psychosocial Rehabilitation and Treatment (PSRT) courses. Except for UPR 101 (PSRT 1101), students register at UMDNJ for the PSRT courses and pay the UMDNJ undergraduate tuition rate and fees. A grade of "C" or better in all major courses is required. Full and part-time courses of study are available, including day and evening classes. Classes are taken during fall and spring sessions.

PUBLIC ADMINISTRATION

Option offered through Business ASSOCIATE IN ARTŠ DEGREE

This program offers a strong foundation for students wishing to major in either public and/or business administration. The program includes courses in statistics, computer programming, and management. The courses are designed to develop analytical and quantitative skills, as well as familiarity with the basic characteristics of government and business organizations.

See paragraph "Qualifications for Admission to Degree Program" for desired high school background (see page 207).

The specific objectives of this program are that the graduate must be able to demonstrate:

- knowledge of the principles and practices of management and organization in American Business;
- knowledge of the principles and dynamics of American public administration;
- knowledge of the principles of microeconomics and macroeconomics;
- the ability to perform statistical procedures common to American business;
- critical thinking, problem-solving skills, and effective communication skills:
- an awareness of and concern for the ethical implications of institutional policies and individual practices;
- an awareness of the diverse factors that shape the world in order to keep pace with the changing society;
- the ability to use technology for learning and research;
- the ability to learn independently and to direct one's own learning.



AFTER UCC

Graduates can transfer to a four-year college or university to further their education and are eligible to take advantage of the many transfer/articulation agreements Union County College has with some of the top four-year colleges and universities in the country. See a transfer counselor for details.

RECOMMENDED SEQUENCE

	FIRST YEA	R		
Course#	Course	LEC.	LAB	CR.
FIRST SEMES	TER			
ACC 103	Accounting I	4		4
ENG 101		3	1	3
GOV 201	American Govt. & Politics	3		3
MAT	Mathematics*	3		3-4
SOC 101	Principles of Sociology	3		3
			16	-17
SECOND SEA	MESTER			
ACC 104	Accounting II	4		4
ENG 102	English Comp II	3	1	3
GOV 202	American National Govt		3	
MAT 146	Brief Calculus with	Appli	catio	ons or
MAT 246		4		4
PSY 101	General Psychology	or or		
SOC 206		3		3
				17

SECOND YEAR

Course#	Course	LEC.	Lab	Cr.		
FIRST SEMESTER						
ACC 203 Intermediate Accounting I or						
Laborato	ry Science +	Ū		4		
BUS 10	5 Organization & Management	3		3		
CIS 10	1 Intro to Information Systems**	2	2	3		
ECO 20	1 Principles of Economics I	3		3		
Elective	Humanities	3		3		
				16		

SECOND SEMESTER

				16
Electiv	/es	General		6
		Public Administration	3	3
			3	3
ENG	128	The Dynamics of Communication		
ECO	202	Principles of Economi	cs II or	
Labor	atory	Science +		4
		Intermediate Account	ing II or	
OLCO.	10 01	VILO I LIX		

For career students who do not intend to transfer to a four-year college, ACC 203-204 is recommended.

+ A one-year laboratory science sequence is recommended depending upon where you transfer. Students interested in Urban Studies are urged to examine the Urban Studies Option of the Liberal Arts program. Electives are suggested in the following areas:

Biology History **Business** Computer Science Literature Fine Arts Psychology Modern Language Sociology Urban Studies Government Chemistry

- See advisor to choose an appropriate mathematics course.
- **Prerequisite for CIS 101 is CIS 100.

PUBLIC RELATIONS

Option offered through Communications ASSOCIATE IN ARTS DEGREE

This program is designed for transfer to a bachelor's degree-granting institution. Course work includes theory and practice of public relations. Internships in professional organizations are available. Students are required to consult with an advisor regarding appropriate option and course selection for their needs and



The specific objectives of this program are that the graduate must be able to demonstrate:

- the ability to communicate ideas verbally and in writing with a level of sophistication and fluency appropriate to college-level discourse;
- a recognition of the necessity of keeping abreast of current cultural, social and political issues and events as a cornerstone of citizenship in a democratic society;
- a level of comfort and proficiency with standard productivity software such as word processors, presentation managers and web browsers, as well as an understanding of the ways in which these tools are applied in the communications
- an awareness that learning is a complex, lifelong process and not an event, a phenomenon, not an outcome;
- a sensitivity to, and concern about, the ethical implications of institutional policies and individual practices.

AFTER UCC

Graduates can transfer to a bachelor's degree-granting institution and are eligible to take advantage of the many transfer/articulation agreements Union County College has with some of the top four-year colleges and universities in the country. See a transfer counselor for details.

RECOMMENDED SEQUENCE

	FIRST YEAI	R		
Course#	Course	LEC.	Lab	Cr.
FIRST SEMES	TER			
COM 101	Mass			_
	Communications	3		3
ENG 101	English Comp I	3	1	3
HIS 101	Intro to Western Civilization I	3		3
MAT	A 4-credit Mathematics course	4		4
COM 100	Communications Technologies	3	2	4
				17
SECOND SEA	MESTER			
COM 108	Principles & Practice of Public Relations	s 3		3
ENG 102	English Comp II	3	1	3
Laboratory	Science course	3	3	4
ENG 128	The Dynamics of Communication OR			
ENG 129	Public Speaking	3		3
	Intro to Western Civilization II	3		3
				16

COURSE	:#	COURSE	LEC.	LAB CR.
FIRST S	EMES	TER		
COM	102	Reporting & News \	V ritir	ng OR
COM	107	Publication Editing & Design OR	<u> </u>	
COM	111	Mass Communication	n	
		Ethics	3	3
ENG		200-Level Course	3	3
Moder	n Lar	nguage	3	3
GOV 2	201	American Govt.		
		& Politics	3	3
PSY	101	General Psychology	3	3
BUS	101	Intro to Contempora	ry	
		Business	[′] 3	3
				18

SECOND SEMESTER

SECOND SE	MLJILK		
COM 207	Advanced Publication Design OR	on Edit	ing &
COM 201	Issues in Mass Med	ia OR	
COM 214	Communications		
	Practicum I	3	3
ENG	200-Level Course	3	3
Modern Lar	nguage	3	3
GOV 202	American National		
	Govt.	3	3
Elective	Social Science	3	3
			7.5

15

RADIATION THERAPY

ASSOCIATE IN SCIENCE

By virtue of an agreement between Union County College and the Muhlenberg Regional Medical Center Harold B. and Dorothy A. Snyder Schools, Plainfield, N.J., Union County College confers college credits upon graduates of the Hospital sponsored school who have fulfilled the requirements for the credits specified by Union County College. Applicants admitted to the program that do not hold at least an A.S./A.A.S. degree will be admitted into the General Education Component of the program and must complete all 29 prerequisite courses at Union County College prior to beginning the Post General Education Component of the program. All graduates that have successfully completed the program will be granted a diploma in Radiation Therapy from Muhlenberg and a Bachelor of Science in Applied Science and Technology from Thomas Edison State College. Those graduates that have successfully completed degree course work at Union County College will also be granted an Associate in Science degree from Union County College.

Radiation Therapy courses are the primary responsibility of the program.

The program holds accreditation from the New Jersey Department of Environmental Protection, Radiologic Technology Board of Examiners and the Joint Review Committee on Education in Radiologic Technology.

Students are enrolled in the School of Radiation Therapy and are matriculated by Union County College. They are eligible to participate in all student activities at Union County College and have the same rights and privileges as all other college students.

Students interested in the program should contact Muhlenberg Regional Medical Center Harold B. and Dorothy A. Snyder **Schools** at (908) 668-2637 for additional information.

Specifically, the program objectives are that graduates must be able to demonstrate.

- an ability to deliver a planned course of radiation therapy;
- an ability to verify the mathematical accuracy of the prescription for radiotherapy;
- an ability to maintain daily record and document technical details of the radiotherapy treatment administered;
- an ability to observe the clinical progress of the patient undergoing radiation therapy and observe the first sign of any complication;
- an ability to provide patient care and comfort essential to radiation therapy procedures;
- within the scope of practice for a radiation therapist, detect equipment malfunctions; report same to the proper authority; and know the safe limits of equipment operations;
- an ability to understand the functions, limitations and utilization of radiotherapy equipment and treatment accessories and detect malfunctioning equipment;
- an ability to apply the rules and regulations for radiation safety, detect radiation hazards and other hazards to patient welfare within the scope of practice for the radiation therapist;
- an ability to simulate a prescribed course of radiation therapy treatment.

AFTER UCC

Graduates are eligible to apply to sit for the American Registry of Radiologic Technologists and the New Jersey State **Licensure Examinations.**

RECOMMENDED SEQUENCE

PREREQUISITE

GENER		OUCATION CURRICULUM:	LEC.	LAB	Cr.
ENG	101	English Comp I	3	1	3
ENG		English Comp II	3	1	3
BIO	105	Anatomy & Physiology I	3	3	4
BIO	106	Anatomy & Physiology II	3	3	4
PSY	101	General Psychology	3		3
PSY	102	Psychology of Person	nality	OR	
SOC	101	Principles of			
		Sociology	3		3
MAT	119	Algebra	3		3
Electiv	⁄e	Social Science	3		3
Electiv	es es	Humanities*	6		6
Total	Cred	its	30	8	32

* Humanities Electives must be taken at Union County College.

POST GENERAL EDUCATION

Course#	Course	LEC.	Lab	CR.
FIRST SEMES	ter (Fall) First Year			
PHY 125	Elements of Physics	3		3
PHYL 125		Lab	2	1
RATM 100	Basics of Radiation Therapy	3		3
RATM 102		2		2
RATM 114	Ethics & Law	2		2
PHI 212	Logic & Critical Thinking	3		3
Semester (13	2	14
SECOND SE	MESTER (SPRING) FIRST	YEAR	<u> </u>	
	Treatment Planning			4
RATM 112	•			
	Diseases I	4		4
	Sectional Anatomy	3		3
CLPT 901				0
Semester (Credits	11		11
				_
THIRD SEMES	ster (Summer I & II)	FIRST	YEA	R
RATM 204	Treatment Planning		YEAI	R 4
	Treatment Planning		YEAI	
RATM 204 RATM 212	Treatment Planning Neoplastic Diseases II	II 4	YEAI	4
RATM 204 RATM 212	Treatment Planning Neoplastic Diseases II Clinical Internship II	II 4	YEAI	4
RATM 204 RATM 212 CLPT 902 Semester (Treatment Planning Neoplastic Diseases II Clinical Internship II	4 8	YEAI	4 0
RATM 204 RATM 212 CLPT 902 Semester (Treatment Planning Neoplastic Diseases II Clinical Internship II Credits TER (FALL) SECOND YE. Radiation Therapy	4 8	YEAI	4 0 8
RATM 204 RATM 212 CLPT 902 Semester 0 FIRST SEMES RATM 140	Treatment Planning I Neoplastic Diseases II Clinical Internship II Credits TER (FALL) SECOND YE. Radiation Therapy Pathology	8 AR 2	YEAI	4 4 0 8
RATM 204 RATM 212 CLPT 902 Semester 0 FIRST SEMES RATM 140	Treatment Planning Neoplastic Diseases II Clinical Internship II Credits TER (FALL) SECOND YER Radiation Therapy Pathology Quality Management	8 AR 2	YEAI	4 4 0 8
RATM 204 RATM 212 CLPT 902 Semester (FIRST SEMES RATM 140 RATM 106	Treatment Planning Neoplastic Diseases II Clinical Internship II Credits TER (FALL) SECOND YE. Radiation Therapy Pathology Quality Management Radiation Biology	8 AR 2 at 2 2	YEAI	4 0 8 2 2 2 2
RATM 204 RATM 212 CLPT 902 Semester (FIRST SEMES RATM 140 RATM 106 RATM 135	Treatment Planning Neoplastic Diseases II Clinical Internship II Credits TER (FALL) SECOND YE. Radiation Therapy Pathology Quality Management Radiation Biology Clinical Internship II	8 AR 2 at 2 2	YEAI	4 4 0 8
RATM 204 RATM 212 CLPT 902 Semester (FIRST SEMES RATM 140 RATM 106 RATM 135 CLPT 903	Treatment Planning Neoplastic Diseases II Clinical Internship II Credits TER (FALL) SECOND YE. Radiation Therapy Pathology Quality Management Radiation Biology Clinical Internship II	8 AR 2 1 2 2 1	YEAI	4 0 8 2 2 2 2 0

RADIO

Option offered through Communications ASSOCIATE IN ARTS DEGREE

This program is designed for transfer to a bachelor's degree-granting institution. Course work includes theory and practice of radio broadcasting. Internships in professional organizations are available. Students are required to consult with an advisor regarding appropriate option and course selection for their needs and interests.

The specific objectives of this program are that the graduate must be able to demonstrate:

- the ability to communicate ideas verbally and in writing with a level of sophistication and fluency appropriate to college-level discourse;
- a recognition of the necessity of keeping abreast of current cultural, social and political issues and events as a cornerstone of citizenship in a democratic society;
- a level of comfort and proficiency with standard productivity software such as word processors, presentation managers and web browsers, as well as an understanding of the ways in which these tools are applied in the communications field;
- an awareness that learning is a complex, lifelong process and not an event, a phenomenon, not an outcome;
- facility with the tools and technology encountered in a professional recording studio or radio station;
- the ability to work effectively as a member of a team.



AFTER UCC

Graduates can transfer to a bachelor's degree-granting institution and are eligible to take advantage of the many transfer/articulation agreements Union County College has with some of the top four-year colleges and universities in the country. See a transfer counselor for details.

RECOMMENDED SEQUENCE

1
1
1
1
2
1
1
3
icatio

S	ECOND YE	AR	2	
Course#	Course	LEC.	LAB CR.	
FIRST SEMES	TER			
COM 102	Reporting & News	Writin	ng OR	
COM 201	Issues in Mass Med	dia Of	₹	
COM 214	Communications Practicum I	3	3	
ENG	200-Level Course	3	3	
HIS 101	Intro to Western Civilization I	3	3	
GOV 201	American Govt. & Politics	3	3	
Elective	Humanities	3	3	
Elective	Social Science	3	3	
			18	
SECOND SEMESTER				
COM 111	Mass Communicati	ion Eth	nics OR	
COM 106	Intro to Television: Theory OR	Produc	ction &	

JECOND JE	MESIER		
COM 111	Mass Communication	n Ethi	cs OR
COM 106	Intro to Television: P Theory OR	roduct	ion &
COM 215	Communications Practicum II	3	3
ENG	200-Level Course	3	3
HIS 102	Intro to Western Civilization II	3	3
GOV 202	American National Govt.	3	3
Elective	Humanities	3	3
			15

Muhlenberg Regional Medical Center School of Radiography ASSOCIATE IN SCIENCE DEGREE

By virtue of an agreement between Union County College and Muhlenberg Regional Medical Center Harold B. and Dorothy A. Snyder Schools, Plainfield, N.J., Union County College confers a degree of Associate in Science upon graduates of the Hospitalsponsored school who have fulfilled the requirements for the degree specified by the College.

Students in the program earn college credits in English, mathematics, biology, physics, psychology, computer systems and humanities electives in classes and laboratories conducted at Union County College. Radiography courses are the primary responsibility of the program.



The Joint Review Committee on Education in Radiologic Technology and the New Jersey Department of Environmental Protection, Radiologic Technology Board of Examiners accredits Muhlenberg Regional Medical Center School of Radiography.

Students are enrolled in the School of Radiography and are matriculated by Union County College. They are eligible to participate in all student activities at Union County College and have the same rights and privileges as all other college students.

Students interested in the program should contact the Muhlenberg Regional Medical Center Harold B. and Dorothy A. Snyder Schools at (908) 668-2194 or (908) 668-2844 for additional information.

AFTER UCC & MUHLENBERG

Graduates are eligible to sit for the American Registry of Radiologic Technologists and the New Jersey State Licensure Examinations.

RECOMMENDED SEQUENCE

GENERAL EDUCATION

(34 CREDITS MUST BE SUCCESSFULLY COMPLETED PRIOR TO THE START OF THE PROFESSIONAL RADIOGRAPHY COURSES)

Cour	SE#	COURSE	LEC.	LAB	CR.
RNTM	1101	Medical Terminology	<i>,</i> 1		1
MAT	119	Algebra	3		3
ENG	101	English Comp I	3	1	3
ENG	102	English Comp II	3	1	3
BIO	105	Anatomy & Physiology I	3	3	4
BIO	106	Anatomy &	Ū	Ŭ	•
2.0		Physiology II	3	3	4
PSY	101	General Psychology	3		3
PSY	102	Psychology of Persor	nality	or or	
SOC	101	Principles of Sociology	3		3
PHY	125	Elements of Physics with Lab or	3	2	3
PHY	101	General Physics I with lab	4		4
CIS	100	Intro to Computer Applications	2	2	3
Electiv	ve	Humanities			3
					34

RECOMMENDED SEQUENCE

PROFESSIONAL RADIOGRAPHY COURSES

(FALL SEMESTER START -ON A SEAT AVAILABILITY BASIS) LEC. LAB CR. Course# Course FALL SEMESTER I RNTM 103 Intro to Medical 3 4 **Imaging** RADM 120 Radiologic Procedures I 3 Clinical Practicum - 2 days per week 7 SPRING SEMESTER I RADM 110 Radiographic 3 3 Exposure I RADM 121 Radiologic Procedures II 3 3 RNTM 102 Healthcare Today 2 Clinical Practicum – 2 days per week 8 SUMMER SESSION I RADM 122 Radiologic 2 2 Procedures III 2 RADM 135 Radiation Biology 2 Clinical Practicum – 2-4 days per week 4 SUMMER SESSION II Clinical Practicum – 2-4 days per week FALL SEMESTER II RADM 211 Radiographic 3 Exposure II RADM 212 Radiographic Physics 3 3 RADM 223 Radiologic Procedures IV 3 Clinical Practicum – 2 days per week 9 SPRING SEMESTER II RADM 201 Radiographic Pathology 2 3 RADM 213 Radiographic 3 Equipment 3 RADM 224 Radiologic Procedures V 3 3 Clinical Practicum – 2 days per week

SUMMER SESSIONS II & IV

Clinical Practicum - 2 to 4 days per week

• RADM 102 may be taken at any time if a student is to continue in Nuclear Medicine Technology or Radiation Therapy. RADM 102 is a required course for students entering nuclear medicine technology.

• RNTM signifies courses offered to radiography, nuclear medicine technology and radiation therapy students.

Each professional semester, including the 4 summer sessions, have a clinical component that MUST be met for the successful completion of the program.

RESPIRATORY CARE

ASSOCIATE IN SCIENCE DEGREE

The Respiratory Care program is a two-year course of study leading to the Associate in Science degree. The course work can also be done on a part-time basis. Clinical instruction and training is provided by the University of Medicine and Dentistry of New Jersey (UMDNJ). Hours for clinical practice may vary and travel to the clinical setting is the responsibility of the student. Respiratory care practitioners are employed in the treatment, management, control, evaluation, and care of patients with deficiencies and abnormalities associated with the cardiopulmonary system.

See paragraph "Qualifications for Admission to Degree Programs" and "Admission Requirements for Health Technologies" for desired high school background (see page 207). Also note that a minimum GPA of 2.5 is required in first-year courses in order to continue to the Respiratory Care (second year) course work.

The specific objectives of this program are that the graduate must be able to demonstrate:

- effective communication and interpersonal skills consistent with professional and employer expectations for a Respiratory Care Practitioner;
- the ability to comprehend, evaluate, and apply information relevant to their role as Respiratory Care Practitioners;



- the psychomotor skills that are consistent with professional and employer expectations for a Respiratory Care
- the ability to function as a member of the Health Care Delivery team, providing patient care in a multicultural society.

AFTER UCC

Successful completion of the program provides eligibility for licensing in New Jersey and allows graduates to sit for credentialing examinations administered by the National Board for Respiratory Care. The program is fully accredited by the Committee on Accreditation for Respiratory Care.

RECOMMENDED SEQUENCE

		FIRST YEA	R		
Cours	SE#	Course	LEC.	LAB	CR.
FALL S	EMEST	ER			
BIO	105	Anatomy & Physiology I	3	3	4
CHE	105	Chemistry-Health Sciences	3	3	4
ENG	101	English Comp I	3	1	4
PSY	101	General Psychology	3		3
MAT	119	Algebra	3		3
					17
SPRING	G SEN	NESTER			
ENG	102	English Comp II	3	1	3
BIO	106	Anatomy & Physiology II	3	3	4
BIO	108	Microbiology	3	3	4
Electiv	ve	Diversity	3		3
Electiv	ve	Humanities			3
					17

SE	COND YE	AR		
Course#	Course	LEC.	LAB	CR.
SUMMER SEM	ESTER			
	Core Concepts in Respiratory Care	1		1
RSTN 2100	Fundamentals of Respiratory Care	3	3	4
RSTN 2231	Appl. Cardiopulmo Pathophysiology I	onary 2	/	2
RSTN 2189	Clinical Practice I			1
				8
FIRST SEMESTE	ER			
RSTN 2250	Principles of Ventilo Support	atory 3	3	4
RSTN 2232	Appl. Cardiopulmo Pathophysiology II	onary 2	/	2
RSTN 2200	Cardiopulmonary Pharmacology	2		2
RSTN 2230	Cardiopulmonary Evaluation	1	3	2
RSTN 2289	Clinical Practice II			2
				12
SECOND SEM	ESTER			
RSTN 2355	Pediatric/Neonata Respiratory Care	ا 2	3	3
RSTN 2340	Patient Manageme Critical Care	nt 3		3
RSTN 2370	Long Term, Home & Rehab. Care	ፄ 3		3
RSTN 2389	Clinical Practice III			3
				12
Students register for the professional phase				

Students register for the professional phase courses at UMDNJ and pay the UMDNJ undergraduate tuition rate and fees.

SOCIAL SERVICES

ASSOCIATE IN SCIENCE DEGREE

In today's diverse and increasingly more complex society, there is a need for individuals trained in a professional and educational curriculum which prepares students with work in a plethora of careers, including Social Services case aide, Gerontology Worker, Youth Worker, Crisis Counselor and Psychiatric Technician. The Social Services program will expose students to a multidisciplinary approach to understanding society and human behavior. Students will gain the practical and theoretical education necessary for success professionally or at a four-year college or university.

Upon completion of the Social Services A.S. program, students will gain the initial education and training for future careers in various occupations within Human and Social Services. Associate in Science programs in general are primarily designed for students who plan to transfer to four-year colleges and universities. UCC has transfer agreements with a number of colleges and universities in New Jersey and throughout the United States. Graduates of this program can obtain work as aides/assistants in daycare centers, mental health agencies, social service agencies, institutions for the physically or mentally challenged, prisons, hospitals and substance abuse agencies. Those students who later earn a bachelor's degree and beyond may hold positions such as social service case managers, counselors, administrators or educators.



RECOMMENDED SEQUENCE

	FIRST YEA	R		
Course#	Course	LEC.	Lab	Cr.
FIRST SEMES	TER			
ENG 101	English Comp I	3	1	3
SOC 101	Principles of Sociology	3		3
Laboratory	Science	3	3	4
CIS 100	Intro to Computer Ap	pplic	ation	S
CIS 101	Intro to Information S	Syste	ms C)R
	Communications Technologies			3-4
HIS 101 or	HIS 102 or HIS 103 or GOV 201	3		3
			16	-17
SECOND SE	MESTER			
ENG 102	English Comp II	3	1	3
HUS 104	Social Research	3		3 3 3
PSY 101	General Psychology	3		3
MAT 117	Intro to	٠,		_
COC 100	Mathematical Ideas	` 3		3
	Social Problems OR			
SOC 203	International Social Problems	3		3
HUS 101	Community Resource	s 3		3

SECOND YEAR

18

Course#	Course	LEC. LA	AB CR.
THIRD SEMES	STER		
ENG 128	Dynamics of Comm	unicatio	n OR
ENG 129	Public Speaking	3	3 3
SOC 207	Social Inequality	3	3
SOC 209	Intro to Social Policy	y 3	3
PSY 102 or	PSY 205 or HUG 101	3	3
Elective	200-Level Humanitie	-	3
			15
FOURTH SEM	NESTER		
SOC 206	Minorities in	•	•
\\/\\C 101	American Life	3	3
WW2 101	or URS 101 or HUS 201	3	3
Psychology	Option** OR		
Sociology (Option***	9	9
			15
*A higher le	vel mathematics course substituted	may be	
PSY 212 F	Abnormal Psychology (Psychology of Aging O	R	
	Psychology of Women (Child Abnormal Psycho		3
Elective 200-	Level Psychology cours	e 3	3
PSY 215 Fiel	ldwork in Psychology	3	3
	9 Women and Work C 3 Marriage and Family		3
	00-Level Sociology cou Fieldwork in Sociology		3

SOCIOLOGY

Option offered through the Liberal Arts ASSOCIATE IN ARTS DEGREE

Sociology is the scientific study of human society and social interaction. This program helps students understand and use sociological tools and insights to work effectively in a diverse society. The program is for students who plan to transfer to a fouryear institution and major in Sociology or other related fields.

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

- demonstrate general competencies in oral and written communication when communicating ideas in a diverse society;
- demonstrate general competencies in knowledge of subject matter in the liberal arts such as mathematics, the natural sciences, and social sciences;
- demonstrate an understanding of the basic principles and concepts of Sociology to cultivate Sociology perspectives;
- apply basic concepts, theoretical frameworks, and analytical tools to the analysis of everyday life and world problems;
- demonstrate an understanding of the research process and research methods used in the social sciences for examining human society and social interaction;

- develop critical thinking and problemsolving skills in dealing with contemporary
- demonstrate appreciation and understanding of diverse cultures;
- use computerized and online databases to find published research and use APA guidelines to format citations;
- develop capability to continue the learning experience;
- pursue transfer to a baccalaureate program in Sociology or Liberal Arts.



AFTER UCC

Graduates can transfer to a four-year degree program, majoring in the Social Sciences or Liberal Arts, or other areas of interest and are eligible to take advantage of articulation agreements Union County College has with four-year colleges and universities. See a transfer counselor for details.

RECOMMENDED SEQUENCE

FIRST YEAR					
Course#	Course	LEC.	Lab.	Cr.	
FIRST SEMES					
SOC 101	Principles of Sociology	3		3	
ENG 101	English Comp I	3	1	3	
MAT 119	Algebra	3		3	
HIS 101	Intro to Western Civilization I	3		3	
Modern La	nguage	3		3	
				15	
SECOND SE	MESTER				
ENG 102	English Comp II	3	1	3	
HIS 102	Intro to Western				
	Civilization II	3		3	
SOC 102	Social Problems	3		3	
PSY 101	General Psychology	3		3	
MAT 127	Elementary Statistics	4		4	
Modern La	nguage	3		3	
				19	

		V/-	
O(O) i	ND .	Y 13	ΔK

COURSE#	Course	LEC.	LAB.	CR.
THIRD SEME	STER			
ENG 128	The Dynamics of Communication or			
ENG 129	Public Speaking	3		3
CIS 100	Intro to Computer Applications	2	2	3
SOC 273	Marriage & Family	3		3
BIO 102	Human Biology with	lab	or	
BIO 107	Decisions for Wellness	3	3	4
WMS/SOC	C 219 Gender & W	ork o	r	
WMS 101	/SOC 103 Gender, Culture, & Society	3		3
				16

FOURTH SEMESTER

LOOKIH DEW	JESTEK		
SOC 206	Minorities in		
	American Life	3	3
SOC Electiv	ve: Students can ch	oose one	
	course from the fo SOC 103, SOC 2 SOC 207, SOC 2 SOC 213, SOC 2 SOC 219	llowing li 203, SOC 209,	st: 204,
	SOC 213, SOC 2 SOC 219	'15, '3	3
GOV 201	American Govt. & Politics	3	3
FIA 108	Appreciation of A	rt or	
Elective	200-Level Humani	ties 3	3
Open Elect	ives	3	3
			15

Open Elective (select from following):

ENG 205, ENG 207, ACC 103, AST 101, AST 102, ECO 201, 202, URS 101, MAT 125, MAT 144, GEO 201, PSY 102, PSY 205, PSY 207, PSY 208, PSY 211, PSY 212, PSY 218, PSY 219, PHY 101, PHY 102, PHY 105, PHY 111, FIA 108, FIA 111, EGG 111, EGG 251, BUS 101, BUS 105, BUS 107, HIS 201, TIN 202, CRJ 101, CRJ 206, CHE 106, CHE 124, TRN 101, Modern Languages, GOV 202, GOV 215, GOV 216, GOV 205, BIO 103, BIO 104, BIO 109, BIO 118, CSC 100, CSC 231, EIP 201, CIS 101, CIS 111, COM 101, COM 102, COM 105, COM 108, COM 214, COM 215, COM 112

ASSOCIATE IN SCIENCE DEGREE

By virtue of an agreement between Union County College and the Muhlenberg Regional Medical Center Harold B. and Dorothy A. Snyder Schools, Plainfield, N.J., Union County College confers a degree of Associate in Science upon graduates of the Hospital-sponsored school who have fulfilled the requirements for the degree specified by Union County College.

Students in the program earn college credits in English, mathematics, biology, physics, social sciences and humanities electives in classes and laboratories conducted at Union County College. Diagnostic Medical Sonography courses are the primary responsibility of the program. Students must apply to Muhlenberg for admission to the Diagnostic Medical Sonography Program by March 31 for the fall semester. Candidates must be high school graduates and must have had high school biology and algebra.

ADMISSION INTO THE PROGRAM IS COMPETITIVE.

The Joint Review Committee on Education in Diagnostic Medical Sonography and the Commission on Accreditation of Allied Health Education Programs accredits Muhlenberg Regional Medical Center Harold B. and Dorothy A. Snyder School of Diagnostic Medical Sonography.

Students are enrolled in the School of Diagnostic Medical Sonography and are matriculated by Union County College. They are eligible to participate in all student activities at Union County College and have the same rights and privileges as all other college students.

Graduates are eligible to sit for the credentialing examinations of the American Registry in Radiologic Technology and the American Registry of Diagnostic Medical Sonography.

Students interested in the program should contact the Muhlenberg Regional Medical Center Harold B. and Dorothy A. Snyder School of Diagnostic Medical Sonography at (908) 668-2400 or (908) 668-2405 for additional information.

Graduates of the School of Diagnostic Medical Sonography will be able to:

- provide patient care as required in the ultrasound department;
- perform diagnostic sonographic studies, including patient preparation, instrument preparation, patient positioning, study acquisition and computer processing;
- utilize good communications skills, problem-

- solving skills, and conflict management techniques;
- engage in good ultrasound safety practices;
- perform quality control procedures on sonography equipment;
- perform administrative duties as required of sonography technologists;
- practice the principles of medical ethics and adhere to the regulations and laws governing the practice of diagnostic medical sonography;
- evaluate current issues in health care.

Leading to a Diploma in Diagnostic Medical Sonography from Muhlenberg Regional Medical Center Harold B. and Dorothy A. Snyder Schools and an Associate in Science Degree from Union County College.

Graduates will also be prepared to advance to a Bachelor's Degree and will be counseled on an individual basis regarding this intention.

RECOMMENDED SEQUENCE 28-MONTH FULL-TIME CURRICULUM

STUDENTS MUST COMPLETE THE GENERAL EDUCATIONAL REQUIREMENTS FOR THE ASSOCIATE IN SCIENCE DEGREE AND CAAHEP ENTRANCE ACCREDITATION REQUIREMENTS BEFORE THEY CAN ENTER INTO THE PROFESSIONAL PHASE. THE FOLLOWING COURSES COMPRISE THE GENERAL **EDUCATIONAL REQUIREMENT:**

GENERAL EDUCATION

LEC. LAB. CR.

COURSE

Course#

EALL SEAFEST	er – First Semester			
RNTM 101	Medical Terminology Online	1		1
BIO 105	Anatomy & Phisiolog Part I	у 3	3	4
ENG 101	English Comp I	3		3
MAT 119	Algebra	3		3
PSY 101	General Psychology	3		3
SPRING SEM	ester – Second Semes	STER		
IDH 101	Fundamentals of Hea	ılth		2
	& Disease	3		3
BIO 106	Anatomy & Phisiolog Part II	у 3	3	4
HUG 101	Multidisciplinary Pers	spec	ctives	
	on Aging '	'3		3
DMSM 101	Patient Care	2		2
PHY 125	Elements of Physics	3		3
PHYL 125	Elements of Physics L	ab	2	1
				30

RECOMMENDED SEQUENCE

	PHASE	
Course#	Course	LEC. LAB. CR.
• • • • • • • • • • • • • • • • • • • •	ND II - THIRD SEMES	TER
DMSM 100	_	2 1 2
DMSM 102	Sonography Cross-Sectional	
DMSM 103	Anatomy Ultrasound Physic	2 2 cs &
DMSM 105	Instrumentation P Ultrasound of the	
CLPS 901	Abdomen I Clinical Sonogra	3 3
CLI 3 701	(140 clinical hou	ors + 50 hours
	supervised lab ir student)	nstruction per
	siodeiiij	0 0
FALL SEMESTE	er – Fourth Semest	ER
DMSM 104		cs &
	Instrumentation Pt II	3 3
DMSM 106	• • • •	-
	Abdomen II	3 3
DMSM 107	Ultrasound of the Female Pelvis	3 3
RNTM 102	Healthcare Today	-
	Online	2 2
CLPS 902	Clinical Sonogra (350 clinical hou	phy II
	supervised lab ir	struction per
	student)	0 0
SDDING SEME	STER - FIFTH SEMES	TED
DMSM 109		ILK
	Sonography I	3 3
DMSM 111	Ultrasound of Sup Structures I	perficial 3 3
CIS 100	Intro to Compute	•
	Applications	2 2 3
CLPS 903	Clinical Sonogra (360 clinical hou	phy III
	supervised lab in	istruction per
	student)	0 0
SUMMER SES	SIONS I AND II - SI	XTH SEMESTER
ENG 102	English Comp II	
	(online)	3 3
DMSM 11/	Obstetrical Sonography II	3 3
DMSM 118		
	Structures II	2 2
CLPS 904	Clinical Sonogra (240 clinical hou	phy IV irsl 0 0
	(240 cillical flot	11310 0
FALL SEMESTE	R - SEVENTH SEMES	TER
DMSM 116	0 /	3 3
CLPS 905	Clinical Sonogra (450 clinical hou	phy V urs) 0 0
	(450 cillical not	113] 0 0
Total credit	s for the progran	n 72
Total clinica	al hours:	1540
Total super	vised laboratory	
hours per s		81

SPORT MANAGEMENT

ASSOCIATE IN APPLIED SCIENCE DEGREE

The program at UCC has a solid foundation of business, computers, and liberal arts courses. This permits more options with the greatest potential for professional development in terms of job responsibilities and monetary compensation. It provides students with opportunities to develop what most business employers perceive as entry-level skills (e.g., public speaking, writing for business, and general economics). It also introduces students to financial accounting, marketing, and legal issues applicable to the industry.

Specifically, the program objectives that the graduates must be able to demonstrate are:

- critical thinking and problem-solving skills to solve and understand problems;
- interpersonal and communication skills necessary in a diverse society;
- knowledge of technology and its use in sport;
- a concern for the societal issues involved in sport management;
- the ability to state how sport has impacted local, national, and international issues;
- a recognition for the value of collaborative work in the contemporary sport management environment;



- knowledge of finance, human resources, marketing, legal issues, and budgeting which are integral to a career in sport management;
- knowledge of the possible careers available;
- the ability to locate, discern, and defectively use information to solve issues and/or problems;
- knowledge of good work ethics and professionalism.

AFTER UCC

Graduates of this program may work in one of the many areas of this rapidly growing industry.

Students may also transfer to a college or university that offers a bachelor's degree in Sport Management.

RECOMMENDED SEQUENCE

FIRST YEAR						
Course#	Course	LEC.	Lab.	CR.		
FIRST SEMES	TER					
BSM 101	Intro to Sport					
	Management	3		3		
ACC 103	Accounting I	4		4		
CIS 100	Intro to Computer					
	Applications	2	2	3		
ENG 101	English Comp I	3		3		
BUS 105	Organization &					
	Management	3		3		
				16		
SECOND SE	MESTER					
PSY 101	General Psychology	3		3		
BSM 110	Evolution of America	an				
	Sports	3		3		
ENG 122	Introductory Technic	al &				
	Business Writing	3		3		
ACC 104	Accounting II	4		4		
BUS 107 P	ersonnel Managemer	nt 3		3		
				16		

Course#	Course	LEC. LA	AB. CR.
THIRD SEME	STER		
ENG128	Dynamics of Comm	nunicatio	on Or
ENG 129	Public Speaking	3	3
MAT 143	Elementary Math Analysis I	4	4
PED 101	Concepts of Adult Fitness	2	2
SOC 101	Principles of Sociology	3	3
BUS 110	Business & Technology	3	3
BSM 205	Sports in Society	3	3
FOURTH SEA	AECTED		18
ECO 202	Principles of Economics II	3	3
MAT 144	Elementary Math Analysis II	4	4
BUS 208	Principles of Marketing	3	3
BSM 210	Sport & Law	3	3
BUS 290	Co-op Education Experience *		3
			16

* Students planning to transfer may take COM 101, ECO 201, or MAT 246. Students should ascertain from the transfer institution which course is preferred.

TECHNICAL STUDIES

ASSOCIATE IN APPLIED SCIENCE DEGREE

The A.A.S. degree in Technical Studies will provide a means for students to acquire credits based on technical training within their employing organization. Credit will be granted to individuals who have successfully completed courses in a corporate, industrial or military training program or through a certified apprenticeship training program in the building and construction trades and who are interested in pursuing an associate in applied science degree according to the following guidelines:



Collegiate-level depth/breath of curriculum beyond entry-level requirements

- Number of lecture/lab hours of study
- Company and trainer certifications
- Prior completion of prerequisites or predetermined skill level
- Types of assessments
- Level of supervision
- Cooperative/apprenticeship experiences associated with the training

The specific objectives of this program are that the graduate should be able to:

- compete effectively in a technology based global economy;
- demonstrate the necessary skills to be more productive in his/her chosen profession and career;
- demonstrate the ability to effectively communicate and present information in a logical and systematic manner;
- display positive interaction interpersonally as a member of a technological team and/or employer representative;
- have the initiative and skills to continue to educate her/himself and remain abreast of the state-of-the-art through the review and interpretation of technical literature;
- · show an awareness of community, societal and ethical responsibilities and obligations associated with being awarded a college degree.

AFTER UCC

Upon graduating the student will have increased opportunities for professional and personal advancement. This A.A.S. degree is not transferable to a four-year institution, but many of the nontechnology courses may transfer.

RECOMMENDED SEQUENCE

	FIRST YEAR	2					
Course#	Course	LEC.	Lab.	Cr.			
FIRST SEMESTER							
ENG 101	English Comp I	3	1	3			
MAT 119	Algebra*	3		3			
Elective	Social Science	3		3			
Up to 8 Te	chnical Studies credits awarded	ma	y be	8			
	awaraea			17			
SECOND SE	MESTER			17			
ENG 122	Technical Writing	3	1	3			
CSC 115	Intro to						
	Programming	2	2	3			
Elective	Technical	3	3	4			
Up to 8 Te	chnical Studies credits awarded	ma	y be	8			
-				18			
THIRD SEME	STER						
ENG 128	Dynamics of Commu	nico	ation	OR			
ENG 129	Public Speaking	3		3			
PHY 125	Elements of Physics	3		3			
PHYL 125	Elements of						
	Physics Lab		2	1			
Elective	Technical	3	3	4			
Up to 5 Te	chnical Studies credits may be awarded			5			
				16			
FOURTH SE	MESTER						
Elective	Humanities	3		3			
Elective	Technical	3	3	4			
Elective	Any course			3			
Up to 4 Technical Studies credits							
	may be awarded			4			
				14			

* Higher course may be indicated by math placement test

Students will meet with an advisor to select an area of concentration from among all of UCC's technically-oriented A.A.S. degree programs.

A faculty advisor for the selected concentration area will develop with each student a plan of study to include at least 10 credits from the concentration area.

Between 3 and 25 credits may be earned as block credits for corporate, industrial, or military training programs after review by faculty of a related program and/or the appropriate program coordinator. These credits will be posted to a student's UCC transcript on a matching basis as students earn credits for courses taken at UCC.

Upon consultation with the faculty advisor, additional technical electives may be selected from the following areas: ARC, AST, BIO, CHE, CIT, CSC, EET, GEY, MAT, and PHY, if required.

TELEVISION

Option offered through Communications ASSOCIATE IN ARTS DEGREE

This program is designed for transfer to a bachelor's degree granting institution. Course work includes the theory and practice of television production and video editing. Internships in professional organizations are available. Students are required to consult with an advisor regarding appropriate option and course selection for their needs and interests.



The specific objectives of this program are that the graduate must be able to demonstrate:

- the ability to communicate ideas verbally and in writing with a level of sophistication and fluency appropriate to college-level discourse;
- a recognition of the necessity of keeping abreast of current cultural, social and political issues and events as a cornerstone of citizenship in a democratic society;
- a level of comfort and proficiency with standard productivity software such as word processors, presentation managers and web browsers, as well as an understanding of the ways in which these tools are applied in the communications
- an awareness that learning is a complex, lifelong process and not an event, a phenomenon, not an outcome;
- facility with the tools and technology encountered in a professional television studio or video production facility;
- the ability to work effectively as a member of a team.

AFTER UCC

Graduates may transfer to four-year colleges or universities in a similar degree program or other areas of interest and are eligible to take advantage of the many transfer/articulation agreements Union County College has with some of the top four-year colleges and universities in the country. See a transfer counselor for details.

RECOMMENDED SEQUENCE

		FIRST YEA	R		
Course	#	Course	LEC.	LAB	CR.
FIRST SE	MES	TER			
COM 1	01	Mass Communications	3		3
ENG 1	01	English Comp I	3	1	3
PSY 1	01	General Psychology	3		3
MAT		A 4-credit Mathema	tics		
		course	4		4
COM 1	00	Communications Technologies	3	2	4
					17
SECOND	SEA	MESTER			
COM 1	06	Intro to Television: Pr	rodu	ction	&
		Theory	3		3
ENG 1	02	English Comp II	3	1	3
Laborate	ory	Science	3	3	4
ENG 1	28	The Dynamics of Co OR	mmu	nica	tion
ENG 1	29	Public Speaking	3		3
Elective		Social Science	3		3

16

15

SECOND YEAR						
Course	LEC.	Lab Cr.				
FIRST SEMESTER						
Television Field						
Production	3	3				
200-Level Course	3	3				
Intro to Western						
Civilization I	3	3				
American Govt.						
& Politics	3	3				
Humanities	3	3				
Social Science	3	3				
		18				
MESTER						
Digital Video & Mu	ltimed	dia				
Imaging	3	3				
200-Level Course	3	3				
Intro to Western						
Civilization II	3	3				
American National						
Govt.	3	3				
Humanities	3	3				
	TER Television Field Production 200-Level Course Intro to Western Civilization I American Govt. & Politics Humanities Social Science AESTER Digital Video & Mu Imaging 200-Level Course Intro to Western Civilization II American National Govt.	TER Television Field Production 3 200-Level Course 3 Intro to Western Civilization I 3 American Govt. & Politics 3 Humanities 3 Social Science 3 AESTER Digital Video & Multimed Imaging 3 200-Level Course 3 Intro to Western Civilization II 3 American National Govt. 3				

* Mathematics requirement must be MAT 117 or higher

URBAN STUDIES

Option offered through Liberal Arts ASSOCIATE IN ARTS DEGREE

This program is designed to enable students in the Liberal Arts area to concentrate on the history, problems, and issues of urban and suburban communities in order to understand more fully the unique challenges which cities present and to lay a foundation for future study and possible employment in such fields as urban administration and social work. Students may concentrate in sociology or government or choose a combination of courses from each of these areas.

See paragraph "Qualifications for Admission to Degree Programs" for desired high school background (see page 207).



The specific objectives of this program are that the graduate must be able to demonstrate:

- an ability to think critically about issues related to the development of urban America;
- his/her successful defense of positions taken on urban issues;
- an ability to analyze material dealing with relevant urban problems;
- an understanding of the significant differences between urban and suburban living;

- the knowledge to exercise the rights and responsibilities of a citizen;
- communication skills which will allow him/her to effectively deal with members of other cultures;
- an awareness of the various forces that help shape the urban world;
- an understanding of the ethical implications of various urban policies.

AFTER UCC

Graduates may transfer to a four-year college or university and are eligible to take advantage of the many transfer/articulation agreements Union County College has with some of the top four-year colleges and universities in the country. See a transfer counselor for details.

RECOMMENDED SEQUENCE

FIRST YEAR					
Course#	Course	LEC.	LAB	CR.	
FIRST SEMESTER					
ENG 101	English Comp I	3	1	3	
GOV 201	American Govt. & Politics	3		3	
Laboratory	Science+ or				
MAT				3-4	
SOC 101	Principles of Sociology	3		3	
URS 101	Intro to Urban Studies	3		3	
			15	-16	
SECOND SE	MESTER				
ENG 102	English Comp II	3	1	3	
	American Nationa	l Govt	. or		
SOC 102	Social Problems	3		3	
Laboratory	Science+ or				
MAT	Mathematics*+			3-4	
Electives				6	
			1.5	-16	

SECOND YEAR

Cours	SE#	Course	LEC.	LAB CR.	
FIRST SEMESTER					
ECO	201	Principles of Economics I	3	3	
HIS	201	US History to 1865	3	3	
PSY	101	General Psychology	3	3	
Electiv	/e	Govt. or	^	0	
		Sociology	3	3	
Electiv	es/			6	
				18	
SECON	ND SE/	MESTER			
ECO	202	Principles of Economics II	3	3	
HIS	202	US History since 1865	3	3	
GOV	204	Public Administration	1 3	3	
SOC	206	Minorities in			
		American Life	3	3	
Electiv	/e	Social Science		3	
Electiv	/e			3	
				18	

- + Select either two semesters of laboratory science or two semesters of mathematics.
- * MAT 117 or higher. See Liberal Arts Programs guidelines under Mathematics course listings.

Courses recommended to fill elective requirements:

VISUAL ARTS/FINE ARTS

Option offered through Liberal Arts ASSOCIATE IN ARTS DEGREE

The Visual Arts option will approach sculpture, architecture, painting, and drawing from a dual perspective. Students will explore the history and appreciation of art in the classroom and develop introductory and advanced skills in a variety of media in the drawing and painting studio.

See paragraph "Qualifications for Admission to Degree Programs" for desired high school background (see page 207.

The specific objectives of this program are that the graduate must be able to demonstrate:

- a practical and theoretical understanding of formal creative issues, including composition, balance, space, line, and form;
- the conceptual and perceptual skills associated with two-dimensional imaging;
- a knowledge and familiarity of the use of diverse materials and various media and techniques employed in foundation level drawing and painting studio activities;
- a critical and aesthetic knowledge of the Visual Arts through an Art historical overview;
- a portfolio of work that demonstrates competency in the visual arts area undertaken and provides the necessary visual support material needed for transfer acceptance into a four-year program or an entry-level vocational position.



AFTER UCC

Graduates of this program can transfer to a four-year college or university into a similar program or other areas of interest and are eligible to take advantage of the many transfer/articulation agreements Union County College has with some of the top four-year colleges and universities in the country. See a transfer counselor for details.

RECOMMENDED SEQUENCE FIDCT VEAD

		FIKSI TEA	IR		
Cour	SE#	Course	LEC.	Lab	Cr.
First Semester					
ENG	101	English Comp I	3	1	3
FIA	109	Drawing I	3		3
MAT	127	Elementary Statistic	cs OR		
MAT	143	Elementary Mathe	matica		
		Analysis I´	4		4
Mode	rn Lai	nguage	3		3
HIS	101	Intro to Western			
		Civilization I	3		3
					16
SECON	ND SE/	MESTER			
ENG	102	English Comp II	3	1	3
FIA	110	Painting I	3		3
Modern Language		3		3	
HIS		Intro to Western			
		Civilization II	3		3
1 1		Science	3	3	4

16

	5	ECOND YE	AR		
Cour	SE#	Course	LEC.	LAB CR.	
FIRST	FIRST SEMESTER				
ENG		200-Level Literature			
		course	3	3	
FIA	115	Drawing II	3	3	
PSY	101	General Psychology	3	3	
ECO	201				
		Economics I	3	3	
MAT	MAT 144 Elementary Mathematical Analysis II OR			l	
Labor	atory	Science	4	4	
FIA	108	Appreciation of Art	OR		
FIA	111	History of Art	3	3	
				19	
SECON	ND SE/	MESTER			
ENG	128	Dynamics of Commi	unica	tion OR	
ENG	129	'	3	3	
FIA	116	Painting II	3	3	
FIA	224	Digital Imaging for A	Art &	t .	
		Photography	3	3	
GOV	202	American National	Govt	. OR	
PHI	205	Intro to Philosophy	3	3	
PSY	102	Psychology of			
		Personality	3	3	
FIA		Diversity Course*	3	3	
				18	

* Students can take FIA 105 Music Appreciation or FIA 117 Music in the 20th Century to fulfill the Fine Arts Diversity course requirement.

WOMEN'S/GENDER STUDIES

Liberal Arts Option offered through Psychology/Sociology Department ASSOCÍATE IN ARTS DEGREE

The mission of the Women's/Gender Studies program is to recognize the increasingly important role that women have played and will continue to play in the numerous and diverse disciplines. Women's/Gender Studies is an interdisciplinary program that examines both the "natural" or biological differences and the social, cultural, political, historical, and economic factors that produce differences in how women live and are perceived in the world. These differences manifest themselves not only in the everyday lives of men and women, but also in the functioning of our social institutions and systems of thought and representation.



The specific objectives of this program are that the graduate shall be able to demonstrate:

- critical thinking and problem-solving skills;
- the ability to communicate effectively with others in a diverse society;
- an awareness of the diverse factors that shape the world, including gender and sexuality, in order to keep pace with contemporary issues in an ever-changing society;
- the ability to learn independently and direct their own course of learning and specialization and be able to present those findings to a group of peers;
- the ability to recognize the basic differences between gender and sexuality and understand that there are dynamic social definitions that vary across time, place, politics and ideologies;

- the ability to discuss the fact that all the disciplines have been affected by the engendered historical and political contexts and even the sciences are not as impartial, objective or neutral as has traditionally been thought;
- knowledge of the important female figures within various disciplines;
- the ability to recognize the need for continuing efforts to assure equality of women and other minorities in society.

AFTER UCC

UCC graduates have the opportunity to matriculate at four-year colleges, pursuing either a degree in Women's/Gender Studies or other related majors such as Psychology, Sociology, Communications, Education, or Law. Graduates are eligible to take advantage of the many transfer/articulation agreements Union County College has with some of the top four-year colleges and universities in the country. See a transfer counselor for details.

RECOMMENDED SEQUENCE

CROSS-LISTED COURSES GIVE STUDENTS THE OPPORTUNITY TO REGISTER EITHER WAY, TO MEET TRANSFER OR OTHER NEEDS.

		FIRST YEA	R		
Cour	SE#	COURSE	LEC.	LAB	Cr.
FIRST	SEMES	TER			
			3	1	3
HIS	101	Intro to Western Civ OR	'ilizat	ion l	*
HIS	105	Afro-American History I*	3		3
SOC	101	Principles of Sociology	3		3
Mode	rn Laı	nguage ,			
WMS	101,	/SOC 103 Gender, Society	Cultu 3	ıre &	3
					15
SECON					
ENG		English Comp II		1	3
HIS	102	Intro to Western Civ	⁄ilizat	ion II	*
HIS	106	Afro-American History II*	3		3
MAT	119	Algebra* OR	3 3		3
MAT	125	Survey of Special To Mathematics*	opics 4	in	4
	rn Laı	nguage	3		3
CIS	100	Intro to Computer Applications**	2	2	3
				18-	19

	Course	LEC.	LAB	CK.
FIRST SEMES	STER			
ENG 128	Dynamics of Commu	Jnico	ition (ЭR
ENG 129	Públic Speaking	3		3
	118 Intro to Biology	of \	Wom	en
	OR O			
BIO	Any 4-credit BIO	_	•	
	course	3	3	4
ENG/WM	S 245 Women	2		3
COV 201	in Literature I	ال مانام	. OD	3
	American Govt. & P	OIITIC	s OR	
GOV 202	American National Govt.*	3		3
AAAT /\A/AA	S 230 Women in M	•	matic	ر ک
/V/AI/ VV/VI	Science	3	manc	s &
PSY 101	General Psychology	3		3 \$ & 3 3
				19
SECOND SE	MECTED			17
	MESIEK			
	S 247 Women	3		3
ENG/WM	S 247 Women Authors	3		3
ENG/WM	S 247 Women Authors 218 Psychology of	3		3
ENG/WM PSY/WMS	S 247 Women Authors 218 Psychology of Women	3	stem*	Ĭ
ENG/WM PSY/WMS	S 247 Women Authors 218 Psychology of	3	stem*	Ĭ
ENG/WM PSY/WMS GOV 216	S 247 Women Authors 218 Psychology of Women Women & the Justice OR Women & American	3 e Sys	stem*	3
ENG/WM PSY/WMS GOV 216 GOV 215	S 247 Women Authors 218 Psychology of Women Women & the Justice OR Women & American Politics*	3 e Sys	stem*	Ĭ
ENG/WM PSY/WMS GOV 216 GOV 215	S 247 Women Authors 218 Psychology of Women Women & the Justice OR Women & American Politics* Field Experience in	3 e Sys		3
ENG/WM PSY/WMS GOV 216 GOV 215 PSY 215	S 247 Women Authors 218 Psychology of Women Women & the Justice OR Women & American Politics* Field Experience in Psychology	3 e Sys		3 3 1-3
ENG/WM PSY/WMS GOV 216 GOV 215 PSY 215 FIA	S 247 Women Authors 218 Psychology of Women Women & the Justice OR Women & American Politics* Field Experience in Psychology Fine Arts Elective	3 e Sys		3
ENG/WM PSY/WMS GOV 216 GOV 215 PSY 215 FIA	S 247 Women Authors 218 Psychology of Women Women & the Justice OR Women & American Politics* Field Experience in Psychology Fine Arts Elective S 219 Women	3 = Sys		3 3 1-3 3
ENG/WM PSY/WMS GOV 216 GOV 215 PSY 215 FIA	S 247 Women Authors 218 Psychology of Women Women & the Justice OR Women & American Politics* Field Experience in Psychology Fine Arts Elective	3 e Sys		3 1-3 3

^{*}Consult with Program Coordinator concerning course choices if you plan to transfer.

^{**}Students transferring to Rutgers: CIS 100 will only transfer if combined with CIS 101 or 115

CERTIFICATE

The American Sign Language and Deaf Studies Certificate of Completion Program is designed for individuals who currently have a college degree (Associate degree or higher) and are interested in the fields of Deaf Studies, linguistics, communications, psychology, social work, rehabilitation, education of the Deaf and other related areas. The program provides a multi-disciplinary and interdisciplinary approach in American Sign Language and Deaf Studies. Areas of scholarly pursuit include cultural and historical studies, linguistic examination, and literary analysis, as well as the study of the language in its conversational form. Graduates will be prepared for entrylevel positions working with Deaf persons. This program can be completed either as part-time or fulltime in the day or evening.

Students are admitted to the ASL and Deaf Studies Program when they have demonstrated English competency and have satisfactorily completed the two semesters of the Pre-entry-level.

Deaf and Hard of Hearing students are encouraged to participate in this program.

The specific objectives of this program are that the graduate must be able to demonstrate:

- proficiency in the practices of communication with members of the Deaf community;
- competency in the use of American Sign Language and English;
- · knowledge of the studies of American Sign Language as a distinct modern language, including scholarly pursuit of cultural and historical studies, linguistics and literacy analysis, as well as the language in its conversational and discourse styles;
- understanding of the social and cultural characteristics of American Deaf Culture, general and diverse American culture;

- understanding of the psychological and social factors affecting diverse populations within the Deaf community;
- effective written, spoken, and signed communication skills;
- an ability to learn independently and to direct his/her own learning;
- critical thinking and problem-solving skills, with emphasis on using community resources to solve specified problems;
- · awareness of one's rights and responsibilities as a professional and/or citizen in a world community.

GENERAL PROGRAM REQUIREMENTS

A grade of 'A', 'B', or 'C' in ASL 101 - ASL I and ASL 102 - VGC I meets satisfactorily the prerequisite requirement to enroll in ASL 103 . – ASL II, ASL 104 – VGC II, and HUD 104 – Fingerspelling. A grade of 'D' or 'F' in one of these courses does not allow the student to take the course sequences. The course(s) may be repeated once as this is the policy of Union County College.

A grade of 'A' or 'B' in ASL 103, ASL 104 and HUD 104 meets the prerequisites for ASL&DS and IDP. In proceeding courses (ASL 201, ASL 202, ASL 205, ASL 208, ASL 210) a grade of 'C' necessitates a conference with the instructor(s) and coordinator for consultation. A 'C' in more than one of these courses disqualifies the student from continuing in the program. A grade of 'D' or 'F' disqualifies the student from entry into or continuation of ASL&DS and ASL - English Interpreting Program (AEIP).

Conferences with respective instructor(s) and coordinators are by appointment only. Information about the American Sign Language and Deaf Studies and Interpreters for Deaf Programs may be obtained at the ASL&DS and AEIP office (Room 3, Plainfield Campus) or the Counseling Office at the Plainfield or Cranford campuses.

RECOMMENDED SEQUENCE

PRE-ENTRY-LEVEL

Course#	Course	LEC. LAB CR.				
FALL SEMESTER						
ASL 101	American Sign Language I	3.5 1.5 4				
ASL 102	Visual-Gestural Co Techniques	ommunication 1.5 1.5 2				
		6				
Spring Semester						
ASL 103	American Sign Language II	3.5 1.5 4				
ASL 104	ASL Classifiers	2				
HUD 104	Fingerspelling	0.5 1.5 1				
		7				

Course#	Course	LEC.	Lab (CR.	
FALL SEMES	TER				
ASL 201	American Sign Language III	2	3	3	
ASL 205	Linguistics of Ame Language		ign 1.5	3	
				6	
Spring Semester					

Spring Semester							
ASL 202	American Sign Language IV	2	3	3			
ASL 208	American Deaf Culture	3		3			
PSY 207	Social Psychology	3		3			
	·			0			

SECOND YEAR

Course#	Course	LEC.	LAB	Cr.
FALL SEMEST	TER			
ASL 203	American Sign Language V	3	3	3
ENG 128	Dynamics of Communication	3		3
ENG 216	Contemporary Literature	3		3
				9
SPRING SEM	NESTER			
ASL 210	ASL/Deaf Literature	3		3
Elective	Humanities	3		3
				6

CERTIFICATE

The American Sign Language-English Interpreting Certificate Program is designed for individuals who currently have a college degree (Associate degree or higher) and are interested in the field of American Sign Language-English Interpreting. The program provides a multi-disciplinary and interdisciplinary approach of instruction. The five-semester program (after the pre-entry-level is completed) is designed to equip students with knowledge and skills for entry-level sign language interpreting. Areas of scholarly pursuit include cultural and historical studies, linguistic examination, and literary analysis, as well as the study of the language in its conversational form. The courses within the program are geared to preparing students for evaluation for certification through the National Association of the Deaf-Registry of Interpreters for the Deaf National Interpreter Certificate. Graduates will be prepared for entry-level interpreting positions working with Deaf persons. This program can be completed either as part-time or full-time in the day or evening.

GENERAL PROGRAM REQUIREMENTS:

A grade of 'C' or better in ASL 101 - ASL I and ASL 102 - VGC I meets satisfactorily the prerequisite requirement to enroll in ASL 103 – ASL II, ASL 104 – VGC II, and HUD 104 – Fingerspelling

A grade of 'B' or better in ASL 103, ASL 104 and HUD 104 meets the prerequisites for ASL&DS and ASL-English Interpreting Program. In proceeding courses (ASL 201, ASL 202, ASL 205, ASL 208, ASL 210, HUD 105, HUD 106, HUD 103, HUD 108, HUD 215 and HUD 216) a grade of 'C' necessitates a conference with the instructor(s) and coordinator for consultation. A 'C' in more than one of these courses disqualifies the student from continuing in the program. A grade of 'D' or 'F' disqualifies the student from entry into or continuation of ASL&DS and ASL-English Interpreting Program.

Entry to third-year courses (HUD 108, HUD 106 and HUD 215) will be based on 'B' or better grades and demonstration of proficiency via examination. Permission to do Field Experience in Interpreting (HUD 216) will be based on demonstration of proficiency via examination and instructor of HUD 216.

The specific objectives of this program are that the graduate must be able to demonstrate:

- proficiency in the practices of communications with members of the Deaf community;
- competency in the use of American Sign Language and English;
- knowledge of the studies of American Sign Language as a distinct modern language, including scholarly pursuit of cultural and historical studies, linguistics and literary analysis, as well as the language in its conversational and discourse styles;
- understanding of the psychological and social factors affecting diverse populations within the Deaf community;
- knowledge of the ethical and professional standards of interpreters working in the field with Deaf and Hard of Hearing
- · understanding of types of interpretation and translations and the process of interpretation through the use of theoretical models;
- · requisite skills and process tasks of American Sign Language-English interpretation;
- understanding of the field of interpretation from an historical perspective;
- understanding of contemporary issues in the field of interpreting and the Deaf community;
- effective written, spoken, and signed communication skills;
- · ability to learn independently and to direct his/her own learning;
- · critical thinking and problem-solving skills, with emphasis on using community resources to solve specific problems;
- awareness of one's rights and responsibilities as a professional and/or a citizen in a world community.

AFTER UCC

Graduates will be prepared for entrylevel interpreting positions working with Deaf persons.

RECOMMENDED SEQUENCE

PRE-ENTRY-LEVEL

ONE YEAR REQUIRED BEFORE ENTRY INTO PROGRAM)

Course#	Course	LEC.	LAB (CR.				
FALL SEMES	FALL SEMESTER							
ASL 101	American Sign Language I	3.5	1.5	4				
ASL 102	Visual-Gestural Co Techniques		catio 1.5					
				6				
SPRING SEA	MESTER							
ASL 103	American Sign Language II	3.5	1.5	4				
ASL 104	ASL Classifiers	1.5	1.5	2				
HUD 104	Fingerspelling	0.5	1.5	1				
				7				

(FIVE-SEMESTER PROGRAM)

FALL SEMESTER ASL 201 American Sign Language III 2 3 ASL 205 Linguistics of American Sign Language 3 HUS 101 Community Resources in Huma Services 3 SPRING SEMESTER ASL 202 American Sign Language IV 2 3 ASL 208 American Deaf Culture & History 3 HUD 105 Interpreting Processes: Theory Practice 2.5 1.5	Course#	Course	LEC.	LAB (Cr.
Language III 2 3 ASL 205 Linguistics of American Sign Language 3 HUS 101 Community Resources in Humo Services 3 SPRING SEMESTER ASL 202 American Sign Language IV 2 3 ASL 208 American Deaf Culture & History 3 HUD 105 Interpreting Processes: Theory	FALL SEMES	TER			
Language 3 HUS 101 Community Resources in Huma Services 3 SPRING SEMESTER ASL 202 American Sign Language IV 2 3 ASL 208 American Deaf Culture & History 3 HUD 105 Interpreting Processes: Theory	ASL 201		2	3	3
Services 3 SPRING SEMESTER ASL 202 American Sign Language IV 2 3 ASL 208 American Deaf Culture & History 3 HUD 105 Interpreting Processes: Theory	ASL 205		ican S 3	ign	3
ASL 202 American Sign Language IV 2 3 ASL 208 American Deaf Culture & History 3 HUD 105 Interpreting Processes: Theory	HUS 101		^	Hum	an 3
ASL 202 American Sign Language IV 2 3 ASL 208 American Deaf Culture & History 3 HUD 105 Interpreting Processes: Theory					9
Language IV 2 3 ASL 208 American Deaf Culture & History 3 HUD 105 Interpreting Processes: Theory	SPRING SEA	MESTER			
Culture & History 3 HUD 105 Interpreting Processes: Theory	ASL 202	American Sign Language IV	2	3	3
	ASL 208		3		3
	HUD 105				& 3
					9

SECOND YEAR

	EGOIND IL		_	
Course#	Course	LEC.	Lab (CR.
FALL SEMES	TER			
HUD 103	Text/Discourse Ana Interpreting	lysis 3	for	3
HUD 108	ASL to English Interpreting	2	2.5	3
				6
SPRING SEA	MESTER			
HUD 106	English to ASL Interpreting	3	1	3
HUD 110	Interpreting Role & Ethics	3		3
HUD 215	Advanced Techniqu	es of		
	Interpreting	1	2	2
				8
FALL SEMES	TER (FIFTH SEMESTER)			
HUD 109	Prev Measures Aga Interpreting	inst (CTD ir	1
HUD 216				

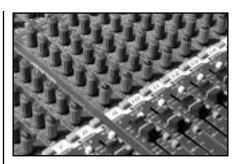
Interpreting

AUDIO PRODUCTION

CERTIFICATE

The Audio Production program will provide students with a solid foundation for further study and employment in the growing field of Audio Production. Students will learn the foundation of multi-track session recording as well as Mastering/Restoration techniques.

The program intends to create graduates with the requisite training and skills to begin working with industry standard equipment and software to compose and record their own compositions and compete for entry-level positions in the field. Emphasis will be placed on how DAW & MIDI (Cubase & Adobe Audition) systems operate, giving the students a broad understanding of their uses.



The specific objectives of this program are that the graduate must be able to:

- recount the history of audio recording technology;
- conduct research, understand the importance of qualifying source material, using time honored structures such as peer review and disciplinary standards;
- demonstrate an understanding of the recording industry as a business;
- demonstrate a level of comfort and proficiency with standard productivity software such as Adobe Audition, Cubase SX and Pro Tools, as well as an understanding of the ways in which these tools are applied in the audio production
- understand and apply all phases of audio production in the contemporary music studio environment;
- identify the fundamental process and sequence involved in the production of audio composition;
- identify the different roles and responsibilities of the recording studio staff members;
- identify the historical development of musical performance;
- understand the essentials of audio engineering, the fundamentals of digital imaging and video editing for New Media applications.

AFTER UCC

Graduates can work in the field of Audio Production in a studio setting, or continue study in the Audio Production Associate degree program here at UCC.

RECOMMENDED SEQUENCE

Course#	Course	LEC.	LAB	Cr.
FIRST SEMES	TER			
COM 100	Communications Technologies	3	1	4
ENG 101	English Comp I	3	1	3
COM 103	Intro to Radio			
	Broadcasting	3		3
				10
SECOND SEA	MESTER			
COM 203	Audio Production I	3		3
FIA 103	Fundamentals of Music	3		3
PSY 101	General Psychology	3		3

Course#	Course	LEC.	LAB CR.
FIRST SEMES	TER		
COM 213	Audio Production II	3	3
COM 209	Evolution of Film	3	3
			6
SECOND SEA	MESTER		
HIS 101	Intro to Western		
	Civilization I	3	3
COM 216	Digital Video Editing		
	Multimedia Imaging	3	3
			6
Total:			31

BIOTECHNOLOGY

The Freda & Robert N. Brown Biotechnology Program **CERTIFICATE**



The Biotechnology Certificate program is to educate and provide students with the fundamental knowledge and laboratory skill for the rapidly developing biotechnology industry. After completing the program students will be able to work with scientists in various aspects of DNA isolation and identification, protein purification and characterization and genetic engineering procedures.

AFTER UCC

Graduates can work in the pharmaceutical and other industry laboratories.

RECOMMENDED SEQUENCE					
Course#	Course	LEC.	LAB	CR.	
FIRST SEMES	STER				
CIS 100	Intro to Computer				
	Application	2	2	3	
ENG 101	English Comp I	3	1	3	
CHE 111	General Chemistry	or			
CHE 113	Principles of		_		
	Inorganic Chemistry	3	3	4	
BIO 101	Intro to Biology or				
BIO 102	Human Biology	3	3	4	
MAT 119	Algebra*	3		3	
				17	
SECOND SE	MESTER				
BIO 108	Microbiology	3	3	4	
CHE 114	Principles of Organi Biochemistry	с &			
	Biochemistry		3	4	
BIO 202	Biotechnology	3	3	4	
BIO 290	Independent Study/	Spec	ial		
	Projects	1		<u> </u>	
				13	
Prerequisite: Satisfactory performance on the College Basic Skills Placement Test for students entering the program.					
*MAT 143 or higher may be substituted.					

DECOMMENDED SECTIONS

CORRECTIONS

CERTIFICATE

Corrections is a 30-31 credit program designed for individuals who are interested in the fields of police, corrections, probation, parole, and juvenile delinquency.

The specific objectives of this program are that the graduate must be able to demonstrate:

- an understanding of the field of criminal justice;
- a knowledge of the administration of the correctional system;
- basic knowledge of criminal law;
- the ability to communicate with emphasis on effective police reports;
- an understanding of criminal justice problems in business and industry;
- an understanding of the dynamics involved with community based treatment of the offender.



AFTER UCC

Graduates can transfer to four-year colleges and universities and are eligible to take advantage of the many transfer/articulation agreements Union County College has with some of the top four-year colleges and universities in the country. See a transfer counselor for details.

E#	Course	LEC.	Lab	CR.
101	Intro to Criminal Justice	3		3
109	Correctional Administration	3		3
203	Criminal Investigation	3		3
206	Criminal Law	3		3
208	Community Based To the Offender	reatm 3	nent	of 3
223	Business	olems	in	
	& Industry	3		3
101	English Comp I	3	1	3
101	General Psychology	3		3
e	Mathematics OR Science			3-4
101	Keyboarding I or Elective			2-3
			30	-31
•	109 203 206 208 223 101 101 e	Justice 109 Correctional Administration 203 Criminal Investigation 206 Criminal Law 208 Community Based Tour the Offender 223 Criminal Justice Probabusiness & Industry 101 English Comp I 101 General Psychology e Mathematics OR Science 101 Keyboarding I	Justice 3 109 Correctional Administration 3 203 Criminal Investigation 3 206 Criminal Law 3 208 Community Based Treatm the Offender 3 223 Criminal Justice Problems Business & Industry 3 101 English Comp I 3 101 General Psychology 3 e Mathematics OR Science 101 Keyboarding I	Justice 3 109 Correctional Administration 3 203 Criminal Investigation 3 206 Criminal Law 3 208 Community Based Treatment the Offender 3 223 Criminal Justice Problems in Business & Industry 3 101 English Comp I 3 1 101 General Psychology 3 e Mathematics OR Science 101 Keyboarding I or Elective

CRIMINAL JUSTICE

CERTIFICATE

Criminal Justice is a 30-31 credit program designed for individuals who are interested in the fields of police, corrections, probation, parole, and juvenile delinquency.

The specific objectives of this program are that the graduate must be able to demonstrate:

- knowledge of criminal justice, including police organization and administration and police management;
- an awareness of her/his rights and responsibilities as an officer of the law in society;
- a knowledge of the procedures involved in criminal investigation;
- the ability to communicate, in writing, with particular emphasis on the writing of effective police reports.



AFTER UCC

Graduates can work in the field of criminal justice or can further their education in the field.

RECOMMENDED SEQUENCE					
Cour	SE#	Course	LEC.	Lab	Cr.
CRJ	101	Intro to Criminal Justice	3		3
CRJ	102	Police Administration	3		3
CRJ	201	Police Management Systems	3		3
CRJ	203	Criminal Investigation	3		3
CRJ	205	Police Community Relations	3		3
CRJ	206	Criminal Law OR			
CRJ	208	Community Supervision Offender	sion o	of the	3
CRJ	223	Security in Business & Industry	3		3
ENG	101	English Comp I	3	1	3
PSY	101	General Psychology	3		3
Electiv	ve	Mathematics OR Science			3-4
Total:				30-	-31

DATABASE SPECIALIST

CERTIFICATE



The Database Specialist Certificate Program is designed to meet the needs of those students who have decided to specialize in database management. Database specialists should possess the skills necessary to design databases. They should be knowledgeable about redundancy and its problems. Additionally, they should be able to write Visual Basic programs that interface with the databases. They need to possess good communication skills.

The specific objectives of this program are that the graduate must be able to demonstrate:

- the ability to communicate effectively with
- the ability to work well as a member of a team;
- the ability to work independently;
- an awareness of the current capabilities of database management systems;
- an aptitude for designing logical databases;
- an understanding of the ethical and social issues involved in computing.

AFTER UCC

Graduates can work in the field of Database Management or upgrade their skills with advanced education.

RECOMMENDED SEQUENCE

Course#		Course	LEC.	Lab	CR.
CIS	101	Intro to Information Systems	2	2	3
CIS	116	Access	2	2	3
CIS	130	Introductory Visual Basic	2	2	3
CIS	204	Database Management	2	2	3
CIS	202	Systems Analysis & Design	3	1	3

Prerequisites for required courses must be successfully completed prior to registering for courses.

DEAF-BLIND INTERPRETING

CERTIFICATE

This certificate is designed for individuals who want to obtain a certificate of completion in Deaf-Blind Interpreting. The program is designed to admit students who have any Associate degree or higher and have graduated from an interpreting training program, be either state screened or nationally certified, and/or be currently working as interpreters. Deaf persons will be eligible to enroll in the program, provided they have a minimum of 60 credits or an Associate degree and have two letters of recommendation from agencies or programs which provide services to the Deaf and Hard of Hearing population or the Deaf-Blind population. The introductory course, Intro to Deaf-Blindness and Deaf-Blind Community, will be open to anyone with an Associate degree or higher who has an interest in learning more about this subject area. The short certificate program will be 9 college credits.

The specific objectives of this program are that the graduate must be able to demonstrate:

- define deaf-blindness and understand how Deaf-Blind people differ from people who are hearing and sighted, blind, or deaf;
- understand the hallmarks of Deaf-Blind people's lives, particularly regarding mobility and transportation, community services, relationships, and the diversity of communication modes that exist within the Deaf-Blind community;
- be familiar with the etiquette and importance of touch and become comfortable with specialized manners or approaches used with Deaf-Blind people;
- gain basic knowledge regarding the perspective and worldview of Deaf-Blind people and the roles/relationships involved in working and/or socializing with Deaf-Blind people;

- possess basic knowledge about common community resources and typical career paths of Deaf-Blind people;
- have a basic understanding of the anatomy of the eye;
- identify the basic similarities and differences across etiologies of deaf-blindness:
- be familiar with the causes of deafblindness and its impact on the Deaf-Blind person's communication and worldview;
- recognize the implication of the differences as they relate to language and communication preferences, visual conditions, mobility, social and emotional adjustment, education, and identification with culture and community;
- be aware of the various modifications to communication that may be necessary when interpreting for Deaf-Blind people (e.g., inclusion of visual, cultural, and contextual information, pacing, condensing, vocabulary, and conceptual adjustments);
- be aware of the psychosocial impacts of deaf-blindness and one's cultural identity: be able to use this awareness to interact with Deaf-Blind people in a respectful manner.

AFTER UCC

This certificate is designed for individuals who want to obtain a certificate of completion in Deaf-Blind Interpreting. The program will be designed to admit students who have any Associate degree or higher and have graduated from an interpreting training program, be either state screened or nationally certified, and/or be currently working as interpreters.

RECOMMENDED SEQUENCE

Course#	COURSE	LEC.	Lab	Cr.	
FALL SEMES	ΓER				
DBI 201	Intro to Deaf-Blindn Deaf-Blind	ess &			
	Community	3		3	
DBI 205	Communication Me Sighted Guide	ethods	&		
	Techniques	2	1	2	
SPRING SEMESTER					
DBI 210	Interpreting Strateg	ies foi	Dec	af-	
	Blind Interpreting	3	3	4	
Total:				9	

DENTAL ASSISTING

CERTIFICATE

The dental assistant is a valuable member of the dental health care team. The scope of the dental assistant's responsibilities is determined by educational preparation, type of practice, and the laws of the state in which one is employed. The dental assistant works at the chairside with the dentist. Chairside duties include receiving and preparing the patient for treatment; sterilizing and selecting instruments; assembling materials and equipment; organizing the work area; maintaining the operative field; exposing, processing, and mounting dental radiographs; and providing instructions in oral hygiene and nutritional counseling. Other responsibilities include office management and the performance of basic laboratory procedures. The dental assistant schedules appointments, maintains patient records and financial accounts, answers the telephone, prepares insurance forms, collects payments, orders supplies and maintains an inventory of same. Basic laboratory tasks such as pouring impressions, trimming study models, fabricating custom trays, and preparing base plates and bite rims are also provided by the dental assistant.

The New Jersey Dental Auxiliaries Act of 1979 provides for the extension of the functions normally performed by dental assistants. The rules and regulations for this legislation outline specific tasks which may be assigned to dental assistants possessing state "registration in expanded functions." The teaching of expanded functions is an integral component of the UMDNJ-UCC curriculum.

By virtue of an agreement between UCC and the School of Health Related Professions (SHRP) of the University of Medicine and Dentistry of New Jersey (UMDNJ) a certificate in dental assisting is conferred upon successful program graduates.



A high school diploma or its recognized equivalency with a minimum of a 2.0 cumulative grade-point average is required for admission into the program. In addition, scores from the College Placement Test must be forwarded for review. Those persons who lack certain basic skills will have to complete the indicated Remedial courses and demonstrate competence in all basic skills before beginning the program in January. In addition, an allied health entrance examination will be administered to each candidate as part of admission requirements.

The program is approved by the New Jersey Department of Higher Education and accredited by the Council on Dental Accreditation of the American Dental Association, the specialized accrediting agency recognized by the Council on Postsecondary Accreditation and the U.S. Department of Education.

Inextricably related to SHRP's overall mission, the mission of the UMDNJ-SHRP's Department of Allied Dental Education is to promote professional standards of excellence and leadership among its students and health professionals while meeting the health care needs of New Jersey residents through patient care, education, research, and service. The Department's unique and innovative curriculum reflects the direction of allied dental practice and often presages the evolution of the profession. The Department seeks to develop new and innovative approaches to education while keeping pace with current treatment modalities and research strategies. The students develop a humanistic

approach to health care delivery as well as critical thinking, problem-solving, independent decision making, and research skills which characterize the professional.

The Department strives to instill in its students and members of the allied dental professions, a dedication to lifelong learning, and provides opportunities for continued growth within the health professions.

The specific objectives of this program are that the graduate must be able to:

- · exhibit competency as clinicians through demonstrated performance on the Certified Dental Assistants Examination (CDA) administered by the Dental Assisting National Board and feedback from Employer Surveys;
- assume responsibility for health promotion and disease prevention for individuals and communities through participation in multiple dental health education projects;
- perform multiple, advanced level dental auxiliary functions as defined in the New Jersey State Dental Practice Act under the auspices of Clinical Assisting and Internship;
- obtain the Registered Dental Assistant credential issued by the State Board of Dentistry of New Jersey;
- demonstrate professional development through membership in the American Dental Assistants' Association and participation in related activities;
- display professionalism in the delivery of comprehensive dental health care through achievement of satisfactory grades in the section of the evaluation form for Clinical Assisting and Internship;
- prepare individuals for employment as dental assistants;
- determine student satisfaction with educational programming.

AFTER UCC

Graduates who successfully complete the program and demonstrate competency through their performance on the **Certified Dental Assistants Examination** (CDA) may begin their career as a Dental Assistant.

DENTAL ASSISTING

CERTIFICATE cont'd

THREE OF THE GENERAL EDUCATION REQUIREMENTS MUST BE COMPLETED BEFORE ENTERING THE PROFESSIONAL PHASE OF THE PROGRAM:

Cours	E#	Course	LEC.	Lab	Cr.
ENG	101	English Comp I+	3	1	3
PSY	101	General Psychology+	3		3
BIO	102	Human Biology +	3	3	4
					10

⁺ Must be completed with a minimum grade of C prior to the start of dental course work in January

BIO 102 is not transferable to Dental Hygiene

RECOMMENDED SEQUENCE

Course#	Course	LEC.	Lab	CR.
FIRST SEMESTER				
ADEC 1110	Dental Head & Neck Anatomy (Core Course)	3		3
ADEC 1209	Intro to the Dental Profession (Core Course)	3	2	4
ADEC 1240	Medical Emergencies in the Dental Office	1	1	1
ADEC 1250	Dental Materials (Core Course)	2	3	3
ADEC 1269	Dental Specialties (Core Course)	1	1	1
				12
SECOND SEMESTI	ER.			
ADEC 2460	Practice Management (Core Course)	1		1
DENA 1232	Dental Science	2		2
ADEC 1219	Dental Radiology (Core Course)	2	3	3
ADEC 1205	Dental Health Education (Core Course)	1		1
DENA 1279	Clinical Assisting*		12	3
DENA 1309	Internship*		8	1
				11

^{*}A total of 300 combined clinical hours must be completed.

- Students register for the professional phase courses at the UMDNJ Scotch Plains campus and pay the UMDNJ undergraduate tuition rate and fees.
- The nature of the courses may require students to act as dental service providers and patients with fellow students.
- Students are required to attend classes on multiple campuses.
- Some courses may be Web-based. Students must have computers and Internet access.
- Please note that the State Board of Dentistry of New Jersey conducts criminal background checks on all applicants.

END-USER COMPUTING

CERTIFICATE

The End-User Computing Certificate Program is designed to meet the needs of those students who require information from computers to aid in decision making and problem-solving. End-Users generally work at computer keyboards and either access and apply the information created by others, or develop their own methods for accessing information. End-Users frequently work with productivity software and query languages to obtain the information necessary to perform their task or to assist others.

This certificate is also directed to those students already possessing a degree in other areas who feel the need to supplement their education in the field of computer information systems.

See paragraph "Qualifications for Admission to Certificate and Diploma Programs" for desired high school background (see page 207).

The specific objectives of this program are that the graduate must be able to demonstrate:

- the ability to communicate effectively with clerical personnel, analysts, and users;
- an awareness of state-of-the-art hardware and software:
- an aptitude for using existing application software packages, utilities, and libraries;
- an understanding of ethical and social issues in computing technology;
- a proficiency in communicating effectively and using the Internet and E-mail.

AFTER UCC

Graduates can find work at computer keyboards, work with productivity software and Query languages to obtain the information necessary to perform their tasks or to assist others.

RECOMMENDED SEQUENCE						
Cour	SE#	Course	LEC.	Lab	CR.	
ADM	101	Keyboarding for the Computer	1	2	2	
ENG	101	English Comp I	3	1	3	
MAT	113	Business Mathematics*	3		3	
ADM	213	Word I	2	2	3 3 3	
CIS	115	Excel I	2	2	3	
CIS		Database Management	2	2	3	
CIS		Data Communication Networks	ns & 3	1	3	
Technical Electives * *					12	
					32	

*MAT 113 or higher

CHOOSE FROM THE FOLLOWING **TECHNICAL COURSES:

ACC 210 Microcomputers in Accounting

BUS 101 Intro to Business

BUS 105 Organization & Management

CIS 100 Intro to Computer Applications

COM 107 Desktop Publishing

ADM 135 Technical Editing

117 Professional Presentations CIS

120 The Internet CIS

CIS 116 Access

Course#

Prerequisites for courses must be successfully completed prior to registering for courses.

FIRE SCIENCE TECHNOLOGY

CERTIFICATE

The Fire Science Technology Certificate Program is tailored to meet the needs of students who desire to limit their enrollment to the technical fire science courses basic to the Associate in Applied Science degree program. It is also directed to those students possessing college degrees in other areas of higher education.

The certificate is endorsed by the Department of Higher Education. Graduates of the Union County Fire Academy will be granted 6 credit hours of advanced standing upon matriculation in this program.

See paragraph "Qualifications for Admission to Certificate and Diploma Programs" for desired high school background (see page 207).

The specific objectives of this program are that the graduate must be able to demonstrate:

- the ability to apply analytical skills to the reading of building blueprints and codes;
- · knowledge of fire prevention, including fire prevention systems and building codes;
- the ability to apply problem-solving skills to specific fire ground situations;
- knowledge of fire fighting strategies and
- knowledge of the organization and management of fire departments;
- knowledge of the procedures and management involved with incident command:
- the application of problem-solving skills to the detection of fire and its causes.

Graduates can work in the field of fire science or transfer to an Associate degree program.

RECOMMENDED SEQUENCE

FIRST

LEC. LAB CR.

COURSE

FIRST SEMESTER						
ENG	101	English Comp I	3	1	3	
FST	103	Fire Protection	3		3	
					6	
SECOND SEMESTER						
FST	102	Building Construction	3		3	
FST	105	Fire Prevention	3		3	
					6	

FIRST SEMESTER FST 106 Fire Fighting Tactics 3 FST 107 Hazardous Materials 3 MAT 117 Intro to Mathematical Ideas 3 SECOND SEMESTER FST 108 Fire Hydraulics 3 FST 113 Fire Department Organization Management 3	<u>Cr.</u>
FST 107 Hazardous Materials 3 MAT 117 Intro to Mathematical Ideas 3 SECOND SEMESTER FST 108 Fire Hydraulics 3	
MAT 117 Intro to Mathematical Ideas 3 SECOND SEMESTER FST 108 Fire Hydraulics 3	3
Mathematical Ideas 3 SECOND SEMESTER FST 108 Fire Hydraulics 3	3
FST 108 Fire Hydraulics 3	3
FST 108 Fire Hydraulics 3	9
FST 113 Fire Department Organization	3
Managemen	0
PSY 101 General Psychology 3	& 3

Graduates of the Union County Fire Academy will be granted 6 credits of advanced standing when they matriculate in the program.

GERONTOLOGY ACTIVITI

CERTIFICATE

The Gerontology Activities Certificate is a multi-disciplinary program and is designed for those who plan to work with Senior Citizens. Specific Gerontology courses are aimed at familiarizing students with special problems and needs of older adults and community resources available to meet those needs. This certificate is for those who have already earned, or are earning a degree in another (or related) field.

See paragraph "Qualifications for Admission to Certificate and Diploma Programs" for desired high school and college background (see page 207).

The specific objectives of this program are that the graduate must be able to demonstrate:

- an ability to encourage effective communication among members of small
- critical thinking and problem-solving skills, with emphasis on using community resources to solve specified problems;
- an understanding of the psychological effects of aging;
- an understanding of the social factors affecting diverse populations.



AFTER UCC

Graduates can work in Senior Citizen Centers, housing complexes, assisted living facilities or nursing homes as Activity Professionals, Recreation Specialists, or otherwise working with older adult clients. Coursework is also part of preparation for certification by the **National Certification Council of Activity** Professionals.

In order to successfully complete this program, the student will be required to take the following courses and may be required to take additional electives. BE SURE TO CONFER WITH A UCC COUNSELOR OR WITH THE PROGRAM COORDINATOR WHEN PLANNING YOUR COURSE SCHEDULE.

RECOMMENDED SEQUENCE

Cour	SE#	Course	LEC. LAB	CR
FIRST	SEMES	TER		
HUG	101	Multidisciplinary P	erspectives	;
		on Aging '	.3	3
HUS	101	Community Resour	ces in	
		Human Services	3	3
				-
SECON	ND SE	MESTER		
SOC	213/	PSY 213 Social Re	esearch	
	·	Methods*	3	3
PSY	212	Psychology of		
PSY	212	Psychology of Aging	3	(

CECONID VEAD

SECOND TEAK				
Course#	Course	LEC. LAB	CR.	
FIRST SEMES	TER			
SOC 206	Minorities in Americ	an Life C)R	
SOC 219	Women & Work	3	3	
BIO	Biology Course from Below**	the List		
	Below**	4	4	
			7	
SECOND SEA	MESTER			
Elective	Choose from list below***	3	3	
HUS 201	Externship in Humar Services	3	3	
			4	

- * Social Research Methods is cross-listed in two departments. You can register for either SOC 213 or PSY 213.
- ** Choose from: BIO 107, BIO 118, BIO 110, or BIO 105 & BIO 106. (BIO 105 and 106 are a two-semester sequence.)
- *** Choose from: any CIS 3-credit computer course, BUS 105, HUG 201 (which together with the externship equals the NCCAP MEPAP credits that can be obtained through the Assessment of Prior Learning Program p. 209), or another related course approved by the Gerontology Coordinator.

Courses in the Gerontology/Activities program meet requirements toward certification by the National Certification Council for Activity Professionals (NCCAP). Students are also encouraged to take the MEPAC basic activities course, which is offered off campus by NCCAP professionals.

INFORMATION PROCESSING

CERTIFICATE PROGRAM

The Information Processing Certificate is a 30-credit program which prepares the graduate to perform the functions of a corresponding secretary in an automated office. Emphasis is placed on communication development and hands-on experience on various software packages.

AFTER UCC

Graduates who complete this program can perform the functions of a corresponding secretary in an automated office.



RECOMMENDED SEQUENCE						
Cours	SE#	Course	LEC.	Lab	Cr.	
ENG	101	English Comp I	3	1	3	
MAT	113	Business Mathematics*	3		3	
CIS	100	Intro to Computer Applications	2	2	3	
CIS	120	The Internet	2	2	3	
ADM	103	Shorthand I	3	2	4	
ADM	102	Keyboarding for the Computer II	1	2	2	
ADM	122	Intermediate Keyboarding	2	3	3	
ADM	131	Administrative Procedures	3		3	
ADM	135	Proofreading & Editing Skills	3		3	
ADM	213	Word I	2	3	3	
TOTA	L:				30	
*MAT	113	or higher				
Challe	Challenge exame may be taken for CIS 100					

Challenge exams may be taken for CIS 100, ADM 101, ADM 102 and ADM 103.

INTERPRETING SPOKEN LANGUAGE

CERTIFICATE

This program prepares its graduates to become court interpreters. Fluency in both English and at least one other language is required for admission to the program. Students will develop their interpreting ability with courses that focus on consecutive interpreting, simultaneous interpreting, and sight translation. Students will also be prepared to enter the workforce as freelance interpreters by learning about how to succeed in the field of professional interpreting and translating. Ethical issues and the responsibilities of the interpreter are also taught.

The specific objectives of this program are that the graduate must be able to demonstrate:

- the ability to perform simultaneous interpreting;
- the ability to perform consecutive interpreting;
- the ability to perform sight translation of legal documents;

- the ability to pass the New Jersey State Certification Exam for Court Interpreters on the level of Journeyman;
- the knowledge of techniques necessary to maintain and improve one's interpreting skills after graduation;
- the ability and the knowledge to enter the workforce as a professional free lance interpreter;
- an awareness of the diverse cultural factors which play a crucial role in language interpreting;
- an awareness of the ethical principles and responsibilities underlying the role of court interpreter.

AFTER UCC

Graduates will be prepared to enter the workforce as freelance or court interpreters by learning about how to succeed in the field of professional interpreting and translating.

RECOMMENDED SEQUENCE					
Cour	SE#	Course	LEC.	LAB	CR.
INT	101	Interpreting I	3		3
INT	102	Interpreting II	3		3
INT	105	Role of Interpreter	3		3
TRN	101	Intro to Written			
		Translation	3		3
ENG	101	English Comp I OR	3	1	3
ENG	111	& ENG 112 English	Com	ıp.	
		For Speakers of Ot	her	•	
		Languages	6	2	6
ENG	128	Dynamics of			
		Communication	3		3
ENG	129	Public Speaking	3		3
Electi	ve	Mathematics OR			
		Science			3-4
Electi	ve	Social Science	3		3
Electi	ve	Humanities			
		(ENG 112 serves a			
		Humanities elective)	3		3
TOTA	L:			30	-31

CERTIFICATE

This unique career-oriented certificate program combines art, commercial photography, graphic arts and the study of film, publication editing with business, and general education. The emphasis is on hands-on experience in the classroom, laboratory or studio to develop the skills essential to business-oriented art and communication careers.



The specific objectives of this program are that the graduate must be able to demonstrate:

- the ability to apply the knowledge of graphic arts to creating advertisements;
- the ability to think creatively through project development and implementation;
- the ability to provide hands-on experience with professional designers and photographers;
- skills in graphic design and commercial photography techniques;
- skills necessary for business-oriented art and communication careers in a laboratory or studio setting;
- creative marketing skills necessary for career success.

Course# **C**OURSE LEC. LAB CR. COM 107 Publication Editing 3 3 & Design COM 101 Mass 3 3 Communications COM 109 Intro to Film Study 3 3 202 Graphic Design I 3 3 (prerequisite) 221 Black & White Photography I 3 3 108 Art Appreciation 3 3 FIA 208 Principles of BUS Marketing 3 3 BUS 203 Principles of Advertising 3 3 3 3 BUS 101 Intro to Business ENG 101 English Comp I 3 3 101 General Psychology 3 PSY 33 **TOTAL:**

RECOMMENDED SEQUENCE

AFTER UCC

Graduates will gain hands-on experience in marketing, advertising and design, and will have developed skills essential to business-oriented art and communication careers.

MULTIMEDIA DEVELOPMEN

CERTIFICATE

The Multimedia Development Certificate Program is a 30-credit course of study intended to prepare students for careers in multimedia design and development. The certificate is intended for students who have completed a college degree, or have prior field experience and wish to develop skills in computer presentation management, desktop publishing, digital media development, and authoring. Students will be required to develop proficiency in a wide range of software tools and design techniques, and specialize in a content area that will be determined by their choice of electives.

The specific objectives of this program are that the graduate must be able to demonstrate:

- a level of comfort and proficiency with standard productivity software such as word processors, presentation managers, web browsers and databases, as well as an understanding of the ways in which these tools are applied in the communications field;
- facility with the cutting-edge tools necessary to be competitive in the high-technology arena of multimedia development and
- the ability to work effectively as a member of a team:
- professional competence in the technical and theoretical skill-set that constitutes the working toolbox of today's multimedia developer and web design specialist.

AFTER UCC

Graduates will be capable of creating compelling multimedia content drawn from a variety of media-digital audio and video, images and text, designed and developed on cutting-edge equipment and ready for delivery in a variety of forms as live presentations, on CD-ROM, and over the Internet.

RECOMMENDED SEQUENCE

Course#	COURSE	LEC.	Lab	CR
FIRST SEMES	TER			
COM 100	Communications Technology	3	2	2
ENG 101	English Comp I	3	1	3
COM 107	Publication Editing & Design	3		(
				10
SECOND SEA	MESTER			
COM 206	Television Field Production	3		3
COM 112	Multimedia Develop Presentation	ment	l-	
	Management	3		3

LEC. LAB CR.

			•		
FIRST SEMES	TER				
COM 216	Digital Video Editing Multimedia Imaging	&	^		
	Multimedia Imaging	3	3		
	Advanced Publicatio		&		
	Design	3	3		
Elective	From list below		3		
			- 9		
SECOND SEMESTER					

Course# Course

LICCITY TOTAL HIST DOIOTY	3
Elective From list below	_
Authoring 3	3
COM 212 Multimedia Development Il- Multimedia	

Electives: (all 3 credits)

Film: COM 109 Intro to Film Study, COM 209 The Evolution of Film

Television: COM 106 Intro to Television Production and Theory, COM 214 Communications Practicum-Internship;

Cultural Studies: COM 101 Mass Communications, COM 201 Issues in Mass Media

Journalism/Technical Writing: COM 102 Reporting and News Writing, COM 202 Advanced Reporting and News Writing, ENG 122 Introductory Technical and Business Writing

Illustration: FIA 109 Drawing I, FIA 209 Illustration I

Design: FIA 104 Basic Design, FIA 202 Graphic Design

Photography: FIA 221 Black and White Photography I, FIA 222 Black and White Photography II, FIA 223 Color Photography

OFFICE PROFESSIONAL

CERTIFICATE

The Office Professional certificate program upgrades a student's skills necessary to survive in the ever-changing office. The program provides a strong background in technology courses using up-to-date software. Prior to entering the program, students must have successfully completed English Composition and Keyboarding. Challenge exams are available for keyboarding. A CLEP exam may be taken for English.



The specific objectives of this program are that the graduate must be able to demonstrate:

- critical thinking and problem-solving skills;
- professional communication skills;
- the ability to communicate effectively using E-mail and the Internet;
- the ability to use beginning/advanced features of MS Word;
- the ability to use beginning/advanced features of MS Excel;

- the ability to use beginning/advanced features of MS PowerPoint;
- the ability to use additional application packages.

This certificate is designed for people who need to update their computer application skills. Upon completion of this certificate the student may apply these credits toward the Business Management A.A.S. degree or the Administrative Support/Information Processing A.A.S. degree.

AFTER UCC

Graduates can enter the workforce or the **Business Management or Administrative** Support degree programs.

RECOMMENDED SEQUENCE

Cour	RSE#	Course	LEC. LAB C		CR.
ADM	213	Word I	2	3	3
CIS	115	Excel I	2	2	3
CIS	117	PowerPoint	2	2	3
CIS	120	The Internet	2	2	3
Electi	ive	Technical **			3
TOT/	\L:				15

**Choose from the following technical electives:

CIS 116 Access

CIS 106 Visual J++ Programming

130 Introductory Visual Basic

ADM 135 Proofreading & Editing Skills

ADM 214 Word II

Program Prerequisites:

ENG 101 English Comp I

ADM 101 Keyboarding for the Computer

CERTIFICATE

The Paramedic Program is intended for participants who are interested in helping and treating patients to the highest level of care outside of the hospital. Prospective students should have an interest in pathophysiology and be able to work in an undynamic environment. This program is based upon the standards set forth by the U.S. Department of Transportation and the National Registry of Emergency Medical Technicians – National Curriculum. The program is approved and sanctioned by the New Jersey Department of Health Office of Emergency Medicine.

Graduates of the paramedic program must be able to demonstrate:

- critical thinking and problem-solving skills with an emphasis on therapeutic communication;
- the ability to use and select information from available sources as it relates to patient assessment and emergent patient treatments;
- an understanding of the interrelationships between patient's symptoms and physiology of disease processes;
- the ability to perform a skillful patient assessment;
- the ability to identify patient complaint, symptoms and presentation with the appropriate patient treatments;
- mastery of clinical skill competency associated with emergent patient treatments;
- the ability to formulate a patient chart and provide oral report to the medical command;
- mastery of the indications, contraindications and side effects of all NJ DOH MICU 8:40 regulated procedures and pharmaceutical agents;

- mastery of the roles and responsibilities as outlined in the NJ DOH MICU Regulation 8:40 law;
- proficiency in all National Curriculum standards and obtain a grade of 75 or greater.



PROGRAM ENTRANCE **REQUIREMENTS:**

- All students of the UCC paramedic program must have hospital sponsorship from an approved NJ Department of Health Mobile Intensive Care Unit hospital. This sponsorship allows students a clinical rotation site once the didactic portion of the program is completed;
- Current New Jersey EMT-B and CPR certification;
- Basic skill proficiency or approval by the program director;
- MAT 022 or approval by the program director;
- A minimum of 9 General Education credits which includes successful completion of ENG 101.

AFTER UCC

The Paramedic Program is intended for participants who are interested in helping and treating patients to the highest level of care outside of the hospital. The program is approved and sanctioned by the New Jersey Department of Health Office of **Emergency Medicine.**

RECOMMENDED SEQUENCE

Course#	Course	LEC. LA	B CR.				
FALL SEMES	FALL SEMESTER						
PMD 106	Paramedic I	7	7				
PMD 107	Paramedic Procedures I	6	6				
SPRING SEA	MESTER						
PMD 108	Paramedic II	10	10				
PMD 109	Paramedic Procedures II	9	9				

NOTE:

- Courses must be taken together and in the order listed.
- Upon successful completion of the program, students complete a clinical rotation at their sponsoring hospital.

PROGRAMMING

CERTIFICATE

The Programming Certificate Program is designed to meet the needs of those students who have decided to specialize in programming. These students should be able to communicate well with others. They need to know the intricacies of programming in various programming languages. They need to know the commonalities of languages. Programmers should be logical, ethical, and knowledgeable about societal issues.

The specific objectives of this program are that the graduate must be able to demonstrate:

- the ability to communicate effectively with others;
- the ability to work well as a member of a

- the ability to work independently;
- an aptitude for programming;
- problem-solving and critical thinking skills;
- an understanding of the ethical and social issues involved in computing.

AFTER UCC

Graduates will possess knowledge in various programming languages, and they can either work in the field, return for additional college coursework, or earn a college degree.

RECOMMENDED SEQUENCE

COUR	SE#	COURSE	LEC.	LAB	CR.
CSC	101	Computer Algorithms	2	3	3
CSC	102	Data Structures	2	2	3
CIS	202	Systems Analysis & Design	3	1	3

CHOOSE TWO OF THE FOLLOWING:

CIS 130 Introductory

		Visual Basic	2	2	3
CIS	132	Intermediate Visual Basic	2	2	3
CIS	101	Programming Applic Development I	catio 3	ns 1	3
CIS	201	Programming Applied Development II	cation 3	ns 1	3
CIS	106	Java Programming	2	2	3

Prerequisites for required courses must be successfully completed prior to registering for courses.

PUBLIC POLIC

CERTIFICATE

Issues of war, peace and terrorism have profoundly touched the lives of all Americans. Students are provided with an intellectual foundation upon which they can start to build their understanding of these and other issues. This comprehensive certificate offers the student a solid foundation in politics and history accompanied by the study of related areas. Students can incrementally begin earning an Associate degree in Liberal Studies or one of the other Associate degree programs and may start to prepare for careers in government service, law or

The specific objectives of this program are that the graduate must be able to demonstrate:

- an understanding of historical forces that shape the nation;
- a comprehensive understanding of American political institutions, processes, and the formulation of public policies;
- an understanding of bureaucracy, leadership and creation of public policies;
- an appreciation of the impact particular public policies have on the quality of American life;
- an ability to recognize, analyze and assess the ethical dimensions of policies; and
- the ability to communicate effectively.



AFTER UCC

Holders of this certificate may apply for entry-level positions in the Federal Government. They are prepared to continue their education at Union County College in the Liberal Studies program or one of the Associate degree programs. Students who earn their Associate degree can transfer to a four-year college or university.

RECOMMENDED SEQUENCE

Cours	SE#	Course	LEC.	Lab	Cr.
FIRST	SEMES	TER			
CIS	100	Intro to Computer Applications*	2	2	3
COM		Mass Communicati	ions O	R	
ENG	128	The Dynamics of COR	Commu	nicat	lion
ENG	129	Public Speaking	3		3
		English Comp I	3	1	3
GOV	201	American Govt. & Politics	3		3
MAT	117	Intro to Mathematic	cal Ide	as C)R
Highe	r leve	l mathematics	3-4		3-4
				15	-16
SECON	ID SE	MESTER			
CRJ	101	Intro to Criminal	^		^

		1.	5-16
Elective**		3	3-4
PHI 210	Ethics	3	3
ECO 201	Principles of Econom	ics I OI	₹
HIS 202	US History Since 1865	3	3
	International Politics	3	3
GOV 204	Public Administration	OR	
GOV 202	American National (Govt. O	R
CRJ 101	Intro to Criminal Justice	3	3
CDI 101	1		

- * Requires Keyboarding Skills
- ** It is suggested students choose electives from the following list:

		~		
BIO	103	Biology of People & the	Environme 4	nt3
BUS	105	Organization & Management	3	3
HIS	201	US History to 1865	3	3
PSY	101	General Psychology	3	3
SOC	101	Principles of Sociology	3	3
URS	101	Intro to Urban Studies	3	3

CERTIFICATE

The WebMaster Certificate Program is designed to meet the needs of those students who have decided to specialize in web development. These students should be able to communicate well with others. They should be knowledgeable about the current innovations and development within the area of web programming and design.

The specific objectives of this program are that the graduate must be able to demonstrate:

- the ability to communicate effectively with others;
- the ability to work well as a member of a team;
- the ability to work independently;
- an awareness of the current capabilities of web design tools;
- an aptitude for designing wellplanned web sites;
- an understanding of the basics of e-commerce;
- an understanding of the ethical and social issues involved in computing.



AFTER UCC

Graduates will have a strong knowledge of the current innovations and development within the area of web programming and design.

RECOMMENDED SEQUENCE					
Cour	SE#	Course	LEC.	LAB	Cr.
CIS	120	The Internet	2	2	3
CIS	122	Web Page Development	2	2	3
CIS	124	Web & Multimedia	2	2	3
CIS	126	E-Commerce Fundamentals	2	2	3
Снос	OSE ON	IE OF THE FOLLOWING:			
CIS	106	Java Programming	2	2	3
CIS	130	Introductory Visual Basic	2	2	3
CIS	205	Data Communicatio Networks	ns & 3	1	3

GENERAL EDUCATION



Programs leading to the Associate in Arts (A.A.), Associate in Science (A.S.), and Associate in Applied Science (A.A.S.) include a distribution of General Education courses in the categories of:

- 1. Communications (courses enhancing facility in the English Language);
- 2. Mathematics and Science (courses enhancing mathematical and scientific conceptual understanding and application, including knowledge of computers);
- 3. Social Sciences (courses enhancing social awareness, including social, economic, and political problems, and the responsibilities of citizenship in an interdependent world);
- 4. Humanities (courses in literary, philosophical, foreign language, historic, aesthetic, or other humanistic studies enhancing understanding and transmitting values of one's own culture as well as other cultures).

The General Education requirements vary according to the degree program. A.A. Programs require 45 general education credits; A.S. Programs require 30; A.A.S. Programs require 20. No more than 16 hours in one discipline (e.g., English, Chemistry, Psychology, History) may be counted toward the general education requirement for each degree.

Certificate Programs require 6, preferably 9, General Education/credit hours including one Communications course. Diploma Programs require 10 General Education credit hours.

COMMUNICATION

COM 102 Reporting & News Writing COM 202 Advanced Reporting & News Reporting

ENG 101-102 English Composition I-II

ENG 111 English Composition for Speakers of Other Languages I

ENG 122 Introductory Technical & Business Writing

ENG 128 The Dynamics of Communication

ENG 129 Public Speaking

ENG 214 The Technician as Writer

ENG 215 Creative Writing



MATHEMATICS, SCIENCE AND **TECHNOLOGY**

ADM 213 Word I

AST 101 Introductory Astronomy

AST 102 Astronomy

BIO 100 Natural History of New Jersey

BIO 101 Introduction to Biology

BIO 102 Human Biology

BIO 103 Biology of People & the Environment

A Survey of the Animal Kingdom BIO 104

BIO 105-106 Anatomy & Physiology I-II

BIO 107 Decisions for Wellness

BIO 108 Microbiology

BIO 109 Nutrition

BIO 110 Intro to Human Heredity

The Biology of the Organism BIO 111

BIO 112 Cell Biology

BIO 113 Plants & People

BIO 114 General Horticulture

BIO 115 The Seed Plants

BIO 116 The Plant Kingdom

Biology of Women BIO 118

BIO 119/WMS 118 Fundamentals of Microbiology

BIO 202 Biotechnology

BIO 204 Marine Biology

BIO 206 Bacteriology

BIO 208 Ecology

BIO 230 Western Science: Its Development

BIO 270-279 Topics in Biology

BIO 290-299 Independent Studies in Biology

BUS 110 Business & Technology

CIS 100 Introduction to Computer

Applications

CIS 101 Introduction to Information Systems

Applications Program **CIS 102** Development I

CIS 106 Java Programming

CIS 115 Excel

CIS 116 Access

CIS 117 PowerPoint

CIS 120 The Internet

CIS 122 Web Page Development

CIS 124 Web & Multimedia

CIS 126 E-Commerce Fundamentals

CIS 130 Introductory Visual Basic

CIS 201 Application Development II

CIS 202 Structured Systems Analysis

CIS 204 Database Management

CIS 205 Data Communications & Networks

CIS 210 Principles of Information Security

COM 100 Communications Technology

CSC 100 Computer Programming **Fundamentals**

CSC 101 Computer Algorithms

CSC 102 Data Structures

CSC 115 Introduction to Computer Programming

CSC 121 Assembly Language I

CSC 126 Introduction to Operating Systems

CSC 231 Computer Organization & Architecture

CHE 101-102 Chemistry I-II

CHE 105 Chemistry-Health Sciences

CHE 106 Consumer & Environmental Chemistry

CHE 108 Principals of Nutrition

CHE 111-112 General Chemistry I-II

CHE 113 Principals of Inorganic Chemistry

CHE 114 Principals of Organic Chemistry & Biochemistry

CHE 211-212 Organic Chemistry I-II

EGG 201 Engineering Mechanics (Statics)

EGG 202 Engineering Mechanics (Dynamics)

GDP 101 Fundamentals of Gaming

GDP 110 Game Design & Development I

GDP 115 Business of Gaming

GDP 201 Principles of Animation

GDP 215 3D Programming

GENERAL EDUCATION cont'd

GEY 101 Physical Geology **GEY 102** Historical Geology MAT 117 An Introduction to Mathematical Ideas MAT 119 Algebra MAT 125 Survey of Special Topics in

Mathematics MAT 126 Mathematics for Management &

Social Sciences

MAT 127 Elementary Statistics

MAT 130/WMS 230 Women in Mathematics & Science

MAT 143-144 Elementary Mathematical Analysis I-II

MAT 146 Brief Calculus with Applications

MAT 171-172 Unified Calculus I-II

MAT 246 Business Statistical Analysis

MAT 265 Linear Algebra

MAT 267 Discrete Mathematics

MAT 271 Unified Calculus III

MAT 272 Differential Equations

MAT 280-299 Projects in Mathematics

ADM 213 Word I

PED 101 Concepts of Adult Fitness **PED 107** Decisions for Wellness

PED 110 Beginning Golf

PED 290 Independent Study in Fitness & Wellness

PED 296 Advanced Golf

PHY All credit-level Physics courses

SOCIAL SCIENCE

ADM 140 Customer Service

BSM 101 Intro to Sport Management

BSM 110 Evolution of American Sports

BSM 205 Sports in Society

BSM 210 Sport & Law

BUS 101 Introduction to Contemporary **Business**

BUS 105 Organization & Management

BUS 201-202 Business Law I-II

CRJ 101 Introduction to Criminal Justice

ECO 201-202 Principals of Economics I-II

ECO 205 Money & Banking

ECO 207 Urban Economics

ECO 209 The International Economy

EDU 205 Educational Psychology

EDU 208 Current Issues in Education

GOV All credit-level Govt. courses

HSM 100 Intro to the Hospitality Industry

HUD 107 Deafness & Human Behavior

PSY All credit-level Psychology courses **URS 101** Introduction to Urban Studies SOC All credit-level Sociology courses WMS 101 Introduction to Women's Studies WMS 245/ENG 245 Women in Literature



HUMANITIES

ARC 101-102 Architectural Design I-II

BIO 230 Western Science: Its Development

COM 101 Mass Communications

COM 105 Storytelling for Digital Media

COM 109 Introduction to Film Study

COM 201 Issues in Mass Media

COM 209 The Evolution of Film

ENG 112 English Composition for Speakers of Other Languages II

ENG 205-206 English Literature I-II

ENG 207-208 American Literature I-II

ENG 216 Contemporary Literature

ENG 217-218 Literature & the Arts I-II

ENG 220 Drama as Literature

ENG 227-228 Black American Literature I-II

ENG 235 Introduction to Shakespeare

ENG 245/WMS 245 Women in Literature

ENG 247/WMS 247 Women Authors

ENG 270-289 Themes in Literature

FIA All credit-level Fine Arts courses

FRE All credit-level French courses

GER All credit-level German courses

HIS All credit-level History courses

HUG 101 Multidisciplinary Perspectives on

Aging **IDS 128 Business Communications**

IΤΑ All credit-level Italian courses

Modern Languages All credit-level Modern

Languages courses

PHI All credit-level Philosophy courses **SPA** All credit-level Spanish courses

GENERAL EDUCATION cont'd

MULTICULTURAL PERSPECTIVE

The College recognizes and respects the diversity of its student body. All faculty are encouraged to attend conferences and workshops to increase their sensitivity to intercultural issues and to integrate into their courses an awareness of the contributions that people of diverse backgrounds have made to each field of knowledge.

DIVERSITY COURSES

The College is committed to the offering of culturally diverse courses and courses of study in its transfer-oriented programs. The faculty of Union County College believes that diversity in its offerings can only enhance the exchange of ideas, understanding of beliefs, and widening of perspective implicit in the notion of a Liberal Education. A course which satisfies the diversity requirement should enable students to:

- Recognize needs and concerns common to culturally diverse peoples;
- Recognize contributions made to society by people from various nations and cultures;
- Recognize and explain the consequences of prejudicial and discriminatory attitudes and actions;
- Recognize why an understanding of diversity is particularly necessary in American society;
- Recognize that cultural practices relate to the geographical and historical conditions from which they arose.

The menu of courses which satisfy the diversity requirement is subject to continual review and revision, current courses are:

ASL 101	American Sign Language I
ASL 102	American Sign Language II
BIO 113	Plants & People

BIO 118 Biology of Women

COM 201/WMS 118 Issues in Mass Media

COM 209 The Evolution of Film

ENG 209 World Literature I ENG 210 World Literature II

ENG 227 African American Literature I

ENG 228 African American Literature II

ENG 245 Women in Literature ENG 247 Women Authors

FIA 105 Music Appreciation

FIA 108 Appreciation of Art

FIA 111 History of Art I FIA 112 History of Art II

FIA 117 Music in the Twentieth Century

GOV 201 American Govt. & Politics

GOV 202 American National Govt.

GOV 203 Urban Govt. & Politics

GOV 207 International Politics GOV 215/WMS 215 Women & American

Politics GOV 216/WMS 216 Women & the Justice

System

HIS 103 Introduction to World History I HIS 104 Introduction to World History II

HIS 105 Afro-American History I HIS 106 Afro-American History II

HIS 201 United States History To 1865

HUG 101 Multidisciplinary Perspectives on Aging

IDH 104 Culture, Diversity & Healthcare

MAT 230/WMS 230 Women in Mathematics & Science

PHI 209 Social Justice

PSY 212 Psychology of Adulthood & Aging

PSY 218/WMS 218 Psychology of Women

SOC 104/WMS 201 Women & Social Change

SOC 203 International Social Problems

SOC 206 Minorities in American Life **SOC 207** Social Inequality

SOC 219 Women & Work

URS 101/WMS 219 Introduction to **Urban Studies**

WMS 101 Gender, Culture, & Society

WMS 118 Biology of Women

WMS 201/SOC 104 Women & Social Change

WMS 215/GOV 215 Women & American **Politics**

WMS 216/GOV 216 Women & the Justice System

WMS 218/PSY 218 Psychology of Women

WMS 203/MAT 230 Women in Mathematics & Science

WMS 245/ENG 245 Women in Literature

WMS 247/ENG 247 Women Authors

WMS 219/URS 101 Introduction to Urban Studies

All first-time full-time students and part-time students taking twelve or more credits are required to pass UCC 101 in order to progress in their programs. Although the course is not listed among the required credits within each program, it is considered a college-wide requirement which must be fulfilled by all first-time full-time students. Part-time students may elect to take the course, but will not be required to take it until they register for a minimum of 12 credits in one semester.

UCC 101 is designed to help students adjust to college by giving them the information, support, and strategies they need to feel secure in their college classes. It will help students clarify their goals, become familiar with the academic environment, and sharpen their ability to learn and think critically.

UCC 101 is a course that will help students develop study skills and make better use of time and resources while in college. It is intended as a resource for students to get their bearings in college (any college) and begin to think about their long-term educational goals at UCC and beyond.

PREREQUISITES: Students must complete ENG 087 and ESL 065 if required before registering for UCC 101.

EXEMPTIONS: All first-time full-time students are required to take UCC 101 except for the following exceptions:

- students taking fewer than 12 credits
- students who transfer from other institutions with 15 or more credits
- students who transfer from other institutions with 2 or more credits in a first-year seminar course
- students who have completed an Associate or Bachelor's degree at another institution
- students who have successfully completed ENG 101 or ENG 112 and MAT 119
- students with visitor status
- students in diploma programs
- students in certificate programs
- Senior Citizens

DISTANCE EDUCATION @ UCC

LEARNING FROM A DISTANCE

Distance Education @ Union County College provides you with an educational experience that is equivalent to a traditional course presentation format, while giving you the convenience of time flexibility. The Distance Education courses cover the same subject matter, carry the same credit, and are taught by highly qualified Union County College faculty. These courses are available in the fall, winter, spring, and summer sessions and may be applied to a UCC degree or certificate, taken as electives, or for professional development or general interest.



UCC currently offers three types of **Distance Education formats:**

Online Courses are delivered entirely over an Internet connected computer and are the educational equivalent of traditionally delivered courses. The advantage is that online courses usually do not require your attendance on campus, allowing you the flexible time to fit a college course into your schedule. Although on campus attendance is not required, there are definite beginning and ending dates, assignment due dates, and testing dates. (Please note that some courses may have specific requirements such as proctored exams, an on-campus lab or meeting, or require a specific software package. Please consult the appropriate course listings on the UCC Distance Education Website for the requirements in each course. http://www.ucc.edu/DistanceEducation.)

Educational activities take place using computer technology and are usually packaged in a provided course management system. The tools available may include:

- Information delivery incorporating text, images, audio, video, animation, gaming, wikis, and blogs.
- Communication utilizing email, discussion groups, chat rooms, virtual classrooms, and video conferencing.
- Digitally submitted and processed tests, quizzes, and papers.
- Course administrative functions including enrollment and grading.

Campus Web Courses combine traditional on campus class meetings (usually one per week) with online course learning, enabling you a more flexible learning schedule than a full traditional campus class. Campus Web Courses also give you the opportunity to experience a partial online course learning environment, allowing you to evaluate whether total online learning might be right for you.



Telecourses allow students the advantage of studying and learning at home. A portion of the course content is delivered on DVD or VHS tape with printed materials complementing the package. With a refundable deposit, the DVD and VHS tapes are loaned for the course duration. Faculty members communicate with students through a chosen combination of the US mail, email, fax, or phone.



(Please note that for some courses, the instructors may schedule periodic class meetings.)

Subject	Code	Pg
Accounting	ACC	112
Administrative Support	ADM	114
American Sign Language	ASL	11 <i>7</i>
American Sign Language & Deaf Studies	HUD	165
Architecture	ARC	115
Astronomy	AST	119
Automotive Technology		
Biology		
Business	BUS	125
Chemistry	CHE	127
Chinese		
Civil Construction/		
Engineering Technology		
Clinical – Nuclear Medicine		
Clinical – Radiography		
Clinical – Radiation Therapy		
Clinical – Sonography		
Communications	COM	135
${\sf Computer\ Information\ Systems\ } \ \dots$		
Computer Science/Data Processing	.CSC	138
Criminal Justice	CRJ	137
Deaf-Blind Interpreting	DBI	139
Dental – UMDNJ		
	DENA DENH	
Diament Adadian Cananan		
Diagnostic Medical Sonography Economics		
Education		
Educational Interpreting Electronics/	EIF	140
Electromechanical Technology	/ EET	145
Emergency Health Science	EHS	147
Emergency Medical Technician	EMT	148
Engineering		
English	ENG	149
English as a Second Language	ESL	152
Fine Arts		
Fire Science Technology		
Food Industry Marketing		
& Management	FHR	153
	FIM FMG	157
Eronoh		
	FRE	
Game Design Development		
Geography		
Geology		
German		
Gerontology	⊓∪⊌	10/

Subject	Code	Pg
Government		
History	HIS	. 162
Honors	HRS	. 164
Hospitality	HSM	. 165
Human Services		
Interdisciplinary Health Studies	IDH	. 168
Interdisciplinary Studies	IDS UCC	
Interpreting Spoken Language	IDT	. 169
Italian		
Library Science	LIS	. 172
Manufacturing		
Engineering Technology		
Mathematics		
Mechanical Engineering Technology		
Modern Languages, see	CHN	. 129
	FRE GER	
	ITA	. 169
	SPA	. 195
Nuclear Medicine	MTM/	. 1 <i>77</i>
	RNTM	. 191
Nursing, Muhlenburg		
Nursing, Trinitas		
Oceanography		
Paralegal Studies		
Paramedic		
Philosophy		
Physical Education		
Physical Therapy Assistant		
Physics		
Practical Nursing		
Psychology		
Psychosocial Rehabilitation	LIPR	196
Radiation Therapy	RATM	. 190
Radiology	RADM	. 189
Respiratory Care	RSTN	. 191
	URC	. 196
Sociology		
Spanish		
Sports Management		
Translating	TRN	. 195
Urban Studies	URS	. 196
Walt Disney World		
Women's Studies	WMS	. 197

THE COURSE **NUMBER SYSTEM IS:**

000-099 Institutional Credit. Does not meet graduation requirements and will not transfer to fouryear colleges.

100-199 Freshman Courses

200-299 Sophomore Courses

ACC • Accounting

ACC 103 Accounting I

Theory of debit and credit, the purpose and use of a balance sheet, income statement, controlling accounting accounts, subsidiary ledgers, and special journals. Description of negotiable instruments, worksheets, depreciation methods, accounting for accruals and deferrals, and accounting for inventories. Financial Accounting Theory. Equivalent course may be substituted. See Departmental Chair. Prerequisite: ENG 088. 4 lecture hours per week. 4 credit hours.

ACC 104 Accounting II

A continuation of ACC 103. Topics include accounting for current liabilities, investment, preparation, interpretation and evaluation of financial statements and reports, comparison of corporation and partnership accounting. Managerial Accounting. Prerequisite: ACC 103 or the equivalent. See Departmental Chair. 4 lecture hours per week. 4 credit hours.

ACC 203 Intermediate Accounting I

Application of accounting theory to classification of assets, liabilities, equity, fixed assets. Accounting for intangible assets, consigned inventory and cash management included. FASB oriented. Prerequisite: ACC 104 or the equivalent. 4 lecture hours per week. 4 credit hours.

ACC 204 Intermediate Accounting II

Continuation of Intermediate Accounting I with an analytical approach to statements of income, retained earnings, and changes in financial position; influences of federal taxation on financial reporting, consolidation and branch accounting. FASB oriented. Prerequisite: ACC 203. 4 lecture hours per week. 4 credit hours.

ACC 205 Cost Accounting

Theory and concepts applied to accounting for costs of manufacturing operations: methods of controlling and costing material inventory, procedures for charging labor and overhead costs to production; production data and tlow; job order and process cost cycles; planning flexible budgets and standard cost variance analysis. Prerequisite: ACC 104 or equivalent. 4 lecture hours per week. 4 credit hours.

ACC 210 Microcomputers in Accounting

The study and development of skills in the application of accounting and financial functions on the microcomputer. The course will provide the student with hands-on experience in various accounting software applications and spreadsheet use. Prerequisite: ACC 104 and familiarity with the IBM-PC. 2 lecture and 2 laboratory hours per week. 3 credit hours.

ACC 211 Federal Taxes I

A study of Internal Revenue codes commonly used by individuals and small businesses for returns, rates, credits, gross income inclusions, gains and losses, bases, dividends, deductions, preparation of individual returns. Prerequisite: ACC 103 or equivalent. Course open to all majors. 4 lecture hours per week. 4 credit hours.

ACC 212 Federal Taxes II

A continuation of ACC 211 with emphasis on partnerships and corporations, estates and trusts. Social Security taxes and Federal Estate tax complement subject matter covered. Prerequisite: ACC 211. 2 lecture and 1 laboratory hour per week. 2 credit hours.

ACC 290 Co-op Education Experience

An externship of approximately 200 hours in an accounting position with a local business or industry, with or without compensation. If an externship cannot be arranged, a term project on or off campus will be assigned. A weekly seminar on campus is included. An elective may be substituted. This course is open only to matriculated students in the A.A.S. degree accounting program. Prerequisite: ACC 203 or the equivalent or arrangement with the accounting coordinator. 10 lecture hours and 200 externship hours. 3 credit hours.

ADEC • Dental – UMDN.

ADEC 1110 Dental Head and Neck Anatomy

This course is a study of the basic structures of the oral cavity, a study of nomenclature, structure and morphology, and function of the teeth. Demonstrations and lecture sessions are designed to emphasize the clinical appearance of the anatomical features of the teeth and to point out relationships to adjacent teeth, opposing teeth, and surrounding tissues. This course also describes the structure and function of the gross structures of the head and neck. Discussions will emphasize importance of anatomical concepts. 45 lecture hours. 3 credit hours. This course is only available to students who have been accepted into a UMDNJ program. For the most current course description visit http://coursecatalog.umdnj.edu/

ADEC 1205 Dental Health Education I

This course is designed to prepare the dental hygiene student to provide patient education to individuals and groups. The course takes the student through a step by step process regarding the development, implementation and evaluation of dental health education programs. Students complete an individualized patient education project. 45 lecture hours. 1 credit hour. This course is only available to students who have been accepted into a UMDNJ program. For the most current course description visit http://coursecatalog.umdnj.edu/

ADEC 1209 Introduction to the Dental Profession

This course is designed to introduce the student to the profession of dentistry and each of the recognized dental specialties. Through lecture and laboratory sessions, the student learns dental procedures and the role of the dental auxiliary in the following areas: dental public health, endodontics, oral and maxillofacial surgery, oral pathology, orthodontics, pediatric dentistry, periodontics, prosthodontics, and oral and maxillofacial radiology. State dental practice acts and ethical considerations for the dental auxiliary are addressed. 45 lecture hours, 30 lab hours. 4 credit hours. This course is only available to students who have been accepted into a UMDNJ program. For the most current course description visit http://coursecatalog.umdnj.edu/

ADEC 1219 Dental Radiology

Dental radiography is a didactic/laboratory course presenting the principles of radiology and its clinical application. Lecture topics include x-ray production, processing of films, intra and extra oral techniques, quality assurance, utilization of radiographic selection criteria, radiographic interpretation, and radiation biology and safety. Also covered is infection control and hazardous waste disposal. Laboratory experiences include mannequin simulation as well as assigned patients. The format will include lectures and demonstrations followed by student participation. Students who take the laboratory component will also complete a portfolio with a selfevaluation paper. 30 lecture hours, 45 lab hours. 3 credit hours. This course is only available to students who have been accepted into a UMDNJ program. For the most current course description visit http://coursecatalog.umdnj.edu/

ADEC 1240 Medical Emergencies

The course is designed to cover the causes of various medical emergencies and how to manage an episode in the dental office. Through lectures and reading materials the student will learn about various conditions that can lead to a medical emergency in the dental office, how to recognize it and what management steps are necessary in that particular case. The student is also taught how to prevent a medical emergency from occurring via proper history taking techniques. The course also includes a laboratory project which involves independent research on a given systemic condition. 15 lecture hours, 15 lab hours. 1 credit hour. This course is only available to students who have been accepted into a UMDNJ program. For the most current course description visit http://coursecatalog.umdnj.edu/

ADEC 1250 Dental Materials

This course is to introduce and reinforce theory, techniques and application in the handling of dental materials. Information and manipulation will be taught to a pre-clinical laboratory proficiency level and will be explored further in the Dental Specialties courses. Expanded functions as listed in the New Jersey Dental Auxiliary's Act are included whenever applicable to reinforce the importance of understanding the utilization of dental materials. 30 lecture hours, 45 lab hours. 3 credit hours. This course is only available to students who have been accepted into a UMDNJ program. For the most current course description visit http://coursecatalog.umdnj.edu/

ADEC 1269 Dental Specialties I

This course consists of lectures and laboratory sessions which allow students to demonstrate clinical competency. At the completion of the course, the student will be able to perform expanded duties, incorporate principals, and manipulate properties of dental materials to laboratory proficiency as outlined in the New Jersey Dental Auxiliary Practice Act. This course is a Prerequisite to Dental Specialties II. 15 lecture hours, 15 lab hours. 1 credit hour. This course is only available to students who have been accepted into a UMDNJ program. For the most current course description visit http://coursecatalog.umdnj.edu/

ADEC 2460 Practice Management

This course prepares the student in dental practice management procedures. Topics include appointment contacts, telephone techniques, record keeping, insurance, computerized dental systems, resume writing and interviewing. Legal, ethical and safety issues are emphasized. Case studies in ethics will be emphasized followed by group discussion. 15 lecture hours. 1 credit hour. This course is only available to students who have been accepted into a UMDNJ program. For the most current course description visit http://coursecatalog.umdnj.edu/

ADM • Administrative Support

ADM 100 Notetaking (SuperWrite)

This introductory course will help students in every discipline learn to take good notes. The students are taught the SuperWrite system. Students will learn how to read and write notes. This course is ideal for anyone who needs to take better notes either in class or on the job. This course is open to all majors; however, it is not intended as a transfer course. 3 lecture hours. 3 credit hours.

ADM 101 Keyboarding for the Computer I

This course is designed for those who plan to use a computer for personal and professional purposes. Students learn the alphabetic, numeric, and symbol keys, including the ten-key pad on PCs. The basic skills needed for document formatting are taught. Reports, letters, and memoranda are introduced. This course is open to all majors. 1 lecture hour and 2 laboratory hours per week. 2 credit hours.

ADM 102 Keyboarding for the Computer II

This course is a continuation of Keyboarding for the Computer (ADM 101) where proper keyboarding techniques and computer literacy were stressed. This course begins with production work, while continuing to stress the importance of proper techniques. Topics include: tables, rough-draft reports, bulleted and numbered lists, business and personal letters, reports with footnotes and endnotes, bibliographies, and employment papers. Prerequisite: ADM 101 or Challenge Examination or permission from ADM Coordinator/Business Department Chairman. 1 lecture hour and 2 laboratory hours per week. 2 credit hours.

ADM 131 Administrative Procedures

This course discusses general administrative professional orientation, including the role of a professional secretary. This course develops self-confidence and a professional attitude. Lectures and discussions on records management, mail processing, travel arrangements, business meetings, communications responsibilities, financial assistance, investments, human relations in the office, grooming, and career advancement. Development of business vocabulary and business communications skills is included. Also, an overview of employment search activities such as the resume and interview process is covered. 3 lecture hours per week. 3 credit hours.

ADM 135 Proofreading and **Editing Skills**

This course addresses the complaint of many office supervisors that employees lack business communication skills. Major emphasis is on developing technical editing skills needed for successful employment in a business environment. Students apply these skills to typical business correspondence. This course is ideal for students who are planning a career where communication skills are required. Prerequisites: ENG 088 and ENG 098. 3 lecture hours per week. 3 credit hours.

ADM 140 Customer Service

This course covers the many aspects of customer service skills needed in business and industry. The course examines the people, practices, and events that are needed in the field of customer service. The course includes an overview of customer service, discusses specific skills and related topics, and provides insight into future customer service trends and issues. This course is beneficial to anyone in business and industry that provide products, services, or information. Prerequisites: ENG 089 and ENG 099. 3 lecture hours per week. 3 credit hours.

ADM 213 Word I

This course introduces the student to the use of a current version of Microsoft Word. Topics include: creating/editing documents, formatting, speller/thesaurus/grammar checker, widow/orphan control, headers/footers, multiple windows, find/replace, Auto text, templates, Wizards, borders, Microsoft Draw, WordArt, tables, columns, styles, and more. Materials covered in this course helps prepare the student for the Microsoft Office Specialist (MOS) certificate in Word. This course is also listed as CIS 113. Prerequisite: ADM 101 or higher level keyboarding course or permission from ADM Coordinator/Business Department Chairman. 2 lecture and 3 laboratory hours per week. 3 credit hours.

ADM 214 Word II

This course is a continuation of Word I, ADM 213/CIS 113. Students learn how to insert pictures and text boxes, create newsletters, control text flow, create and modify styles, insert and edit fields, use electronic forms, use mail merge, create and manage macros, use advanced table-formatting features, create charts and import data into charts, add/edit footnotes and endnotes, create and navigate outlines, create master documents, create and track comments, create hyperlinks and more. Material covered in this course helps prepare the student for the expert level of the Microsoft Office Specialist (MOS) certificate in Word. Prerequisite: ADM 213/CIS 113 and ADM 101 or higher level keyboarding course or permission from ADM Coordinator/Business Department Chair. 2 lecture and 3 laboratory hours. 3 credit hours.

ADM 215 Excel I

This course introduces the student to the use of a current version of Microsoft Excel. Students build a worksheet from a beginning level to an intermediate level. Topics include creating and formatting a worksheet, enhancing a worksheet, absolute and relative referencing, functions, advanced formulas, dates, times, financial functions, templates, multiple worksheets/files charts, and more. Material covered in this course helps prepare the student for the Microsoft Office Specialist in Excel. This course is also listed as CIS 115. 2 lecture and 2 laboratory hours per week. 3 credits.

ADM 216 Access

This course introduces the student to the use of a current version of Microsoft Access. Students create a database and learn to maximize productivity. Some of the topics included are creating a database, organizing and retrieving data, working with tables, creating queries and advanced queries, building forms, reports and data access pages, automating and extending Access, entering criteria, sorting, structure, validation, referential integrity, the World Wide Web, Hyperlink fields, briefcase replication, wizards, and macros. Materials covered in this course help prepare the student for the Microsoft Office Specialist (MOS) certificate in Access. This course is also listed as CIS 116. 2 lecture and 2 laboratory hours per week. 3 credit hours.

ADM 217 PowerPoint

Students learn how to create professional-looking presentations using a current version of Microsoft PowerPoint. Some of the topics covered are creating and editing, table slides, templates, ClipArt Gallery, autoshapes, drawing tools, organization charts, enhancing presentations, slide time, running an automatic slide show, selecting color schemes, captions, integrating Word and Excel, creating presentations for a Web page, AutoContent, Hyperlinks, and more. Material covered in this course helps prepare the student for the Microsoft Office Specialist (MOS) certificate in PowerPoint. 2 lecture and 2 laboratory hours per week. 3 credit hours.

ADM 290 Co-op Education Experience

An externship of approximately 200 hours in the office of local business firms. If an externship cannot be arranged, a term project on or off campus will be assigned. Co-op should be taken in student's last year of program. An elective may be substituted for this course. Prerequisite: Permission from Administrative Support Coordinator/Business Department Chair. 1 lecture and 20 laboratory hours per week. 3 credit hours.

ARC • Architecture

ARC 101 Architectural Design I

An introduction to architectural design through the examination of basic principles and elements of design. Human needs such as personal identity, privacy, community, and security are studied and applied to a series of problems in spatial organization. 3 lecture and 5 laboratory hours per week. 5 credit hours.

ARC 102 Architectural Design II

A further exploration of architectural design issues, examining the impact of the environment on physical and mental health, user-groups and their responses to environments, and architectural design as the expression of social values, cultural patterns, and historical heritage. Execution and criticism of a series of related problems. Prerequisite: ARC 101. 3 lecture and 5 laboratory hours per week. 5 credit hours.

ARC 105 Introduction to Architecture and Culture

An introductory study of architecture and design issues that impact society. This course is for students interested in pursuing studies in architecture and design fields such as landscape architecture, interior design, urban planning, historic preservation, real estate, and facilities design. It explores how architecture and environments impact and shape our lives and communities. The cultural and historic basis for design will be studied and technical aspects of architecture will be introduced through examples. Prerequisite: ENG 088. 3 lecture hours per week. 3 credit hours.

ARC 205 Architectural CAD Design

This course covers the basics of computer technology and software applications used in the architectural profession to design, produce, present, and communicate with other design professionals and clients. Using computer-assisted design, students will perform a series of design assignments. Applications of computer tools in resolving design issues during the various phases of a project will be discussed and utilized. The course will build on the elements of architectural theory and practice. Execution and project reviews will be conducted in a group format. Prerequisite: ARC 102 or permission of instructor. 2 lecture hours and 3 laboratory hours per week. 3 credit hours.

ARC 206 Architectural 3D Design

This course will expose students to the more advanced aspects of computer assisted design of architecture and design projects. The course will require the completion of projects involving the resolution of a more complex set of design issues. Students will be using advanced applications of Computer Aided Design (CAD) and three-dimensional modeling to construct a design project and presentation layout from start to finish. Execution and project reviews will be conducted in a group format. Prerequisite: ARC 205 or permission of instructor. 2 lecture hours and 3 laboratory hours per week. 3 credit hours.

ARC 210 Portfolio Development and Presentation Methods

This course will provide the architecture and design student with the foundation for the preparation of a design portfolio. The individual is encouraged to organize a comprehensive assemblage of work. Various techniques of media images are demonstrated and applied to the student's individual design projects. This portfolio typically is used for transfer evaluations and work/job interviews. Prerequisite: ARC 102 or permission of the instructor. 1 lecture hour and 3 laboratory hours per week. 2 credit hours.

ARC 216 Materials & Construction I

Introduction to wood and masonry construction. Weights and strengths of various materials are given and actual shapes and sizes are drafted to produce wall sections of typical wood frames. Building code requirements are also introduced. Knowledge is applied to projects produced in Architectural Design course. 1 lecture and 2 laboratory hours per week. 2 credit hours.

ARC 217 Materials & Construction II

Introduction to steel and concrete construction, roofing, glazing, and cladding systems for buildings. Prerequisite: ARC 216. 1 lecture and 2 laboratory hours per week. 2 credit hours.

ARC 224 Structural Design I

An introduction to the basic principles of static equilibrium of external forces in engineered systems, including the use of free-body diagrams, the location of centroids, and calculation of area moments of inertia. Practical problems involving simple structures, trusses, frames, etc., are analyzed, preparing the student for further study of the strength of materials, structural analysis, and design. Special topics for architectural applications. Calculations use units from both the Customary English System and the International System (Metric). Prerequisite: MAT 143. 3 lecture hours per week. 3 credit hours.

ARC 225 Structural Design II

An introduction to the basic principles of strength of materials, structural analysis, and design. Practical problems involving internal stresses and strains, properties of structural materials, shear and moment diagrams, beam stresses and deflections, structural behavior of beams, columns, and connections. It provides the student with the basic knowledge and skills required to analyze and design basic structural elements, including wood and steel tension members, beams, columns, and simple structural connections. Calculations use units from both the Customary English System and International System (Metric). Prerequisites: ARC 224. 3 lecture and 1 laboratory hour per week. 3 credit hours.

ARC 295 Independent Study

A special research and/or design project in Architecture for the advanced student with individual needs. Prerequisite: Permission of the instructor. 1 to 3 credits by arrangement.

ASL • American Sign Language

ASL 101 American Sign Language I

This course is designed to introduce the student to American Sign Language, the visual-gestural language of Deaf persons, and Deaf Culture and to develop receptive and expressive communication skills with incorporation of visual-gestural techniques, ASL vocabulary, basic rules of grammar, syntax and some cultural features of the Deaf community. Prerequisite: Students whose records and tests indicate the need for review in the fundamentals of language will be assigned to Communication skills courses. Students placed in English 098-099 and English 088-089 must demonstrate college level competence before enrolling in American Sign Language & Deaf Studies Program. 3-1/2 lecture hours and 1-1/2 laboratory hours per week. 4 credit hours.

ASL 102 Visual-Gestural Communication

A skill development course of the visualgestural aspects of communication, which are an integral part of American Sian Language. Emphasis will be on visual and kinetic readiness via visual-gestural communication techniques, visual discrimination and memory exercises; also kinetic movements and exercises of body, face, arms and hands and their relationship to space. Spatialization and its relationship to the signer's perspective will be developed through exercises. Emphasis will be on mastering visual and kinetic skills related to visual-gestural communication and on non-manual behaviors of American Sign Language. Students will do survey and/or research of similarities and differences between American Deaf Culture visual-gestural/non-manual aspects. Prerequisite: Students whose records and tests indicate the need for review in the fundamentals of language will be assigned to Communication skills courses. Students placed in English 098-099 and English 088-089 must demonstrate college level competence before enrolling in American Sign Language & Deaf Studies Program. Corequisite: ASL 101. 1-1/2 lecture hours and 1-1/2 class laboratory hours per week. 2 credit hours.

ASL 103 American Sign Language II

This course is a continuation of ASL (ASL 101). It is designed to develop further competency in ASL above the basic level. Students will be exposed to ASL transcription symbols, sentence types, non-manual behaviors, time, pronominilization, subjects and objects, classifiers, locatives, pluralization, temporal and distributional aspects. Some information about the Deaf Community and its culture will also be featured throughout the course. Receptive and expressive sign vocabulary will be featured through class activities leading to basic conversational skills in ASL. Students will be expected to interact with the Deaf Community in real-life situations, thereby enhancing their awareness of and sensitivity toward various aspects of Deaf Culture and ASL. Prerequisite: ASL 101. 4 lecture hours per week. 4 credit hours.

ASL 104 ASL Classifiers

This course will expand on understanding the principles of Classifiers, an integral part of American Sign Language (ASL), knowing how to identify different types of ASL Classifiers, and application of ASL Classifiers. Students will learn and apply the three types of classifiers, learn and use the representative classifiers (animate and inanimate), descriptive classifiers (size-and-shape, extent, perimeter, and pattern and texture), and instrumental classifiers. This course will provide hands-on experiences and skill building activities needed for appropriate classifier use applied to complex descriptions and images. Eye gaze, role shifting, spatial referencing and appropriate use of ASL Classifiers in storytelling and different genres will also be covered. Prerequisite: ASL 101 and 102. Corequisites: ASL 103 and HUD 104. 2 lecture hours per week. 2 credit hours.

ASL 201 American Sign Language III

This course is a continuation of ASL II. It is designed to develop further competencies in ASL; expanding the emphasis on ASL grammar and vocabulary development as well as Deaf Community and culture. Students will experience additional in-depth receptive and expressive skill development. Development of advanced signing skills include topicalization of health, drug use, money/business, etc. Dialogue, short stories, narratives, and conversations will be featured throughout the course. Students will be required to interact with the Deaf Community in real-life situations enhancing their awareness, application, and sensitivity toward various aspects of ASL and Deaf Culture. Prerequisite: ASL 103. 2 lecture and 2 laboratory hours per week. 3 credit hours.

ASL 202 American Sign Language IV

This course teaches students advanced conversational and discourse skills in American Sign Language and advanced and fine aspects of American Deaf Culture. Styles/Registers in ASL will be discussed on an advanced level. Development of advanced signing skills include topicalization of medical and sexual behavior, current events, dialogues, sign variants/differences, etc. Text and discourse analysis are also incorporated throughout the course. Prerequisite: ASL 201 and ASL 205. 2 lecture and 2 laboratory hours per week. 3 credit hours.

ASL 203 American Sign Language V

ASL Vocabulary and usage of ASL are expanded through storytelling and folklore in ASL. Students will enhance skills in storytelling and re-telling which incorporate the dynamics of ASL and its finer aspects. Students learn how to participate in group discussions, to speculate and make analogies, give instructions and express feelings and intentions as well as applications of ASL discourse styles and registers and rehearse appropriate social/language responses.

Prerequisite: ASL 201. 3 lecture hours per week. 3 credits hours.

ASL 205 Linguistics of American Sign Language

Conducted in American Sign Language (ASL), the course is descriptive and data-oriented rather than theoretical. The course gives an historical overview of social and linguistic events that influence transformations in ASL; introduction to structure and organizational properties of ASL as identified through linguistic research; review of other languages that share similar organizational principles; discussion of semantic hierarchy and framework for analyzing semantic properties of ASL. Prerequisite: ASL 103. Corequisite: ASL 201 or permission of instructor. 3 lecture hours per week. 3 credit hours.

ASL 208 American Deaf Culture and History

This course is a study of the status of Deaf people as both a linguistic and cultural minority group. This course is designed for individuals who may or may not have had prior experience with Deaf people. The course raises questions on the nature of sign language and its varieties, the education of Deaf people, the historical treatment of Deafness, the sociological and cultural make up of Deaf individuals, and the nature of ASL Literature and poetry. The course also covers the history of Deaf people in the Western World, with emphasis on the American Deaf Community and its relation to hearing society. Prerequisite: ASL 201 and ASL 205. Corequisite: ASL 202. 3 lecture hours per week. 3 credit hours.

ASL 210 American Sign Language and Deaf Literature

Students read and discuss in ASL various genres of American Sign Language and Deaf literature. Students develop basic skills in ASL Literature. Concentration is on the work of current, recognized narrators in both literacy and face-to-face storytelling traditions. Prerequisite: ASL 203. 3 lecture hours per week. 3 credit hours.

ASL 211 Mentoring – Skills Development for American Sign Language-English Interpreters

This course is designed as a supervised mentoring for students with a certificate of completion or degree in ASL-English Interpreting or three years of experience as a community and/or educational interpreter. Students will design specific skill development goals to focus on during the course. Emphasis will be on application of lean and rich American Sign Language features, i.e., fingerspelling, vocabulary, use of space, classifiers, Prosody, Interpreting (ASL to English and English to ASL) in interpreting, based on the students' specific skill development goals. Students will apply self-assessment tools for maintaining skills enhancement. Knowledge and skills sets in ASL/English interpreting may include Bilingual/multilingual skills, meaning management skills (interpreting/transliterating), ethical and professional decision-making, professional management and business skills, and/or new specialization, i.e., medical, business, mental health, legal interpreting, or working towards a certification. Prerequisites: Permission of Instructor. 3 credit hours.

ASL 270-289 Selected Topics in American Sign Language Studies

Studies of selected events, issues, topics or skill development in American Sign Language Studies will be offered on the basis of timely concerns, community interests, students' requests, etc. These courses are of a continuation of professional skill development and of a timely or specialized nature and can be best offered not on a regularly scheduled basis, but periodically. Individual topics will be announced prior to registration; one, two, or three credits will be offered depending on the nature of the course format and class hours. 1, 2, or 3 credit hours.

AST • Astronomy

AST 101 Astronomy of the Solar System

This course describes the nature and motions of all the solar objects: sun, planets, satellites, asteroids, comets, and meteoroids. Astronomical discoveries are put into historical perspective. Experiments are carried out to determine the mass of the earth, phases of the moon and Venus, and more. Distances and motions are calculated using only high school math. The use of sky charts and coordinate systems is presented. Open book and open notes for exams encourage the practical application of the studied material. 3 lecture hours and 3 laboratory hours per week. 4 credit hours.

AST 102 Astronomy Beyond the Solar System

This course covers objects outside the solar system, including stars, constellations, galaxies, and the universe. The brightness and spectral (color) classes of stars are investigated along with the life history of typical stars. The course then covers how stars are clustered into galaxies, and the relationships of galaxies to each other in the universe. The spectroscope is employed to examine spectral lines of stellar gases. These lines tell us the stuff of which stars are made. Additional experiments cover items such as constellations, classification of stars, the Milky Way, and the structure of the universe. In doing the experiments using basic math, students discover anew what great astronomers of the past have found. Open book and open notes for exams encourage the practical application of the studied material. 3 lecture hours and 3 laboratory hours per week. 4 credit hours.

AUT • Automotive Technology

AUT 100 Automotive Fundamentals

This course is an introduction to basic automotive fundamentals. Students will be taught safety, computer software and information retrieval from service manuals and business based software programs, basic hand tools, power tools, specialty tools, and their uses and applications. Fasteners and thread repair techniques will also be covered. Basic car component identification, services, and maintenance will also be presented to the students. This is an introduction course to familiarize new students with no prior automotive background and is a requirement before entering the Automotive Technology Program. The ability to test out of this course will be offered to students with prior automotive experience. 3 lecture and 3 laboratory hours per week. 4 credit hours.

AUT 101 Steering/Suspension Systems

This course is designed to teach the principles of automotive steering/suspension systems and wheel alignment. Basic tire construction, ratings, repairs, dismounting and mounting procedures are covered. Static and dynamic wheel balancing procedures will finish the tire segment. This program will cover fundamentals of short/long-arm, and strut suspension which includes the components that are individually part of the suspension systems and how they operate. Various steering linkage systems, components, operation, differences between manual and power steering and how they apply to steering, suspension, and four wheel alignment will be discussed. The basics of two and four wheel alignment and the related geometry will be taught to the students during the wheel alignment segment of the course. Students will learn strategy-based diagnostic routines, in order to interpret and verify customer concerns and to perform tests to determine the causes of problems. Students will perform hands-on repairs related to tires, steering and suspension components as well as actual wheel alignments. 3 lecture and 3 laboratory hours per week. 4 credit hours.

AUT 102 Manual Drive Trains

This course covers the manual drive train and the components that are individually part of it. Covered are front wheel, rear wheel drive, four wheel drive, and all wheel drive transmissions systems. The power delivery to the wheels through the clutch, transmission, differential and drive shafts are part of this course. Theory, noise diagnostics and overhaul procedures will be covered within this phase. Constant velocity axles and drive shaft overhaul will be covered as well. Included within this module will be a section on diagnostics, noise, and vibration causes and repairs. 3 lecture and 3 laboratory hours per week. 4 credit hours.

AUT 103 Brake Systems

The brake course prepares the student to diagnose and repair brake systems in the automotive field. This course builds upon the essential laws of physics, motion, forces, hydraulics, thermodynamics, and chemical reactions, and how these principles apply to the operation of the automotive brake system. The course will cover the energy conversion of motion changed to heat energy (when brakes are applied,) the effects of weight and speed on braking and stopping distance, thermal expansion, friction, force, and coefficient of friction, as they apply to braking systems. The course covers the fundamentals and service of disc/drum brakes; including, how they operate, brake-fluid properties, diagnosis, component replacement/repair/adjustment, disc/drum machining, power-assist units, and the fabrication (double flaring) of brake lines. The student will learn strategybased diagnostic routines for interpreting and verifying customer concerns and proper operation. Through the inspection, testing, or measurement of component(s) operation, the student will learn to apply this knowledge to determine needed repair(s) and to implement the repair(s). 3 lecture and 3 laboratory hours per week. 4 credit hours.

AUT 121 Automotive Electrical 1

This ASE certified course is a basic automotive electrical course designed to cover the theory of electricity. The course will cover the basic applied electrical principles, basic component operation such as bulbs, relays, diodes, magnetism, and test equipment, moving toward chemical development of electricity (the battery) and the development of electromagnetism in its applied use in the starting and charging of systems. 3 lecture and 3 laboratory hours per week. 4 credit hours.

AUT 122 Automotive Electrical 2

This course will build on the basic applied electrical principles from Automotive Electrical 1, and apply them to individual systems of the automobile. A diagnostic strategy will be developed to allow the student to be able to diagnose and repair electrical problems. The horn, lighting, wiper and washer systems will be covered as well as dash instrumentation and motorized accessories within the automobile. The applied use of electrical test equipment will be mandatory during this phase. Prerequisites: AUT 121. Corequisite: AUT131. 3 lecture and 3 laboratory hours per week. 4 credit hours.

AUT 131 Automotive Engine Performance 1

This ASE certified based course is an introduction to the basic interrelationship of the engine, ignition, fuel, and exhaust systems that is called, engine performance. This course will cover the basics of the ignition system, basic engine operation, basic fuel and its delivery. The byproduct of their united functions which is exhaust and emissions will be discussed. Basic diagnostics and maintenance of these systems will be taught. Prerequisite: AUT 121. 3 lecture and 3 laboratory hours per week. 4 credit hours.

AUT 201 Engine Repair

This course is designed to introduce the student to engine construction, diagnosis, and repair/rebuilding procedures. The student will learn the basic construction and operation of a four stroke engine, types, classifications, and ratings. Components, hardware, and service tools that are part of the short block assembly and valve train will be discussed. Engine sub systems; cooling, lubrication, starting, fuel, and emissions will be included within engine repair. Engine overhaul procedures and common engine mechanical repairs will be taught during this phase. An engine teardown, measurement, analysis, and reassembly will be a requirement of the course. Diagnosis and troubleshooting engine mechanical problems will be covered in this phase. 3 lecture and 3 laboratory hours per week. 4 credit hours.

AUT 202 Automotive A/C & Heating

This course is designed to introduce the student to the basic theories and principles of refrigeration and their applications in the automotive air conditioning and heating system. The student will study the basic theories and principles of refrigerant, safety and environmental concerns, and the related tools and equipment needed to service these systems. The student will learn the associated electrical system controls and operations that allow air delivery, filtration, and temperature control into the automobile. The cooling system in relation to the heating system of the automobile will be covered. The student will perform related hands-on tasks to recharge, evacuate, purge, and diagnose heating and A/C problems. Included in this course will be the information and test for handling automotive refrigerant. Prerequisite: AUT 122. 3 lecture and 3 laboratory hours per week. 4 credit

AUT 203 Automatic Transmission

This course is an introduction to automatic transmissions and transaxles. Applying the previously learned information from Manual Drive Trains. Automatic Transmissions will cover the hydraulic principles and the components that allow this transmission to shift automatically. Mechanical components, fluid transfer, circuitry, and testing will be part of this course. Pressure testing and overhauling a transmission will be a requirement. Electronic transmission shifting, lock-up, and diagnostics through a scanner will be covered. Prerequisite: AUT 102. 3 lecture hours, and 3 laboratory hours per week, 4 credit hours.

AUT 223 Automotive Electrical 3

This course will cover the differences between automotive electricity and automotive electronics specializing in the electronic controls within the automobile. Different electronic waveforms and the test equipment to monitor them will be discussed. Diagnostic procedures and computer flow chart diagnostics will enable the student to test electronic modules and sensors within the automobile. Anti-lock brake, air bag, and other specialized electronic systems will be part of this course. New electronic technology will be introduced in this phase as it is developed. Prerequisites: AUT 103, AUT 101, and AUT 122. Corequisite: EET 111. 3 lecture and 3 laboratory hours per week. 4 credit hours.

AUT 232 Automotive Engine Performance 2

This course will build on the introduction of engine performance by expanding each of the sections for more in-depth coverage of the new systems on an automobile. Course coverage will include various electronic ignition systems, fuel injection systems, and computer controls that affect emissions. An introduction to OBD 1 and OBD 2 systems will also be covered. Diagnostics and repair of these systems with computer-based technology will enhance this course. Prerequisites: AUT 122 and AUT 131. Corequisite: AUT 201. 3 lecture and 3 laboratory hours per week. 4 credit hours.

AUT 233 Automotive Engine Performance 3

This course will take the information provided in Engine Performance 1 and 2 and relate them to advanced engine performance diagnostics. Students will develop a diagnostic process with the use of test equipment to prepare them to be emission repair technicians. Following a New Jersey approved curriculum for emission repairs, the student should be able to take the New Jersey emission repair technician certification test. The balance of the course will be practicing the requirements of the New Jersey inspector license with the goal of obtaining the New Jersey inspector certificate. Prerequisites: AUT 122 and AUT 232. Corequisite: AUT 223. 3 lecture and 3 laboratory hours per week. 4 credit hours.

AUT 290 Co-op Education Experience

This course is a work-externship comprising a minimum of 400 hours of employment related to automotive technology with a dealership, independent or specialty auto shop, chain store, municipality, fleet or corporate facility. Prerequisites: Permission of the Automotive Coordinator. 6 credit hours.

BIO • Biology

BIO 002 Introduction to Anatomy and Physiology

An introduction to the fundamental concepts of anatomy and physiology. The course is designed for students who have had no high school biology or who need a review before enrolling in BIO 105-106 or BIO 110. This course will not fulfill a laboratory science requirement. 3 lecture hours per week. 3 credit hours.

BIO 004 Introduction to the **Human Body**

An introduction to the fundamental concepts of anatomy and physiology. The course is designed for students who have passed BIO 102 or BIO 110, and are now seeking enrollment in the Professional Nursing program. This course will be conducted online, with additional assignments to be completed at the Academic Learning Center. This course will not fulfill a laboratory science requirement. Prerequisites: BIO 102. Lecture is online format. 2 credit hours.

BIO 100 Natural History of New Jersey

A study of New Jersey's natural history including the flora, fauna, geology, and a historical background of its diverse environments. The lectures focus on man's role in changing the face of New Jersey. Two field trips, to be held on weekends, will explore selected regions of the state. This course is intended to serve as an elective and not to fulfill a lab science requirement. 3 lecture hours per week. 3 credit hours.

BIO 101 Introduction to Biology

A one-semester introductory course for non-Biology majors covering the basics of life science including scientific method, origin of life, the cell, energy processes, genetics, evolution, and other topics which can be applied to everyday living. 3 lecture and 3 laboratory hours per week. 4 credit hours.

BIO 102 Human Biology

This course is an introduction to human anatomy and physiology for the non-Biology major. It is designed to develop an appreciation for the structure and functions of the human body; to point out the relationship of body systems to health and disease; and to emphasize human biology as it relates to everyday living experiences. Not open to students who have taken BIO 105-106. 3 lecture and 3 laboratory hours per week. 4 credit hours.

BIO 103 Biology of People and the **Environment**

A study of ecological principles and their application to man's role in the biosphere. Population growth, technology, and the social dilemmas posed are viewed in terms of their contributions toward the degradation of environmental quality. The future of man and how he will cope with these problems is discussed. One or more all day field trips on weekends may be required in lieu of some regularly scheduled sessions. Not open to students who have taken BIO 208. 3 lecture and 3 laboratory hours per week. 4 credit hours.

BIO 104 A Survey of the Animal Kingdom

A one-semester survey of the principal types of animals for the non-Biology major. The course will cover the structure, function, and ecology of the major animal groups. Emphasis will be placed on the importance and interaction of these animals to humans. One or more all day field trips on weekends may be required in lieu of some regularly scheduled lab sessions. 3 lecture and 3 laboratory hours per week. 4 credit hours.

BIO 105 Anatomy and Physiology I

The study of the organ systems from the perspective of their structure, processes, and regulation. The course specifically deals with cells, tissues, integument, skeletal system, muscular system, and nervous system. Prerequisite: High School Biology and/or Chemistry. 3 lecture and 3 laboratory hours per week. 4 credit hours.

BIO 106 Anatomy and Physiology II

A continuation of Anatomy and Physiology I intended to complete the required two-semester sequence. The course covers the following systems: endocrine, respiratory, circulatory, lymphatic, digestive, urinary, and reproductive. Prerequisite: BIO 105. 3 lecture and 3 laboratory hours per week. 4 credit hours.

BIO 107 Decisions for Wellness

A one-semester non-Biology majors course that focuses on wellness and several quality of life issues. The course will also discuss disease prevention and functioning optimally on a daily basis in order to enhance one's life now as well as in the future. There is no dissection required in this course. 3 lecture and 3 laboratory hours per week. 4 credit hours.

BIO 108 Microbiology

A study of microbial life on earth including microbial cell biology, growth and metabolism, genetics, diversity and evolution, effects on the environment, and the interactions between microorganisms and higher forms of life. Emphasis will be placed on the relationship between microorganisms and humans and current efforts to track and control infectious diseases worldwide. Prerequisites: BIO 105 or one semester of collegelevel chemistry. 3 lecture and 3 laboratory hours per week. 4 credit hours.

BIO 109 Nutrition

This is an introductory course in nutrition. It is designed to provide the non-Biology majors student with the chemistry and function of all essential nutrients. It will also discuss current ideas and thinking in nutrition as well as an introduction to methods of research in nutrition. Diseases associated with nutrients as well as those prevented by nutrients will be discussed. Prerequisites: BIO 101, 102, 105, or 112 or any introductory college chemistry courses. If a student has no science background, permission of the Department Chair may be granted to highly motivated students. This course does not fulfill a lab science requirement. 3 lecture hours per week. 3 credit hours.

BIO 110 Human Heredity

A one-semester introductory course for non-Biology majors focused on basic human genetics and evolutionary theory. Students will learn modern concepts of heredity and evolution, and their impact and application on everyday life. One all day field trip on a weekend may be required in lieu of some regularly scheduled sessions. 3 lecture and 3 laboratory hours per week. 4 credit hours.

BIO 111 The Biology of the Organism

This course designed for Biology majors is a basic introduction to the structure and function of representative types of plants and animals emphasizing the basic problems facing all multicellular organisms and the variety of solutions which have evolved. The course stresses the evolution of organ systems from simple to complex species. Required for Biology majors. 3 lecture and 3 laboratory hours per week. 4 credit hours.

BIO 112 Cell Biology

This course designed for Biology majors focuses on the study of the cell as the basic unit of structure and function of all living organisms. The student is introduced to important hypotheses and concepts of modern cell biology including those relevant to molecular organization, organelle architecture and function, cellular activities, specialized cell models, origins of cellular life, and major techniques and methods of studying cells. Required for Biology majors. 3 lecture and 3 laboratory hours per week. 4 credit hours.

BIO 113 Plants, People and Society

Life on Earth, including humans, depends on green plants. The development of civilization has paralleled mankind's use and domestication of plants for food, fiber, medicine, fuel, and ornamentation. This course will study how, why, and where plants grow and the direct and indirect effects they have on diverse cultures around the world. Students will learn how the use of certain plants has shaped the modern world and the civilizations from which our societies have evolved. Emphasis will be placed on current events related to plant science and society, including, but not limited to, plants as courses of medicine and how plants can feed an ever-increasing human population. Will not fulfill the lab science requirement. 3 lecture hours per week. 3 credit hours.

BIO 114 General Horticulture

An introduction to the basic principles of horticulture. Theories and methods of plant propagation, control of plant growth, pest management, and pruning are covered. Soils, mineral requirements, growing structures, and plant identification are investigated. One or more all day field trips on weekends may be required in lieu of some regularly scheduled lab sessions. 3 lecture and 3 laboratory hours per week. 4 credit hours.

BIO 115 The Seed Plants

A thorough study of the dominant plant form on earth today - the seed plants. Emphasis is on the morphology and taxonomy of the major angiosperm families. Basic principles of plant physiology are investigated. Laboratory and field exercises. One or more all day field trips on weekends may be required in lieu of some regularly scheduled lab sessions. 3 lecture and 3 laboratory hours per week. 4 credit hours.

BIO 116 The Plant Kingdom

A general systematic study of the plant kingdom from algae to flowering plants. The morphology and physiology of representative groups are studied. Emphasis is on the evolution of the plant kingdom. Laboratory and field exercises. One or more all day field trips on weekends may be required in lieu of some regularly scheduled lab sessions. 3 lecture and 3 laboratory hours per week. 4 credit hours.

BIO 118 (WMS 118) Introduction to the Biology of Women

This course will present aspects of basic human biology that are unique to the female. This course will emphasize the female lifespan including sex cell formation, menopause, and aging. Topics relevant to women's health will also be discussed. 3 lecture and 3 laboratory hours per week. 4 credit hours.

BIO 120 Introduction to Biology

BIO 101 without the laboratory component. This course will not fulfill a college laboratory science requirement. Permission of Department Chair required. 3 lecture hours per week. 3 credit hours.

BIO 121 Human Biology

BIO 102 without the laboratory component. This course will not fulfill a college laboratory science requirement. Permission of Department Chair required. 3 lecture hours per week. 3 credit hours.

BIO 122 Biology of People and the Environment

BIO 103 without the laboratory component. This course will not fulfill a college laboratory science requirement. Permission of Department Chair required. 3 lecture hours per week. 3 credit hours.

BIO 123 A Survey of the Animal Kingdom

BIO 104 without the laboratory component. This course will not fulfill a college laboratory science requirement. Permission of Department Chair required. 3 lecture hours per week. 3 credit hours.

BIO 124 Anatomy and Physiology

BIO 105 without the laboratory component. This course will not fulfill a college laboratory science requirement. Permission of Department Chair required. 3 lecture hours per week. 3 credit hours.

BIO 125 Anatomy and Physiology II

BIO 106 without the laboratory component. This course will not fulfill a college laboratory science requirement. Permission of Department Chair required. 3 lecture hours per week. 3 credit hours.

BIO 126 Microbiology

BIO 108 without the laboratory component. This course will not fulfill a college laboratory science requirement. Permission of Department Chair required. 3 lecture hours per week. 3 credit hours.

BIO 127 The Biology of the Organism

BIO 111 without the laboratory component. This course will not fulfill a college laboratory science requirement. Permission of Department Chair required. 3 lecture hours per week. 3 credit hours.

BIO 128 Cell Biology

BIO 112 without the laboratory component. This course will not fulfill a college laboratory science requirement. Permission of Department Chair required. 3 lecture hours per week. 3 credit hours.

BIO 150 Hands-On Biology for Teachers

This course focuses on the State of New Jersey's Core Curriculum Content Standards in Science. This course emphasizes the biological topics taught in grades K-12. The course is designed for current and future teachers. Each topic presented will have hands-on activities that can readily be used in the classroom along with background information. This course is intended to serve as an elective and will not fulfill a laboratory science requirement. 3 lecture/laboratory hours per week. 3 credit hours.

BIO 151 Plant Propagation

A study of the theories, principles and techniques involved in the asexual and sexual propagation of horticulturally important plants. The topics of cuttage, grafting, layering, dividing, micro-propagation, seeding, and plant breeding will be investigated along with the environmental conditions necessary for successful propagation. 3 lecture and 3 laboratory hours per week.

4 credit hours.

BIO 152 Pest Management

The morphology, physiology, identification, and control of plant pests including viruses, bacteria, fungi, weeds, nematodes and the arthropods. Emphasis will be placed on the characteristics and safe use of pesticides and other means of pest control. 3 lecture and 3 laboratory hours per week. 4 credit hours.

BIO 153 Plant Identification

An intensive study of the trees, shrubs, vines, herbaceous plants, and greenhouse plants of horticultural importance found in New Jersey. In addition to identification, the growth forms, textures, colors, and habitat requirements will be covered. One or more all day field trips on weekends may be required in lieu of some regularly scheduled lab sessions. 3 lecture and 3 laboratory hours per week. 4 credit hours.

BIO 155 Greenhouse Management

The management practices necessary for the successful production of greenhouse crops will be studied with an emphasis on the practical operation of greenhouses. Structural designs of greenhouses, equipment, environmental influences, fertilizers, pest control, production costs, and crop scheduling will be covered in relation to the management of the major greenhouse crops. One or more all day field trips on weekends may be required in lieu of some regularly scheduled lab sessions. 3 lecture and 3 laboratory hours per week. 4 credit hours.

BIO 202 Biotechnology

A one-semester course for science students. The course will cover scientific principles and techniques in Biotechnology; products and applications in agriculture, microbiology, food and human health; and ethical, legal and social implications of biotechnology. Prerequisite: A college-level Biology course or permission of the Department Chair. 3 lecture and 3 laboratory hours per week. 4 credit hours.

BIO 204 Marine Biology

An introduction to the marine environment. Special attention centers on the ways representative species are adapted to various saltwater habitats and on the formation of marine communities. Human relationships with the ocean and the importance of the ocean to life on earth are stressed. In addition, marine legislation and dangers to the marine environment from an environmental view are discussed. One or more all day field trips on weekends may be required in lieu of some regularly scheduled lab sessions. 3 lecture and 3 laboratory hours per week. 4 credit hours.

BIO 208 Ecology

An introduction to basic ecological principles and techniques. Biotic interrelationships are emphasized in the study of aquatic and terrestrial communities. The laboratory combines field investigations with experimental studies. One or more all day field trips on weekends may be required in lieu of some regularly scheduled lab sessions. 3 lecture and 3 laboratory hours per week. 4 credit hours.

BIO 230 Western Science: Its Development

A study of the development of human ideas about the physical world. The course will follow the changes in the Western outlook toward the world and the role of humankind in that world. Topics will also concentrate on the development and growth of the ideas which have formed the modern natural sciences. Prerequisites: HIS 101 and 102 or permission of the instructor. This course will not fulfill a laboratory science requirement. 3 lecture hours per week. 3 credit hours.

BIO 241 Clinical Microbiology

A specialized course for students with a need for knowledge of clinical microbiological procedures. Emphasis is on clinical specimen collection, specimen preparation, and identification procedures for aerobic and anaerobic bacteria, fungi, and parasites. Prerequisite: BIO 108. 3 lecture hours and 3 laboratory hours per week. 4 credit hours.

BIO 266 General Pathology

A study of the basic concepts of pathological processes in the body system. Diseases are studied with emphasis on structural and functional interrelationships of etiology, pathogenesis, diagnosis, treatment, and prognosis of disease processes. This course does not fulfill a lab science requirement. Prerequisites: BIO 105 and BIO 106. 3 lecture hours per week. 3 credit hours.

BIO 270-279 Topics in Biology

Studies of selected topics, issues or events in Biology. The subjects covered will demonstrate that Biology is a dynamic, ever-changing, and expanding scientific domain that impacts on the lives of all individuals. These courses will allow for in-depth studies of current and specific aspects of Biology as well as general topics that will appeal to a broad segment of the community. Individual topics are announced prior to registration. These courses do not fulfill a laboratory science requirement. 3 credit hours.

BIO 290-299 Independent Study in Biology

One-semester courses designed to cover an approved in-depth exploration of some aspect of Biology. The course is intended to provide the students with an opportunity to expand his or her knowledge in one area beyond that which is presently offered in current Biology courses. This course will not fulfill a laboratory science requirement and requires the recommendation and permission of the Department Chair and instructor as a prerequisite for registration. It is recommended that the student have at least two semesters of college Biology. Prerequisites: BIO 111 and 112 or permission of Department Chair. Course may be taken for 1, 2, 3 or 4 credit hours.

BSM • Sports Management

BSM 101 Introduction to Sport Management

This course is an overview of sport management and presents both the theoretical foundations and the subsequent applications of these principles. Some of the topics include sponsorship, volunteerism, marketing, liability, ethics, and labor relations. Prerequisites: ENG 089 and ENG 099. 3 lecture hours per week. 3 credit hours.

BSM 110 The Evolution of **American Sports**

This course explores the evolution of American sports from the early Puritan mistrust of sporting events through the baseball steroid scandals of the present day. A strong emphasis is placed on the relationship among sport, society, and culture. This course explains that sports can be a bond that unites people of different races, backgrounds, and economic conditions. The course also explores the rise of intercollegiate sports, the rise of women's sports, professional and amateur sports in the age of television, and the quest for equity in sports. Prerequisites: ENG 089 and ENG 099. 3 lecture hours per week. 3 credit hours.

BSM 205 Sports in Society

This course offers a global, issues-oriented approach to sports. The emphasis is on sports and sport-related actions as they occur in social and cultural contexts. Topics include how sport is impacted by children and young adults, violence, gender, social class, media, politics, and race and ethnicity. Prerequisite: BSM 101 and ENG 101. 3 lecture hours per week. 3 credit hours.

BSM 210 Sport & Law

This course examines legal issues affecting the safe development and delivery of sport and physical activity programs. Major topics include equal opportunity legislation, tort liability, product liability, participant liability, and the legal rights and obligations of supervisors and participants. In addition, the course examines the laws and regulations which govern the business of sport and sport organizations. Prerequisites: BSM 110 and ENG 101. 3 lecture hours per week. 3 credit hours.

BUS • Business

BUS 101 Introduction to Contemporary Business

Overview of all phases of business, including ownership, marketing, personnel, finance, managerial controls, and the relationship of government and business. The relationship of business to the social and economic environment in which it operates. Practical orientation and emphasis on relationships between business concepts and potential business careers. 3 lecture hours per week. 3 credit hours.

BUS 105 Organization and Management

Background and development of the structure and functions of modern business; principles of organization and management; functions of major departments of the modern industrial enterprise and analysis of their interrelations and interdependence; methods of executive control and applications of basic principles. Prerequisite: ENG 088. 3 lecture hours per week. 3 credit hours.

BUS 107 Personnel Management

Techniques of personnel administration; job analysis and evaluation; recruitment, interviewing, placement, training, and education; employee health and safety, benefits and morale; public and community relations; personnel research, audits, and reviews. Prerequisite: ENG 088. 3 lecture hours per week. 3 credit hours.

BUS110 Business and Technology

This course explores how technology influences all aspects of business and industry including societal issues surrounding their use. Some of the topics include current computer technology and terminology, the Internet, societal issues related to digital media, mobile devices, and wireless devices. Emerging technologies will be explored. Prerequisite: CIS 100 or CIS 117 or ADM 217. 3 lecture hours per week. 3 credits.

BUS 115 Personal Finance

This course is designed to give a practical introduction to personal finance. It addresses realistic ways to manage personal assets effectively. Topics covered include the economy; working, planning, and budgeting; sensible shopping and spending; avoiding fraud and swindles; buying, insuring and financing a car; buying and selling a home; housing costs and regulations; renting a home; banking services; credit and borrowing; investments in stocks, mutual funds and real estate; life, health and income insurance; retirement and estate planning; and income tax. 3 lecture hours per week. 3 credit hours.

BUS 136 Retailing Techniques

Function of the retailer. Retail establishments and the changes in merchandising. Management techniques, organizations, effective control, and profitable operation. Prerequisite: ENG 088. 3 lecture hours per week. 3 credit hours.

BUS 137 Salesmanship

A study of the effective methods of retail selling, application of psychological and persuasive selling techniques. Students prepare and conduct sales presentations on an individual and group basis. Prerequisite: ENG 088. 3 lecture hours per week. 3 credit hours.

BUS 138 Retail Buying and Merchandising

This course introduces the student to the organizational structure at the retail buying and merchandising function. The various techniques for coordinating an effective buying and merchandise program are studied. 3 lecture hours per week. 3 credit hours.

BUS 200 Small Business Management

A course designed to introduce the student to the principles of small business management and the functions of planning, organizing, financing, staffing, marketing, and directing a small business enterprise. 3 lecture hours per week. 3 credit hours.

BUS 201 Business Law I

Legal aspects of common business transactions, including judicial procedures, contracts, torts, crimes, and agency law. Prerequisite: ENG 088. 3 lecture hours per week. 3 credit hours.

BUS 202 Business Law II

Uniform Commercial Code and legal aspects of sales, negotiable instruments, corporations, partnerships, real and personal property, government regulation of business, bankruptcy, insurance, and inheritance. Prerequisite: ENG 088. 3 lecture hours per week. 3 credit hours.

BUS 203 Principles of Advertising

A fundamental survey of the field of advertising as it relates to the total marketing program. Major topics covered include: advertising as a part of the marketing program, behavioral considerations in advertising, advertising campaigns, strategy and production, and the legal implications in advertising. This course also focuses on the functional interrelationships of advertisers, agencies, and media. Prerequisite: ENG 088. 3 lecture hours per week. 3 credit hours.

BUS 205 Principles of Finance

A study of the fundamental concepts of finance. This includes financial analysis; planning and control; working capital management including bank and nonbank financing; time value of money; capital. Prerequisites: ACC 103 and ECO 201. 3 lecture hours per week. 3 credit hours.

BUS 207 Labor Management Relations

This course will provide an introduction to the origins, operations, and impact of labor and management relationships in the United States as well as some major international relationships. It will allow an analysis of the environment, economy, and organizational structures of various industrialized countries. The current collective bargaining process as well as the newer alternative methods of management/labor relations will be studied. Prerequisite: BUS 105 or equivalent. 3 lecture hours per week. 3 credit hours.

BUS 208 Principles of Marketing

Description and evaluations of procedures and institutions involved in the movement of goods from producers to consumers. Analysis of procedures and practices of wholesalers and retailers in relation to the current economic, social, and political environment. 3 lecture hours per week. 3 credit hours.

BUS 209 Introduction to Global Business

An introduction to the theory and practice of international business: theory of international trade, international investment and monetary system, international marketing, management, finance, foreign exchange markets, importing, exporting trade agreements, NAFTA, GATT, trade barriers and the EU. The impact of cultural, economic and political environments on international business will provide preparation with a global focus. 3 lecture hours per week. 3 credit hours.

BUS 210 Marketing and the Global Environment

Examines the historical foundation of cultural, political, and economic diversity and its effect on marketing. Discusses the forces related to the emergence of the global marketplace: trade liberalization 1. advances in communications, 2. the role of mass media in introducing the ideas and the lifestyles of other cultures, and 3. transport technology. Prerequisites: ENG 088, BUS 101, BUS 208. 3 lecture hours per week. 3 credit hours.

BUS 223 Introduction to Entrepreneurism

This course will give the student a clear and comprehensive introduction to business skills and principles, which support independent business innovation, ownership, and management. This course departs from the traditional small business management courses by incorporating new themes and principles of management more appropriate to self-conceived and self-directed small business innovators striving to survive in a dynamic global and technological business environment. It will address topics such as the innovative process, creating markets, technology support of innova-tion, and how a small business can establish a market presence and compete successfully against large competitors. 3 lecture hours per week. 3 credit hours.

BUS 290 Co-op Education Experience

An externship of approximately 200 hours in a business position with a local business or industry with or without compensation. If an externship cannot be arranged, a term project on or off campus will be assigned. A weekly seminar on campus is included. An elective may be substituted. This course is open to only matriculated students in the A.A.S. degree business program. Co-op should be taken in student's last year of program. By arrangement with the Departmental Chair. Ten lecture hours and 200 externship hours. 3 credit hours.

BUS 295 Special Projects

Students integrate their knowledge of marketing and apply and analyze theoretical concepts through involvement in marketing projects designed to test their critical thinking abilities. Prerequisite: ENG 088, BUS 136, and BUS 208. 3 credit hours.

CHE • Chemistry

CHE 005 Introductory Chemistry

Introduction to the fundamental concepts of chemistry for students who have had no High School Chemistry or who need a review before enrolling in CHE 105, CHE 111 or CHE 113. Prerequisites: ENG 099, MAT 022 or equivalent. 3 lecture and 3 laboratory hours per week. 4 credit hours.

CHE 025 Introductory Chemistry

CHE 005 without the laboratory component. Students will attend same lecture and be responsible for the same assignments (excluding laboratory) as students in CHE 005. This course will not fulfill a college laboratory science requirement. Primarily intended for students who have completed the laboratory requirement at another institution. Permission of the Department Chair required. Prerequisite: CHE 005. 3 lecture hours per week. 3 credit hours.

CHE 101 Chemistry I

The chemical view of matter, atomic structure and theory, chemical bonding, stoichiometry, oxidation reduction and solutions. This course is primarily intended for non-science majors. Students who have not had High School Chemistry must take CHE 101. Students offering High School Chemistry as an entrance requirement may take CHE 102 as a first course. Prerequisites: ENG 099, MAT 022 or equivalent. 3 lecture and 3 laboratory hours per week. 4 credit hours.

CHE 102 Chemistry II

A continuation of CHE 101, covering nuclear chemistry, organic chemistry, biochemistry, current topics related to pollution and the environment. Prerequisites: CHE 101 or High School Chemistry, ENG 099, MAT 022. 3 lecture and 3 laboratory hours per week. 4 credit hours.

CHE 105 Chemistry-Health Sciences

Study of selected topics in general, organic, and biological chemistry oriented toward health sciences. Students pursuing the Bachelor's Degree in Nursing should take CHE 113/114 instead of CHE 105. Prerequisites: High School Chemistry and a satisfactory grade on the chemistry placement test or CHE 005, high school algebra or MAT 022, ENG 099. 3 lecture and 3 laboratory hours per week. 4 credit hours.

CHE 106 Consumer and **Environmental Chemistry**

A one-semester course primarily for nonscience majors presenting as many basic concepts of chemistry as are necessary to convey an appreciative understanding of the nature of the science and its relation to life. The focus is on the interrelationships among atoms, molecules, man and his chemical products. Topics are chosen from the areas of air and water pollution, consumer products, chemical action of the body, drugs and medicines, combustion, and chemical energy. This course is offered online. Prerequisite: ENG 099. 3 lecture and 3 laboratory hours per week. 4 credit hours.

CHE 111 General Chemistry I

Atomic structure, chemical bonding, molecular geometry, stoichiometry, states of matter, and solutions. Primarily for science and engineering students. Prerequisites: High School Chemistry; a satisfactory grade on the chemistry placement test or CHE 005; ENG 099; MAT 119 or higher. 3 lecture and 3 laboratory hours per week. 4 credit hours.

CHE 112 General Chemistry II

A continuation of CHE 111, covering electro-chemistry, descriptive chemistry of the elements, thermodynamics, chemical kinetics, chemical equilibrium, acids and bases, ionic equilibrium, complex compounds, and nuclear chemistry. Laboratory includes qualitative analysis. Prerequisite: CHE 111 or permission of the instructor. 3 lecture and 3 laboratory hours per week. 4 credit hours.

CHE 113 Principles of Inorganic Chemistry

Topics in general and inorganic chemistry including elements, compounds, mixtures, atomic structure, gas laws, solutions, acids and bases, radioactivity. This course and CHE 114 serve as a one-year sequence for students seeking a B.S. in nursing or a health-related field. Prerequisites: High School Chemistry or CHE 005; high school algebra or MAT 022; ENG 099. 3 lecture and 3 laboratory hours per week. 4 credit hours.

CHE 114 Principles of Organic Chemistry and Biochemistry

Introduction to the basic concepts of organic and biochemistry oriented toward the health-related fields. Topics include nomenclature, reactions, and stereochemistry of the major classes of organic compounds; the basic chemistry of carbohydrates, proteins, lipids, nucleic acids, and enzymes in relationship to the metabolism of living organisms. Prerequisite: CHE 101, CHE 111, or CHE 113. 3 lecture and 3 laboratory hours per week. 4 credit hours.

CHE 120 Chemistry I

CHE 101 but without the laboratory component. Students will attend the same lectures and be responsible for the same assignments (excluding laboratory) as students in the course with laboratory. Students must meet the same prerequisites. This course will not fulfill a college laboratory science requirement. Primarily intended for students who have completed the laboratory requirement at another institution. Permission of the Department Chair required. 3 lecture hours per week. 3 credit hours.

CHE 121 Chemistry II

CHE 102 but without the laboratory component. Students will attend the same lectures and be responsible for the same assignments (excluding laboratory) as students in the course with laboratory. Students must meet the same prerequisites. This course will not fulfill a college laboratory science requirement. Primarily intended for students who have completed the laboratory requirement at another institution. Permission of the Department Chair required. 3 lecture hours per week. 3 credit hours.

CHE 122 Chemistry-Health Sciences

CHE 105 without the laboratory component. Students will attend the same lectures and be responsible for the same assignments (excluding laboratory) as students in the course with laboratory. Students must meet the same prerequisites. This course will not fulfill a college laboratory science requirement. Primarily intended for students who have completed the laboratory requirement at another institution. Permission of the Department Chair required. 3 lecture hours per week. 3 credit hours.

CHE 124 Consumer and Environmental Chemistry

CHE 106 without the laboratory component. Students will attend the same lectures and be responsible for the same assignments (excluding laboratory) as students in the course with laboratory. Students must meet the same prerequisites. This course will not fulfill a college laboratory science requirement. Primarily intended for general interest and for students who have completed the laboratory at another institution. This course is offered online. Permission of the Department Chair required. 3 lecture hours per week. 3 credit hours.

CHE 125 General Chemistry I

CHE 111 without the laboratory component. Students will attend the same lectures and be responsible for the same assignments (excluding laboratory) as students in the course with laboratory. Students must meet the same prerequisites. This course will not fulfill a college laboratory science requirement. Primarily intended for students who have completed the laboratory at another institution. Permission of the Department Chair required. 3 lecture hours per week. 3 credit hours.

CHE 126 General Chemistry II

CHE 112 without the laboratory component. Students will attend the same lectures and be responsible for the same assignments (excluding laboratory) as students in the course with laboratory. Students must meet the same prerequisites. This course will not fulfill a college laboratory science requirement. Primarily intended for students who have completed the laboratory at another institution. Permission of the Department Chair required. 3 lecture hours per week. 3 credit hours.

CHE 127 Principles of Inorganic Chemistry

CHE 113 without the laboratory component. Students will attend the same lectures and be responsible for the same assignments (excluding laboratory) as students in the course with laboratory. Students must meet the same prerequisites. Primarily intended for students who have completed the laboratory at another institution. Permission of the Department Chair required. 3 lecture hours per week. 3 credit hours.

CHE 128 Principles of Organic Chemistry and Biochemistry Chemistry

CHE 114 but without the laboratory component. Students will attend the same lectures and be responsible for the same assignments (excluding laboratory) as students in the course with laboratory. Students must meet the same prerequisites. This course will not fulfill a college laboratory science requirement. Primarily intended for students who have completed the laboratory at another institution. Permission of the Department Chair required. 3 lecture hours per week. 3 credit hours.

CHE 211 Organic Chemistry I

A study of the principal classes of aliphatic and aromatic compounds, types of reactions and reaction mechanisms, molecular orbital approach to bonding, and stereo-chemistry. The first semester of a two-semester sequence. Prerequisite: CHE 112 or permission of the instructor. 3 lecture and 6 laboratory hours per week. 5 credit hours.

CHE 212 Organic Chemistry II

A continuation of the study of functional groups, reactions and reaction mechanisms, spectroscopic examination of organic compounds, introductory biochemistry. The second semester of a two-semester sequence. Prerequisite: CHE 211 or permission of the instructor. 3 lecture and 6 laboratory hours per week. 5 credit hours.

CHE 221 Organic Chemistry I

CHE 211 without the laboratory component. Students will attend the same lectures and be responsible for the same assignments (excluding laboratory) as students in the course with laboratory. Students must meet the same prerequisites. This course will not fulfill a college laboratory science requirement. Primarily intended for students who have completed the laboratory at another institution. Permission of the Department Chair required. 3 lecture hours per week. 3 credit hours.

CHE 222 Organic Chemistry II

CHE 212 without the laboratory component. Students will attend the same lectures and be responsible for the same assignments (excluding laboratory) as students in the course with laboratory. Students must meet the same prerequisites. This course will not fulfill a college laboratory science requirement. Primarily intended for students who have completed the laboratory at another institution. Permission of the Department Chair required. 3 lecture hours per week. 3 credit hours.

CHE 290 Independent Study in Chemistry

A one-semester course to cover an approved in-depth exploration of some aspect of chemistry. The course is intended to provide the students with an opportunity to expand his or her knowledge in one area beyond that which is presently offered in current chemistry courses. This course will not fulfill a laboratory science requirement and requires the recommendation of the instructor. It is recommended that the student have at least two semesters of college chemistry. Prerequisite: Permission of Department Chair. Course may be taken for 1, 2, 3 or 4 credits.

CHN • Chinese

CHN 101 Beginning Mandarin Chinese 1

This course will provide solid foundation in pronunciation, grammar, and proficiency in the four language skills of understanding, speaking, reading and writing. Video-audio and Web-based materials will be used to supplement regular classroom instruction. PowerPoint program will be used to present class materials. Native speakers of Mandarin Chinese must get approval of Modern Languages Coordinator or the instructor. Corequisite: ENG 088. 3 lecture hours per week. 3 credit hours.

CHN 102 Mandarin Chinese II

CHN 102 is a continuation of CHN 101. This course will cover the equivalent of CHN 101. An emphasis in this course will be on building up vocabulary and sentence patterns. Students will be required to prepare and perform role-plays to carry out conversations in Mandarin Chinese on a range of topics and in real life situations that are readily understood by students. Students will be expected to understand, speak, read, and write all new words that appear from the textbook, workbook, character workbook, and the materials from other sources. Video-audio and Web-enhanced instruction will be used to supplement regular classroom instruction. PowerPoint program will be used to present class materials. Native speakers of Mandarin Chinese must get approval of Modern Languages Coordinator or the instructor. Prerequisite: CHN 101. 3 lecture hours per week. 3 credit hours.

CHN 111 Intermediate Mandarin Chinese I

This course is designed to review and consolidate the fundamentals that students have built in their beginning Mandarin Chinese courses. Students will continue to expand their repertoire of grammatical structures and to build up vocabulary. This course will develop more reading, writing, listening, and speaking skills so that students can apply Mandarin Chinese to good use in and beyond the classroom. Native speakers of Mandarin Chinese must get approval of Modern Languages Coordinator or the instructor. Prerequisites: CHN 101, CHN 102 or 2 years high school Mandarin Chinese. 3 lecture hours per week. 3 credit hours.

CHN 112 Intermediate Mandarin Chinese II

This course is designed to review and consolidate the fundamentals that students have built in Beginning Mandarin Chinese courses and Intermediate Mandarin Chinese I. Students will continue to expand their repertoire of grammatical structures and to build up vocabulary. This course will develop more reading, writing, listening, and speaking skills so that students can apply Mandarin Chinese to good use in and beyond the classroom. Native speakers of Mandarin Chinese must get approval of Modern Languages Coordinator or the instructor. Prerequisites: CHN 111 or 2 years high school Mandarin Chinese. 3 lecture hours per week. 3 credit hours.

CIM • Manufacturing Engineering Technology

CIM 285 Special Topics in Manufacturing Engineering Technology

A topic of current interest in manufacturing technology which meets the needs and interests of the student, arranged in advance with program coordinator approval. Student will submit a proposal conforming to UCC syllabus format outlining course content, objectives and learning outcomes. Prerequisite: Permission of Coordinator. Credit by arrangement.

CIM 290 Co-op Education Experience

A work externship comprising a minimum of 200 hours of employment related to manufacturing. Prerequisite: Permission of Coordinator. 3 credit hours.

CIM 295 Independent Study

A special research or development project or a course not currently offered in the Manufacturing Engineering Technology Program. Reserved for the advanced student with individual needs. Credit by arrangement.

CIS • Computer Information Systems

CIS 100 Introduction to Computer **Applications**

This course introduces students to basic computer concepts. The course also focuses on a current version of Microsoft Office Professional. Students experience hands-on instruction in word processing, spreadsheets, databases, and professional presentations. This course prepares students to succeed in both college and the business world by enabling them to write reports, analyze and chart data, and prepare presentations. Prerequisite: ADM 101 or keyboarding skills, ENG 088, MAT 011. 2 lecture and 2 laboratory hours per week. 3 credit hours.

CIS 101 Introduction to Information Systems

This course is an introduction to the many facets of computer information systems. The course provides an understanding of system concepts, information technology, and application software. It also introduces students to how information is used in organizations and how information technology enables improvement in quality and timeliness of information. It gives students the characteristics of professionals and of possible career paths. Topics include ethical and societal issues, organizing data and information, telecommunications and networks, e-commerce, and management information systems. With handson experience, the course supports the concept of problem solving with computers via applications and the Internet. Prerequisites: CIS 100, ENG 088, MAT 022. 2 lecture and 2 laboratory hours per week. 3 credit hours.

CIS 102 Applications Program Development I

A course designed to teach the student how to develop simple business applications in a procedural language. The student is introduced to the basic syntax of COBOL. Students learn how to construct a general solution using flowcharts. Prerequisite: CIS 101 or CSC 101. 3 lecture hours and 1 laboratory hour per week. 3 credit hours.

CIS 103 Windows Operating Systems

This course introduces the student to an up-to-date version of a popular operating system, Microsoft Windows. The student will have "hands-on" experience using many of the features of Windows. Topics include: working with applications and documents, managing files, folders and disk, using Windows efficiently, using the control panel, using WordPad, creating graphics with Paint, and using other Windows accessories. 1 lecture and 1 laboratory hour per week. 1 credit hour.

CIS 106 Java Programming

This course introduces the study of Sun Microsystems Java programming. It begins at the elementary level and continues with more detailed and practical knowledge. Students should have prior programming experience for successful completion of this course (especially C or C++). 2 lecture and 2 laboratory hours per week. 3 credit hours.

CIS 107 Operating Systems for Help Desk

This course is a survey of today's leading operating systems. Students learn operating systems from both an end-user and administrative standpoint. Prerequisites: ENG 089, ENG 099. 3 lecture hours and 1 laboratory hour. 3 credits.

CIS 110 Computer Literacy

This course introduces students to a variety of computer topics including the history and evolution of computers, DOS and Windows, applications, ergonomics, networks, and the Internet. Corequisite: ADM 101 or equivalent. 1 lecture and 1 laboratory hour per week. 1 credit hour.

CIS 111 Integrating Technology in the Curriculum

This course provides students with an indepth knowledge of how to integrate technology into educational environments. Topics include the Internet, introduction to productivity software applications for educators, hardware, analysis of technology, integrating multimedia and education software applications, using digital equipment in the classroom, and creating curriculum pages. 2 lecture and 2 laboratory hours per week. 3 credit hours.

CIS 113 Word I

This course introduces the student to the use of a current version of Microsoft Word. Topics include: creating/editing documents, formatting, speller/thesaurus/grammar checker, widow/orphan control, headers/footers, multiple windows, find/replace, Auto text, templates, Wizards, borders, Microsoft Draw, WordArt, tables, columns, styles, and more. Materials covered in this course helps prepare the student for the Microsoft Office Specialist (MOS) certificate in Word. This course is also listed as ADM 213. Prerequisite: ADM 101 or higher level keyboarding course or permission from ADM Coordinator/Business Department Chairman. 2 lecture and 3 laboratory hours per week. 3 credit hours.

CIS 115 Excel I

This course introduces the student to the use of a current version of Microsoft Excel. Students build a worksheet from a beginning level to an intermediate level. Topics include creating and formatting a worksheet, enhancing a worksheet, absolute and relative referencing, functions, advanced formulas, dates, times, financial functions, templates, multiple worksheets/files charts, and more. Material covered in this course helps prepare the student for the Microsoft Office Specialist in Excel. This course is also listed as ADM 215. 2 lecture and 2 laboratory hours per week. 3 credits.

CIS 116 Access

This course introduces the student to the use of a current version of Microsoft Access. Students create a database and learn to maximize productivity. Some of the topics included are creating a database, organizing and retrieving data, working with tables, creating queries and advanced queries, building forms, reports and data access pages, automating and extending Access, entering criteria, sorting, structure, validation, referential integrity, the World Wide Web, Hyperlink fields, briefcase replication, Wizards, and macros. Materials covered in this course help prepare the student for the Microsoft Office Specialist (MOS) certificate in Access. This course is also listed as ADM 216. 2 lecture and 2 laboratory hours per week. 3 credit hours.

CIS 117 PowerPoint

Students learn how to create professional-looking presentations using a current version of Microsoft PowerPoint. Some of the topics covered are creating and editing, table slides, templates, ClipArt Gallery, autoshapes, drawing tools, organization charts, enhancing presentations, slide time, running an automatic slide show, selecting color schemes, captions, integrating Word and Excel, creating presentations for a Web page, AutoContent, Hyperlinks, and more. Materials covered in this course helps prepare the student for the Microsoft Office Specialist (MOS) certificate in PowerPoint. 2 lecture and 2 laboratory hours per week. 3 credit hours.

CIS 120 The Internet

This course is all about the Internet. Topics include background of the Internet, ethics and etiquette of the Web, protocols, basic UNIX commands, HTML, designing and creating for the World Wide Web. Students entering this course should have basic keyboarding skills, knowledge of computers and Windows. Prerequisite: ADM 101 or equivalent. 2 lecture and 2 laboratory hours per week. 3 credit hours.

CIS 121 HTML

This course is an in-depth study of HTML (HyperText Markup Language) and its use in creating Web pages. Students will learn to add functionality to Web pages using JavaScript and DHTML (Dynamic HTML). In addition, students will be taught the basics of XML (Extensible Markup Language). Prerequisite: CIS 120. 2 lecture and 2 laboratory hours per week. 3 credit hours.

CIS 122 Web Page Development

This course introduces students to web page development. Students learn elements of HTML, design, and a current version of Microsoft FrontPage. Topics include web page structures, tables, frames, forms and validation, multimedia web pages, and Java applets. Prerequisite: CIS 120. 2 lecture and 2 laboratory hours per week. 3 credit hours.

CIS 124 Web and Multimedia

This course introduces students to the web and multimedia. Students learn what multimedia is and why it is so important. They should be able to distinguish between appropriate and inappropriate uses of multimedia. Students learn practical applications as well as relevant trends and issues surrounding multimedia, such as copyright, privacy, and censorship. Prerequisite: CIS 120. 2 lecture and 2 laboratory hours per week. 3 credit hours.

CIS 126 E-Commerce Fundamentals

This course is a comprehensive introduction to the world of electronic commerce. It covers key technologies used in electronic commerce. Some of the topics discussed are: strategies for business-to-consumer, business-to-business electronic commerce, security, ethics, legal issues and more. Prerequisite: CIS 120. 2 lecture and 2 laboratory hours per week. 3 credit hours.

CIS 130 Introductory Visual Basic

This course is an introduction to objectoriented, event-driven programming and graphical user interfaces using Microsoft Visual Basic. The topics include building an application, working with controls, designing a VB form, changing properties, writing subroutines. Basic knowledge of computers and Windows is essential for successful completion of this course. 2 lecture and 2 laboratory hours per week. 3 credit hours.

CIS 132 Intermediate Visual Basic

This course is a continuation of CIS 130. It involves learning the elements of good graphical interfaces and how to develop them using graphical programming languages. The design element includes windows, menus, dialog and other boxes, and the use of color and controls. Development includes customizing windows, using tools, and working with files. Prerequisite: CIS 130. 2 lecture and 2 laboratory hours per week. 3 credit hours.

CIS 140 Help Desk Concepts and Customer Service

This course provides an overview of the topics relevant to working at a help desk including customer service skills. Topics discussed in this course include: help desk concepts, roles and responsibilities, help desk operations, help desk processes and procedures, tools and technologies, performance measures, ergonomics, customer satisfaction, listening and communications skills, handling difficult customers, solving and preventing problems, and more. 3 lecture hours and 1 laboratory hour per week. 3 credit hours.

CIS 201 Applications Program Development II

This course is a continuation of the COBOL that was learned in CIS 102, emphasizing structured programming techniques in program design. Topics include: control break logic, batch transaction validation, table initializing and searching, interactive indexed file, file updating. Prerequisite: CIS 102. 3 lecture hours and 1 laboratory hour per week. 3 credit hours.

CIS 202 Structured Systems Analysis and Design

This course is a general study of concepts related to information systems and the role of the systems analyst. Topics include: the systems development life cycle, feasibility study, data flow diagrams, data dictionaries, file, reports, and business forms. Prerequisite: CIS 201 or CSC 102 or permission of Coordinator. 3 lecture hours and 1 laboratory hour per week. 3 credit hours.

CIS 204 Database Management

This course teaches the student about database design; modeling concepts, symbols, and techniques; normalization; and form development. One of the leading database managers will be used to construct databases, screen, reports, queries, and data validation routines. Prerequisite: CIS 116 or ADM 216. 2 lecture and 2 laboratory hours per week. 3 credit hours.

CIS 205 Data Communications and Networks

This course teaches students the basics of business data communications and networks. It includes both recent data communications trends and fundamental concepts. Students are introduced to the many types of connections found within computer networks, the technologies necessary to connect computers and networks, and actions that occur when a data transmission produces an error. Topics include: firewalls, network operating systems, telecommunications, and security. Prerequisite: CIS 101 or CIS 120. 3 lecture hours and 1 laboratory hour per week. 3 credit hours.

CIS 207 PC Troubleshooting and Repair

This course provides students with a foundation of both PC hardware, software, and Internet concepts. The course also affords students a practical knowledge of baseline IT skills and technologies enabling students to solve basic PC problems. Prerequisite: CIS 107. 2 lecture and 2 laboratory hours. 3 credits.

CIS 210 Principles of Information Security

This course introduces the student to the field of information security. It presents both the managerial and technical components of security. Students will learn about the legal, ethical and professional issues in Information Security. Other topics include logical and physical design for security, implementing security, and maintaining security. Prerequisites: ENG 089 and ENG 099. 3 lecture hours per week. 3 credit hours.

CIT • Civil Construction Engineering Technology

CIT 104 Construction Management

An introduction to the construction industry, including topics on types of construction contracts and specifications, construction materials, equipment and methods, project planning and scheduling, and project safety. 3 lecture hours per week. 3 credit hours.

CIT 108 Soil Mechanics

A study of soil as a basic construction material, including the relationship of geology to soil characteristics, the study of soil physics and the behavior of soil under various loading conditions. Topics include soil composition and terminology, properties and behavioral analysis under load, site exploration and sampling techniques. Additional topics are soil reinforcement and improvement methods, bearing capacity, shallow and deep foundations, consolidation and settlement, and soil structures. Common laboratory and field testing procedures are also covered. Prerequisite: MAT 143. 2 lecture hours and 2 laboratory hours per week. 3 credit hours.

CIT 201 Structural Design

A study of the fundamentals of structural design and drafting, covering applications in steel, reinforced concrete and wood construction. Reference to appropriate codes and specifications, methods for selecting standard beams, columns, tension members, connections, and concrete reinforcing bars are studied and practiced. Preparation of structural framing plans, details and shop drawings are also covered. Prerequisites: CIT 210, MET 109. 3 lecture hours and 3 laboratory hours per week. 4 credit hours.

CIT 203 Estimating

A study of the fundamentals of quantity take-off, cost estimating for construction projects including site work and excavation, concrete and masonry work, structural steel, carpentry and other specialty work. The basics of construction economics, labor costs and equipment costs will be discussed, as well as the use of estimating software. Prerequisite: CIT 104, MAT 022. 2 lecture hours per week. 2 credit hours.

CIT 205 Surveying I

This course is the first of a two-part introductory sequence in plane surveying which includes the measurement of distances, elevations, angles and directions. Principles and use of traditional and modern surveying instruments are covered in lecture and practiced in the laboratory and in the field. Fundamental surveying computations are also covered. Prerequisites: MAT 143, MET 109. 3 lecture hours and 3 laboratory hours per week. 4 credit hours.

CIT 206 Surveying II

A continuing study of plane surveying and its applications, including area partitioning computations, horizontal and vertical curves, earthwork volume computations, boundary surveying and subdivision layout, topo surveying and mapping, and construction survey methods. Prerequisites: CIT 205. 3 lecture hours and 3 laboratory hours per week. 4 credit hours.

CIT 210 Strength of Materials

A study of the relationship between the external forces on a body and the resulting internal stresses and deformations caused to that body. Topics include the mechanical/structural properties of materials, shear and moment diagrams, beam stresses and deflections, design of beams and columns, connections, and torsion in members. Calculations use units from both the English and SI (Metric) systems. Computer software programs are used to analyze and solve typical problems. Prerequisite: MET 112. 3 lecture hours and 1 laboratory hour per week. 3 credit hours.

CIT 215 Fluid Mechanics

A study of pressure, flow, and viscosity in fluids. Forces on submerged areas and buoyancy are computed. Friction losses in pipelines, valves and fittings are calculated, series piping systems are analyzed, and pumps are sized. Applications include analysis of flow through non-circular sections. Computer software programs are used to analyze and solve typical problems. Prerequisite: MET 112. 3 lecture hours and 1 laboratory hour per week. 3 credit hours.

CIT 285 Special Topics in Civil/Construction Technology

A topic of current interest in surveying and/or civil/construction engineering technology, which meets the needs and interests of the student, arranged in advance with program coordinator approval. Student will submit a proposal conforming to UCC syllabus format outlining course content, objectives and learning outcomes. Prerequisite: Permission of the Coordinator. Credit by Arrangement.

CLPN • Clinical – Nuclear Medicine

CLPN 901 Clinical Practicum I

Student observes, assists with, and performs procedures in the clinical setting. Student participates in clinical practice for two full days per week for a total of 136 hours of clinical practice. Required course first semester.

CLPN 902 Clinical Practicum II

Continuation of Clinical Practicum I. Student participates in clinical practice for three full days per week for a total of 360 hours of clinical practice. Corequisite: NMTM 121.

CLPN 903 Clinical Practicum III

Continuation of Clinical Practicum II. Student participates in clinical practice for four full days per week for a total of 472 hours of clinical practice. Corequisite: NMTM 222

CLPN 904 Clinical Practicum IV

Continuation of Clinical Practicum III. Student participates in clinical practice for five full days per week for a total of 96 hours of clinical practice.

CLPR • Clinical – Radiography

CLPR 901 Clinical Practicum I

Student observes, assists with and performs procedures in the clinical setting. This course prepares the student for application of classroom knowledge in the radiography area. Participation includes 2 days per week at a contracted clinical education site for 12 weeks after completion of the introductory phase of 4 weeks at the school. Corequisites: RADM 120, RNTM 103.

CLPR 902 Clinical Practicum II

Student observes, assists with and performs procedures in the clinical setting. This course prepares the student for application of classroom knowledge in the radiography area. Participation includes 2 days per week at a contracted clinical education site for 15 weeks. Prerequisite: CLPR 901. Corequisites: RADM 121, RADM 110.

CLPR 903 Clinical Practicum III

Student observes, assists with and performs procedures in the clinical setting. This course prepares the student for application of classroom knowledge in the radiography area. Participation includes 2 days per week at a contracted clinical education site for 6 weeks. Prerequisites: CLPR 901, CLPR 902. Corequisite: RADM 122.

CLPR 904 Clinical Practicum IV

Student observes, assists with and performs procedures in the clinical setting. This course prepares the student for application of classroom knowledge in the radiography area. Participation includes 2 days per week at a contracted clinical education site and 2 days per week of clinical related seminars for 6 weeks. Prerequisites: CLPR 901, CLPR 902, CLPR 903.

CLPR 905 Clinical Practicum V

Student observes, assists with and performs procedures in the clinical setting. This course prepares the student for application of classroom knowledge in the radiography area. Participation includes 2 days per week at a contracted clinical education site for 15 weeks. Prerequisite: CLPR 901, CLPR 902, CLPR 903, CLPR 904. Corequisite: RADM 223, RADM 211.

CLPR 906 Clinical Practicum VI

Student observes, assists with and performs procedures in the clinical setting. This course prepares the student for application of classroom knowledge in the radiography area. Participation includes 2 days per week at a contracted clinical education site for 15 weeks. Prerequisites: CLPR 901, CLPR 902, CLPR 903, CLPR 904, CLPR 905. Corequisite: RADM 224.

CLPR 907 Clinical Practicum VII

Student observes, assists with and performs procedures in the clinical setting. This course prepares the student for application of classroom knowledge in the radiography area. Participation includes 2 days per week at a contracted clinical education site and 2 days per week of clinical related advanced seminars and reviews for 6 weeks. Prerequisites: CLPR 901, CLPR 902, CLPR 903, CLPR 904, CLPR 905, CLPR 906.

CLPR 908 Clinical Practicum VIII

Student observes, assists with and performs procedures in the clinical setting. This course prepares the student for application of classroom knowledge in the radiography area. Participation includes 2 days per week at a contracted clinical education site and 2 days per week of clinically related advanced seminars and reviews for 6 weeks. Prerequisites: CLPR 901, CLPR 902, CLPR 903, CLPR 904, CLPR 905, CLPR 906, CLPR 907.

CLPS • Clinical – Sonography

CLPS 901 Clinical Sonography I

This course prepares the student for application of classroom knowledge to the practice of ultrasound by means of a clinical internship. Performing basic, general ultrasound examinations in both the laboratory and clinical settings is stressed. Nursing procedures, ethical issues and medico-legal considerations are discussed as they relate to the practice of an ultrasound examination. 140 clinical hours and 50 supervised laboratory hours per student.

CLPS 902 Clinical Sonography II

This course further prepares the student for the application of classroom knowledge to the practice of ultrasound by means of a clinical internship. Performing basic, general ultrasound examinations in both the laboratory and clinical settings is stressed. The student is expected to perform basic examinations with little, if any, assistance by the end of this course. 350 clinical hours and 15 supervised laboratory hours per student.

CLPS 903 Clinical Sonography III

This course allows for further development of ultrasound examination skills by means of a clinical internship. The student is expected to perform basic examinations with no assistance by the end of this course. 360 clinical hours and 16 supervised laboratory hours per student.

CLPS 904 Clinical Sonography IV

This course is designed to fine tune the development of ultrasound examination skills by means of clinical internship. The student is expected to perform general ultrasound examinations with little or no assistance. Performance of specialized ultrasound examinations with no assistance will be dependent on the clinical site and approval of the site instructor and program director. 240 clinical hours.

CLPS 905 Clinical Sonography V

This fifteen week Clinical Assignment is the final development of ultrasound examination skills by means of clinical internship. The student is expected to perform general ultrasound examinations with no assistance. Performance of specialized ultrasound examinations with no assistance will be dependent on the clinical site and approval of the site instructor and program director/coordinator. This course also provides an introduction to vascular anatomy, disease states pertinent to vascular disease, duplex Doppler ultrasonography and plethysmography. 450 clinical hours.

CLPT • Radiation Therapy

CLPT 901-905 Clinical Internship I-V

This course is designed to provide the student radiation therapist with the opportunity to learn the clinical application of radiation therapy. Students will be assigned to a specific clinical education site for a period of 5 weeks. The instructors for this course will be the therapy professional that is assigned where the student is assigned.

COM • Communications

COM 100 Communications **Technologies**

An introduction to the technologies that shape the communications field, with special emphasis on the creative and enabling potential of computer applications and tools, the fundamentals of information literacy and the importance of critical thinking. Students will receive hands-on training in the Windows environment, Microsoft Word and Microsoft PowerPoint, and develop the ability to apply these tools in concert with data gathering, evaluation and management skills, to critically address the challenges that they will face in their academic work, their careers, and in their daily lives as citizens. Prerequisites: ENG 088, 098, if required. 3 lecture and 2 laboratory hours per week. 4 credit hours.

COM 101 Mass Communications

A survey of the nature of contemporary mass media. Analysis and evaluation of the role of mass media in American life. Prerequisites: ENG 088, 098 if required. 3 lecture hours per week. 3 credit hours.

COM 102 Reporting and News Writing

Instruction in gathering news and interviewing, practice in news writing. Prerequisites: ENG 088, 098 if required. 3 lecture hours per week. 3 credit hours.

COM 103 Introduction to Radio **Broadcasting**

This overview course is designed to introduce students to the principles of commercial radio broadcasting. Emphasis is placed on technical theory, programming and format, studio operation, radio sales, F.C.C. broadcast law, and production of audition tapes. Prerequisites: ENG 088, 098 if required. 3 lecture hours per week. 3 credit hours.

COM 105

Storytelling for Digital Media

This course covers the fundamentals of narrative development and explores the ways in which storytelling serves as an essential medium for human communication, with specific focus on its central role in the creation of video games, multimedia and interactive content. Students will examine traditional narrative theory with special emphasis on its adaptation for interactive digital media. Topics will include world creation, back-story, plot and story arc, genre, character development, and dialogue. Emphasis will be placed on narrative development, multiple narrative outcomes, and the demands of creative development in a collaborative project environment. Prerequisites: ENG 088, ENG 099, if required. 2 lecture and 2 lab hours per week. 3 credits.

COM 106 Introduction to Television: **Production and Theory**

An introduction to the methods and equipment used in the production of television programs in a studio environment. Discussion of the technical systems on which television is based. Students gain experience by assuming the role of producer/director and various crew positions such as floor manager, cameraman, etc. A critical look at television and its effect as a communications medium. 3 lecture hours per week. 3 credit hours.

COM 107 Publication Editing and Design

This course provides instruction and practice in editing and layout for print publication. Emphasis is placed on coordinating graphic elements with text to develop effective print communications. Instruction includes computer applications. Microsoft Office and QuarkXPress are used along with complementary image editing and illustration software. Prerequisites: ENG 088, 098 if required. 3 lecture hours per week. 3 credit hours.

COM 108 Principles and Practices of Public Relations

Principles and practices of communication between the public and an individual or organization. Topics covered include mass media, planning, publicity, writing and ethics. Prerequisites: Completion of all developmental English requirements. 3 lecture hours per week. 3 credit hours.

COM 109 Introduction to Film Study

A study of selected films representing the development of the art of filmmaking. The course includes the study of both the technical and cultural elements of film production. Students will learn to think, speak and write about film and filmmaking. 3 lecture hours per week. 3 credit hours.

COM 112 Multimedia Development I

Presentation Management - An introduction to the elements of multimedia design; students will master the skills necessary to create a multimedia product from content creation and design planning to the use of presentation management and web design software. Students will expand their knowledge of Microsoft PowerPoint, learning to incorporate audio, video, animation and other media into their presentations, and build a rich, multimedia website using Microsoft FrontPage and Adobe Dreamweaver. 3 lecture hours per week. 3 credit hours.

COM 201 Issues in Mass Media

An analysis of the role of the media and popular culture in the formation of our society, our beliefs and ourselves. Students will follow current topics in the media, analyze the media treatment of these issues and examine the present state of the media within its historical framework. Prerequisites: ENG 089, 099 if required and COM 101 or the permission of the instructor. 3 lecture hours per week. 3 credit hours.

COM 202 Advanced Reporting and **News Writing**

Focuses on the principles and problems of feature, beat, and specialty reporting. Students will learn how and where to find newsworthy stories, cultivate sources, and become responsible for a particular beat, feature column or specialty topic. Prerequisites: ENG 088, 098, COM 102 or permission of the instructor. 3 lecture hours per week. 3 credit hours.

COM 203 Audio Production I

An introduction to the skills and technologies that shape the audio production field. Special emphasis will be placed on the creative power of computer applications and tools. Students will receive hands-on training in the Windows environment, Adobe Audition 1.5 and develop the ability to record and edit both simple and complex audio projects in the Music, Television, Film, and live sound reinforcement industries. 3 lecture hours per week. 3 credit hours

COM 206 Television Field Production

This course provides instruction and practice in single camera field production and post-production editing. Emphasis is placed on coordinating audio and visual elements to communicate effectively to viewers. Prerequisite: COM 106 or permission of the instructor. 3 lecture hours per week. 3 credit hours.

COM 207 Advanced Publication Editing and Design

This course builds on material covered in COM 107. Further exploration of principles of attractive layout and design using Quark Xpress and Adobe Photoshop. Emphasis is placed on teaching students to combine graphic elements with text to create attractive and journalistically-sound layouts. Prerequisite: COM 107 or permission of the instructor. 3 lecture hours per week. 3 credit hours.

COM 209 The Evolution of Film

A study of the cultural impact of film. and the effects of film portrayal upon the way in which we see ourselves and others. Students will develop skills and strategies for the analysis of film drawn from a wide variety of disciplines and approaches. Students will have the opportunity to participate in the creation of film and media projects of their own design. 3 lecture hours per week. 3 credit hours.

COM 212 Multimedia Development II

Multimedia Authoring - Students will expand their skills in content creation and manipulation and extend their skill set to include imaging using Adobe Photoshop and Macromedia Fireworks, and audio editing using Sound Forge, Audition and Acid Pro. An introduction to animation using Macromedia Flash will round out the multimedia developer's toolkit. 3 lecture hours per week. 3 credit hours.

COM 213 Audio Production II

An advanced course focusing on contemporary applications of all phases of audio production. Students will work in the PC platform and learn the fundamental and more advanced applications of audio production in both the analog and digital domains including MIDI (Musical Instrument Digital Interface), samples and loops, digital editing, multitrack and sequencing programs including Cubase SX and Pro Tools, microphone techniques, mixing consoles, software plug-ins and soft synths, mastering, 5.1 Surround Sound, as well as the basic elements of film scoring and syncing audio to film. Students will be academically prepared to transfer a fourcollege audio production program with a solid background in all mandatory elements of audio engineering and production. Prerequisite: COM 203. 3 lecture hours per week. 3 credit hours.

COM 214 Communications Practicum I

A variety of assignments offered in cooperation with local newspapers, radio and television stations, and other approved community institutions and agencies. The student must attend periodic seminars and/or prepare reports or other projects as required by the instructor. Prerequisite: Permission of the instructor. 90 hours per semester to be arranged. 3 credit hours.

COM 215 Communications Practicum II

Same as COM 214. 90 hours per semester to be arranged. 3 credit hours.

COM 216 Digital Video Editing and Multimedia Imaging

In this course students will learn to compose and edit digital video using Adobe Premiere and add special effects using Adobe After Effects. Students will learn to storyboard, shoot and edit their own video projects as well as work as team members on the video productions of their peers. Special emphasis will be placed on the use of digital video in multimedia projects and on the web. 3 lecture hours per week. 3 credit hours.

CRJ • Criminal Justice

CRJ 101 Introduction to Criminal Justice

Introduction to the background and history of law enforcement, the origin of laws, the beginnings of law enforcement, the causes of crime and definition of a criminal, critical areas of law enforcement as related to crime, public morals, and the public image. Corequisite: ENG 088. 3 lecture hours per week. 3 credit hours.

CRJ 102 Police Organization and Administration

Study of the principles of organization and administration as applied to law enforcement agencies; a review of police administration past and present with an evaluation of its future. Course includes study of the impact of behavioral sciences, the changing role and goals of police, the impact of police professionalization, and examination of police organization, administrative services, coordination and consolidation of police services and operational services. Prerequisite: ENG 098. 3 lecture hours per week. 3 credit hours.

CRJ 103 Introduction to Forensic **Procedure**

A review of the fundamental techniques used in the analysis and evaluation of physical evidence, including microtechniques, and special subjects of topical interest. Laboratory is included. Analyzing physical evidence using recent developments in non-instrumental and instrumental techniques. Prerequisite: ENG 098. 3 lecture and 3 laboratory hours per week. 4 credit hours.

CRJ 109 Correctional Administration

The study of theories, methods and practices in the administration of punishment with special emphasis on the rehabilitation of the adult offender. Among the major topics are trends in punitive policies, probation, the prison community on the local, state, and federal levels including objectives and treatment methods, parole, and crime prevention. 3 lecture hours per week. 3 credit hours.

CRJ 201 Police Management Systems

Analysis of management improvement, the policies and procedures of personnel effectiveness and their specific application to law enforcement, planning, program and performance budgeting, records management, data processing, communications, leadership, decision making, and operations research. Surveys are used for problem identification, problem solving, and operations auditing. Corequisite: ENG 088. Prerequisite: CRJ 102. 3 lecture hours per week. 3 credit hours.

CRJ 203 Criminal Investigation

A basic course in the methods of searching for truth and relevant information on criminal cases. Includes the police role in preliminary and follow-up investigation, interview techniques, and specialized investigative techniques relative to homicide, rape, robbery and arson. Legal responsibilities and general laboratory and scientific aids to investigation are also included. Corequisite: ENG 098. 3 lecture hours per week. 3 credit hours.

CRJ 205 Police Role in the Community

The concepts and ethics of the police profession; the police function as a critically sensitive area of public service; the attitudes and actions of the police and the public which create positive and negative relationships between the two; the tension and conflicts within the individual police officer due to enforcement and non-enforcement of popular and unpopular laws and the police officer's relationship to the work group; sensitivity training in the area of human relations. Corequisites: ENG 088, ENG 098. 3 lecture hours per week. 3 credit hours.

CRJ 206 Criminal Law

A brief look at the intricacies of the administration of criminal justice, a discussion of the elements of common criminal status, the nature and difficulties of proof, the legal rules governing police practices and procedures, the Federal Civil Rights Act, Criminal and Civil Liabilities of Law Enforcement Personnel, and constitutional provisions of particular importance to the police. Corequisites: ENG 088, ENG 098. 3 lecture hours per week. 3 credit hours.

CRJ 207 Special Police Operations

This course emphasizes the challenge presented to the American Law Enforcement system by both organized crime and political terrorism and offers recommended measures for their control. Corequisites: ENG 088, ENG 098. 3 lecture hours per week. 3 credit hours.

CRJ 208 Community Supervision of the Offender

A study of theories, practices and the problems of their integration into a meaningful program of supervision in the community for sentenced offenders. Major issues include probation, parole, specialized programs, (e.g., Halfway House, alternative programs, diversionary programs) work and research, and prediction. Corequisite: ENG 098. 3 lecture hours per week. 3 credit hours.

CRJ 223 Criminal Justice Problems in **Business and Industry**

Techniques and practices that assist private commercial establishments, particularly large industrial plants and department stores, in minimizing losses through security control. Issues that will be covered are physical security, procedural controls, special problems such as business and industrial espionage, riots, shoplifting, and dishonest employees. Corequisite: ENG 098. 3 lecture hours per week. 3 credit hours.

CSC • Computer Șcience/ Data Processing

CSC 100 Computer Programming Fundamentals

Topics include computer instructions, program logic, coding programs, and introduces students to file management and computer development testing programs. Problem solving, critical thinking and programming techniques are emphasized throughout the course. This course is strongly recommended for students interested in the Computer Science degree programs who have little or no programming background. Prerequisite: ENG 088, MAT 022. 2 lecture and 2 laboratory hours per week. 3 credit

CSC 101 Computer Algorithms

This course introduces students to the logic used to develop solutions to common problems in the computer science field. These step-by-step detail solutions are called algorithms and serve as the basic methods utilized in most computer problems. In the lab component of this course these algorithms are written and tested in C++. Topics include number systems, logical operators, one and twodimensional arrays and methods of sorting arrays, graphs of functions, and string manipulation. Prerequisites: CSC 100. 2 lecture and 3 laboratory hours per week. 3 credit hours.

CSC 102 Data Structures

An introduction to data representation and structures C++: strings, arrays, linked lists, queues, and stacks. The course extends the knowledge gained in CSC 101 to process information stored in the structures described above. Prerequisite: CSC 101 with a grade of "C" or better. 2 lecture and 2 laboratory hours per week. 3 credit hours.

CSC 115 Introduction to Computer Programming

This course is an introduction to computers and programming. Topics include: components of the computer system, problem solving techniques, processing data, manipulating files, creating mathematical functions, controlling processes using the BASIC programming language. Prerequisite: MAT 022. 2 lecture and 2 laboratory hours per week. 3 credit hours.

CSC 121 Assembly Language I

An introduction to the organization and operation of a computer system. The course will focus on machine representation of instructions and data through the study of a low level, machine-oriented assembly language. Topics include memory dumps, registers, and internal data representation. Prerequisite: CIS 102 or CSC 101. 3 lecture and 1 laboratory hour per week. 3 credit hours.

CSC 126 Introduction to Operating Systems

A survey of technical topics related to computer systems with emphasis on the relationships between hardware architectures, system software, and application software. Topics include computer systems components, process management and scheduling, data and file manage system organization, protection and security, and command procedure languages. Prerequisite or Corequisite: CSC 121. 3 lecture hours per week. 3 credit hours.

CSC 217 Advanced C++ Programming

This course introduces the student to object-oriented programming through the use of the C++ Programming Language. The course will focus on features and applications especially suited to the capabilities of the C++ language. Prerequisite: CSC 102 with a grade of "C" or better. 2 lecture and 2 laboratory hours per week. 3 credit hours.

CSC 218 Visual C++

This is a basic course in Microsoft Visual C++ focusing on object-oriented design. Topics covered include the visual C++ toolset, the Microsoft Foundation Class (MFC) library and application framework; and implementing the user interface through menus and toolbars, dialog boxes, and controls. Basic knowledge of computer, Windows, and C++ programming are necessary for successful completion of this course. Prerequisite: CSC 217 or C/C++ programming experience. 2 lecture and 2 laboratory hours per week. 3 credit hours.

CSC 231 Computer Organization and Architecture

A study of the components that make up a computer system. Topics include: logic design, common logic families, sequential devices, encoders and decoders, basic processor organization, memory systems, peripheral devices, and data transmission. Prerequisite: CSC 121. 3 lecture hours per week. 3 credit hours.

CSC 285 Special Topics in Computer **Programming**

Topics of current interest and trends in computer programming are discussed in this seminar course. Course content is arranged to satisfy particular needs and interests of students. This course is intended for students who are completing their degree in Computer Science. Prerequisite: Permission of coordinator. 3 credits.

CSC 290 Co-op Education Experience

This course is an externship of approximately 200 hours in the departments of local business firms. An elective may be substituted. See Program Coordinator. Prerequisite: Completion of all third semester courses and a GPA of at least 2.0. 200 externship hours. 3 credit hours.

CSC 295 Independent Study

A special research or development project in computer science for the advanced student with individual needs. Prerequisite: GPA of at least 3.00 and must have completed a minimum of 48 credits. 3 credits.

DBI • Deaf-Blind Interpreting

DBI 201 Introduction to Deaf-Blindness and Deaf-Blind Community

This course presents an overview of the lives and perspectives of members of the Deaf-Blind community and their culture. It includes etiologies, the impact of deafblindness on the culture and psyche of Deaf-Blind persons and initial skills development in communication modifications for persons who are Deaf-Blind. It also covers the various roles and relationships of interpreters and support service providers within the Deaf-Blind community, advocacy for the Deaf-Blind community by sharing information, linking and relinking communities, and being supportive of political or social actions that enhance the lives of people who are Deaf-Blind. Basic level knowledge and experiential activities around meeting, socializing, and working with Deaf-Blind people in a variety of settings are provided. Prerequisites: Program admission requirements or approval of instructor. 3 lecture hours per week. 3 credit hours.

DBI 205 Communication Methods and Sighted Guide Techniques

This course covers various communication methods and techniques used among persons who are Deaf-Blind and training in sighted guide techniques for Support Service Providers (SSPs) and interpreters. The course incorporates visual examples of the methods through specially produced videotapes and activities that will optimize skill acquisition. Training in sighted guide techniques used with Deaf-Blind people will stress safety factors and mobility issues. Basic issues faced by interpreters and SSPs regarding logistics of group settings are also addressed. Prerequisite or Corequisite: DBI 201. 2 lecture hours and 1 laboratory hour per week. 2 credit hours.

DBI 210 Deaf-Blind Interpreting and Interpreting Strategies

Interpreter Roles and Responsibilities cover the various roles and responsibilities of interpreters who work with persons who are Deaf-Blind, ethics, and cross-cultural considerations. Interpreting Strategies focuses on linguistic modifications for tactual and restricted field interpreting and strategies for incorporating environmental aspects into the interpreting process. Specific linguistic modifications such as condensing and editing, utilizing pre- and post-assignment information, and transferring non-manual grammatical signals into a tactual mode. The course also discusses resources, agencies, and effective provision of interpreter/SSP services for academic or community events where Deaf-Blind persons participate. Prerequisite: DBI 201, DBI 205 and approval of Coordinator of ASL-English Interpreting Program. 3 lecture hours per week. 12 hours of field observation of Deaf-Blind interpreting and interaction in Deaf-Blind community. 3 credit hours.

DENA • Dental – UMDNJ

DENA 1232 Dental Science

A series of lectures designed to familiarize the students with the basic pharmacological agents utilized to provide anesthesia, promote healing and medicate patients. Information concerning the basic principles of oral pathology is presented. Consideration is given to the relationship between general pathology and oral diseases with emphasis on abnormal conditions or the oral cavity. 2 credit hours. This course is only available to students who have been accepted into a UMDNJ program. For the most current course description visit http://coursecatalog.umdnj.edu/

DENA 1279 Clinical Assisting

The clinical dental assisting experience has been designed to incorporate preclinical laboratory skills, the use of dental materials, dental radiology, and expended functions, as delegated by the New Jersey State Dental Auxiliary Practice Act. Clinical rotations in all areas of dental practice have been scheduled at the New Jersey Dental School in order to gain practical experience with other students and patients under the supervision of allied dental personnel. 180 clinical hours. 3 credit hours. This course is only available to students who have been accepted into a UMDNJ program. For the most current course description visit http://coursecatalog.umdnj.edu/

DENA 1309 Internship

The focus of this course is to provide an opportunity to integrate pre-clinical and clinical skills into the private practice setting. The students will actively participate in all aspects of dental assisting. Students will also obtain experiences in expanded functions as outlined by the New Jersey State Dental Auxiliary Practice Act. Additionally, students are required to make radiographic exposures as outlined by the Department of Environmental Protection. 120 clinical hours. 1 credit hour. This course is only available to students who have been accepted into a UMDNJ program. For the most current course description visit http://coursecatalog.umdnj.edu/

DENH • Dental – UMDNJ

DENH 1109 Introduction to Clinical Dental Hygiene

This course is an introduction to the basic knowledge, skills and judgments necessary for prevention of disease of the teeth and surrounding tissues. Instrumentation design, classification and usage are taught in both didactic and laboratory portions of the course. The student performs selected services on one of their peers or a laboratory manikin, but does not necessarily provide a full range of services. Learning methods will include lectures, self-instructional audio-visual, presentations, web research, and reading assignments. Students are assessed throughout the semester through competency evaluations. Laboratory and clinical experience provide the opportunity for practical application of the principles of comprehensive dental hygiene treatment in preparation for the following semester in treating patients. 4 credit hours. This course is only available to students who have been accepted into a UMDNJ program. For the most current course description visit http://coursecatalog.umdnj.edu/

DENH 1220 Nutrition

The purpose of this course is to provide the dental hygiene student with the knowledge to understand and skill to apply the principles of nutrition and diet evaluation and counseling relative to oral health in the dental setting. The course covers the fundamental principles of diet and nutrition as they relate to general and oral health: dietary guidelines, nutrient functions, requirements throughout the life span and deficiency/toxicity concerns, energy needs and nutrition and oral health in dental caries, periodontal disease, diabetes, heart disease, cancer and AIDS. There is an emphasis on the relationship among oral health and dental hygiene practice and patient management. Management of the patients at different stages of the life span will be covered. Clinical application will focus on diet and nutrition risk evaluation and counseling for prevention, caries control, oral disease and restorative work. Complementary medicine and diet therapy issues will also be addressed in relation to oral health. Nutrition misinformation and other consumer issues will also be addressed. The students will complete the midterm and final exam via the Internet through WEBCT. 30 lecture hours. 2 credit hours. This course is only available to students who have been accepted into a UMDNJ program. For the most current course description visit http://coursecatalog.umdnj.edu/

DENH 1231 Clinical Dental Hygiene I

This course demonstrates advanced techniques of the dental hygiene appointment including, oral preventive therapy, fluorides, basics of treatment planning, behavior modification strategies, gerodontic and pediatric preventive counseling, women's health, and dental hygiene care for individuals with special needs including diabetes, cardiovascular and respiratory disease, and substance abuse. 45 lecture hours. 3 credit hours. This course is only available to students who have been accepted into a UMDNJ program. For the most current course description visit http://coursecatalog.umdnj.edu/

DENH 1249 Clinical Services I

This didactic and clinical course provides students the opportunity to apply principles taught during the pre-clinical phase in a patient care environment. Topics will include adjunctive instrumentation and therapy, periodontal evaluation based on the American Academy of Periodontics, prevention of disease and maintenance of oral health, non surgical periodontal therapy, latex hypersensitivity and tobacco cessation. Evidence-based interventions in the dental hygiene process of care will be emphasized. Learning methods will include lectures, seminars, self-instructional audio-visual presentations, and reading assignments. Case studies and patient assessment will be emphasized for preparation for CS II and Board examinations. Students will be assessed through clinical competency exams through the course. 15 lecture hours, 180 clinical hours. 3 credit hours. This course is only available to students who have been accepted into a UMDNJ program. For the most current course description visit http://coursecatalog.umdnj.edu/

DENH 1280 Oral Embryology and Histology

The course provides the dental hygiene student with a conceptual framework for understanding the growth and development of oral structures as well as an overview of the peri-natal events that begin their growth. Microscopic structures of the oral tissues, growth and development of the face and oral cavity will be studied to reinforce lecture topics. A detailed study of the development of the deciduous and permanent dentition is presented along with the common developmental disturbances and anomalies that sometimes occur during the complex pattern of growth and development. 30 lecture hours. 2 credit hours. This course is only available to students who have been accepted into a UMDNJ program. For the most current course description visit http://coursecatalog.umdnj.edu/

DENH 2300 Oral Pathology

The students study abnormalities within the oral cavity and head and neck regions including any deviation from normal. The course covers cellular alterations relating to the inflammatory and immune responses as well as gross abnormalities related to inflammation, immunity, genetics, developmental disorders, infectious disease, neoplasia and systemic disease. The majority of classroom instruction is devoted to oral pathology with emphasis placed on those lesions most frequently encountered. For each lesion discussed, the etiology, pathogenesis, clinical and applicable diagnostic signs and symptoms, treatment, follow-up and prognosis are presented. Limited discussion is devoted to general pathology as it relates to oral lesions and manifestations. 30 lecture hours. 2 credit hours. This course is only available to students who have been accepted into a UMDNJ program. For the most current course description visit http://coursecatalog.umdnj.edu/

DENH 2310 Dental Health Education/Community Dental Health

This course is a participation and study of the principles of delivering health care to the public. It examines dental public health, the role of the dental auxiliary in planning, delivering and evaluation of community dental health programs, dissemination of dental health information, and tools of public health including: epidemiology, biostatistics, dental indices, and reliability and validity of research methods. 30 lecture hours. 2 credit hours. This course is only available to students who have been accepted into a UMDNJ program. For the most current course description visit http://coursecatalog.umdnj.edu/

DENH 2320 Pharmacology and Oral Medicine

This lecture course is designed to explore basic concepts of the anatomy and pathology of the periodontium. Classification, etiology, and treatment of periodontal disease will be discussed in depth using slides, videos, and CD-ROM. Correlation of the relationship of the histopathologic changes of the supporting structures of the teeth are integrated through the use of case based clinical situations. 1 credit hour. This course is only available to students who have been accepted into a UMDNJ program. For the most current course description visit http://coursecatalog.umdnj.edu/

DENH 2321 Periodontology I

This lecture course is designed to explore basic concepts of the anatomy and pathology of the periodontium. Classification, etiology, and treatment of periodontal disease will be discussed in depth using slides, videos, and CD-ROM. Correlation of the relationship of the histopathologic changes of the supporting structures of the teeth are integrated through the use of case based clinical situations. 30 lecture hours. 2 credit hours. This course is only available to students who have been accepted into a UMDNJ program. For the most current course description visit http://coursecatalog.umdnj.edu/

DENH 2332 Clinical Dental Hygiene II

Classroom instruction in the care of special population groups including care for the pediatric, pregnant, geriatric, and handicapped or disabled patients. 30 lecture hours. 2 credit hours. This course is only available to students who have been accepted into a UMDNJ program. For the most current course description visit http://coursecatalog.umdnj.edu/

DENH 2349 Clinical Services II

Students practice all phases of total preventive oral health service including oral examination, nutritional counseling, personalized patient education and fluoride treatments. 15 lecture hours, 180 clinical hours. 3 credit hours. This course is only available to students who have been accepted into a UMDNJ program. For the most current course description visit http://coursecatalog.umdnj.edu/

DENH 2419 Capstone Seminar

The Capstone Seminar is at the conclusion of a student's program of study and caps prior course work. The course will enable the student to synthesize what they have learned in the Dental Hygiene Major. The student will develop a grant proposal for an enrichment grant, critically review literature, and write an abstract for publication using the appropriate format required by peer reviewed journals. The student will analyze research studies, and apply biostatistics. Instruction on understanding the scientific method and evidence-based decision making skills is provided. Emphasis is placed on using the World Wide Web to access current literature and present this information in an educational manner to peers. 30 lecture hours. 2 credit hours. This course is only available to students who have been accepted into a UMDNJ program. For the most current course description visit http://coursecatalog.umdnj.edu/

DENH 2422 Periodontology II

This lecture course is a continuation of Periodontology I. Current information on clinical and adjunctive home care aids will be discussed. Surgical options and alternatives including implants will be studied. Students will exchange their experiences about their patient's treatment through a Case Presentation. Complete documentation including review of medical and dental histories, dental and periodontal charting, goals and objectives of therapy, before and after photographs, radiographs and/or study models, record of treatment, patient compliance, and recommended maintenance schedules will be shared, discussed, and evaluated. 30 lecture hours. 2 credit hours. This course is only available to students who have been accepted into a UMDNJ program. For the most current course description visit http://coursecatalog.umdnj.edu/

DENH 2449 Clinical Services III

This course will refine the student's clinical skills and incorporate the base of knowledge in pathology and periodontology as it relates to the dental clinical setting. The student will develop more independent thinking and self-directive skills while continuing to demonstrate significant confidence, independence and efficiency necessary for a dental hygienist. Upon completion of the course, the fourth semester dental hygiene student will be prepared as a dental hygiene graduate by successful clinical testing in mock board, selected competency examinations, and reviewing graduation requirements. 15 lecture, 180 clinical hours. 3 credit hours. This course is only available to students who have been accepted into a UMDNJ program. For the most current course description visit http://coursecatalog.umdnj.edu/

DENH 2453 Pain Control

The course is designed to introduce the student to the principles of local anesthesia in dentistry. Emphasis will be placed on clinical application of these principles. Anatomy of the head and neck will be stressed throughout the course with an in depth review of the trigeminal nerve and neurophysiology. The pharmacology of various local anesthetics and vasoconstrictors will be reviewed. as well as a rational approach to selection of local anesthetic. Discussion of systemic toxicity and local complications will alert the student to emergencies that can develop in the dental treatment area. Local anesthetic techniques will be discussed and injection techniques will be presented and practiced. Students will apply topical and administer local anesthetic to one another after practicing. Nitrous oxide sedation, general anesthesia, IV sedation and hypnosis will also be discussed. 1 credit hour. This course is only available to students who have been accepted into a UMDNJ program. For the most current course description visit http://coursecatalog.umdnj.edu/

DENH 2459 Dental Specialties II

This course provides students with clinical rotations throughout the dental specialty areas offered by the New Jersey Dental School. The dental hygiene students will function as a New Jersey expanded duty dental assistant and become clinically proficient in all expanded duties listed in the New Jersey Dental Auxiliary Practice Act. 45 clinical hours. 1 credit hour. This course is only available to students who have been accepted into a UMDNJ program. For the most current course description visit http://coursecatalog.umdnj.edu/

DMSM • Digital Medical Sonography

DMSM 100 Introduction to Clinical Sonography with Clinical Component

This course provides a historical, professional and occupational development of Diagnostic Medical Ultrasound. Case studies of the various Imaging Modalities and how to correlate these findings with ultrasound will be emphasized. 2 lecture hours per week. 2 credit hours.

DMSM 101 Patient Care

The course includes a survey of general principles, techniques and procedures in patient care, ethics and medico-legal. The course introduces the student to practical components for the clinical setting. 2 lecture hours per week. 2 credit hours.

DMSM 102 Cross-sectional Anatomy

This course provides basic sectional anatomy of the abdomen and pelvis. which allows the ultrasound student to develop sufficient comfort with cross-sectional images. 2 lecture hours per week. 2 credit hours.

DMSM 103 Ultrasound Physics and Instrumentation - Part I

This course provides the student with the knowledge of ultrasound physics and instrumentation with an emphasis on sound and its interaction with matter. Topics covered in this course include basic physical principles of ultrasound, Doppler principles and ultrasound equipment controls. 3 lecture hours per week. 3 credit hours.

DMSM 104 Ultrasound Physics and Instrumentation - Part II

This course provides the ultrasound student with the knowledge of ultrasound physics and instrumentation with an emphasis on instrumentation. Topics include detailed ultrasound instrumentation, applied Doppler Effect with interpretation, imaging recording devices and quality control. Prerequisite: DMSM 103. 3 lecture hours per week. 3 credit hours.

DMSM 105 Ultrasound of the Abdomen – Part I

This course provides the foundation for human physiology and pathophysiology, relating these sciences to clinical diseases of the abdomen and the resultant pathological effects of the anatomy. 3 lecture hours per week. 3 credit hours.

DMSM 106 Ultrasound of the Abdomen – Part II

This course further provides the foundation for human physiology and pathophysiology, relating these sciences to clinical diseases of the abdomen and the resultant pathological effects on the anatomy. Prerequisite: DMSM 105. 3 lecture hours per week. 3 credit hours.

DMSM 107 Ultrasound of the Female Pelvis

This course provides the ultrasound student with a basic knowledge of gynecology and its ultrasonographic applications. Sonographers are required to differentiate normal from abnormal processes; therefore, the normal and abnormal pathophysiology of the female pelvis will be covered. 3 lecture hours per week. 3 credit hours.

DMSM 109 Obstetrical Sonography – Part I

This course provides the ultrasound student with information necessary to perform sophisticated obstetrical procedures utilizing ultrasound. Examination strategies for various procedures are explored as well as the integration of ultrasound into established clinical practices. 3 lecture hours per week. 3 credit hours.

DMSM 111 Ultrasound of Superficial Structures I

This course provides the didactic and clinical knowledge necessary to perform basic sonographic examination of anatomy classified as superficial structures. Utilizing specialized equipment and high megahertz transducers, examination strategies for various procedures are discussed. The role of ultrasound in established clinical practices utilizing superficial structures imaging is discussed. 3 lecture hours per week. 3 credit hours.

DMSM 116 Ultrasound Registry Review

This course is comprehensive, covering all topics that appear on the current ARDMSM test content outline for General Abdomen Obstetrics and Gynecology and Physics and Instrumentation. 3 lecture hours per week. 3 credit hours.

DMSM 117 Obstetrical <u>Sonography</u> – Part II

This course provides the ultrasound student with information necessary to perform sophisticated obstetrical procedures utilizing ultrasound. Examination strategies for various procedures are explored as well as the integration of ultrasound into established clinical practices. Prerequisite: DMSM 109. 3 lecture hours per week. 3 credit hours.

DMSM 118 Ultrasound of Superficial Structures II

This course provides the didactic and clinical knowledge necessary to perform basic sonographic examination of anatomy classified as superficial structures. Utilizing specialized equipment and high megahertz transducers, examination strategies for various procedures are discussed. The role of ultrasound in established clinical practices utilizing superficial structures imaging is discussed. Prerequisite: DMSM 111. 2 lecture hours per week. 2 credit hours.

ECO • Economics

ECO 105 Basic Economics

A one-semester course, concentrating on macro- and micro-economic issues. Operations of a market economy using the fundamental principles of supply and demand, production costs and basic market models. National income and our monetary system. Interaction of monetary and fiscal policies to accomplish economic objectives. Students will be able to understand the overall functioning of our market and national economy. Prerequisites: ENG 087, MAT 011. 3 lecture hours per week. 3 credit hours.

ECO 201 Principles of Economics I

An introduction to economic problems of GDP growth, full employment, price stability, and national debt and deficits. Topics include national income accounting, aggregate economics sectors, money and banking, income determination and fiscal and monetary policies. Students will be able to evaluate and measure the nation's economic health. Prerequisites: ENG 089, ENG 099, MAT 022 or permission of instructor or Department Chair. 3 lecture hours per week. 3 credit hours.

ECO 202 Principles of Economics II

An introduction to theory of a firm (a micro unit). Analysis of a firm under fundamental principles of supply and demand and consumer behavior. Cost analysis and profit maximization under various market models. The pricing of resources and contemporary issues. Students will be able to analyze behavior of a firm. Prerequisites: ENG 089, ENG 099, MAT 022 or permission of instructor or Department Chair. 3 lecture hours per week. 3 credit hours.

ECO 205 Money and Banking

Study of the evolution and functions of money: monetary standards, credit and development of banking. The course examines banking and credit institutions, theory and practice of bank operations, the Federal Reserve System, foreign exchange, and recent banking developments. Prerequisites: ENG 089, ENG 099, MAT 022, ECO 201 or ECO 202 or permission of instructor or Department Chair. 3 lecture hours per week. 3 credit hours.

ECO 207 Urban Economics

An introduction to the basic principles of urban and regional economics with applications to current metropolitan problems. Emphasis is on the determination of a viable economic base that allows maximum employment, the provision of adequate public services, the impact of federal and state policies on urban transportation and income distribution, fiscal conditions, and the supply of housing. Prerequisites: ENG 089 ENG 099, MAT 022. Corequisite: ECO 201 or ECO 202 or permission of instructor or Department Chair. 3 lecture hours per week. 3 credit hours.

ECO 209 The International Economy

An introduction to international trade theory and policy. An historical examination of emergence of trade and basis and gains from trade. Balance of payment equilibrium and U.S. trade deficit. Tariff and other trade barriers, foreign exchange markets, capital flows, and multinational corporations. Special topics include GATT, EEC and NAFTA. Students will be able to use analytical ability and vocabulary needed in the international trade, commercial, and financial institutions. Prerequisites: ENG 089, ENG 099, MAT 022. Corequisite: ECO 201 or permission of instructor or Department Chair. 3 lecture hours per week. 3 credit hours.

EDU • Education

EDU 205 Educational Psychology

Psychology applied to teaching and learning processes. The course helps students apply understanding and methods of psychology to problems in teaching/learning situations. Prerequisites: ENG 101 or ENG 112. 3 lecture hours per week. 3 credit hours.

EDU 215 Field Work in Education

With permission of the department, any student who has successfully completed EDU 205 and PSY 101 or SOC 101, or students with exceptional qualifications may elect to engage in field work. The student must attend regular classes and/or prepare reports or other projects as required by the department. Credit will be based on a minimum of 30 hours in an approved institution in addition to the classes. (Note: Students must: 1. be matriculated in Liberal Arts Education or Liberal Arts Early Childhood; 2. have completed 30 credits in the above mentioned program; 3. fill out an application form, available through the department, by APRIL 15th for the Fall semester or NOVEMBER 15th for the Spring semester; and 4. have proof of a Mantoux test with a negative reading.) 3 credit hours.

EDU 270-289 Topics in Education

Studies of selected events, issues or topics in education chosen on the basis of timely concerns, community interests, student requests, to be offered not on a regularly scheduled basis but rather periodically. Individual topics will be announced prior to registration; one, two or three credits will be offered depending on hours and format.

EET • Electronics Electromechanical Technology

EET 101 Principles of DC Circuits

Analysis of passive DC networks using standard network theorems such as superposition, mesh and nodal analysis, Thevenin, current and voltage source conversions. Laboratory emphasizes the use and understanding of basic instrumentation and measurement techniques. Prerequisite: ENG 088. Corequisite: MAT 143 or MAT 119. 3 lecture and 3 laboratory hours per week. 4 credit hours.

EET 102 Principles of AC Circuits

Continuation of EET 101, including analysis of passive devices in AC networks, resonance and characteristics of transformers. Laboratory introduces measurement techniques utilizing signal generators, oscilloscopes and frequency counters. Prerequisite: EET 101. 2 lecture and 3 laboratory hours per week. 3 credit hours.

EET 111 Digital Computer **Fundamentals**

A study of the fundamentals of digital computers including number systems, Boolean algebra, Karnaugh maps, logic functions, logic gates, and the implementation of logic functions using discrete and integrated circuit components. Combinations of fundamental circuits are developed to form counters, registers, encoders, decoders, multiplexers, demultiplexers, arithmetic, and memory units. In the laboratory the student is introduced to breadboarding, analysis, synthesis, testing and troubleshooting of digital circuits through the use of digital test instruments such as pulse generators, oscilloscopes, and logic probes. Prerequisite: ENG 088. Corequisite: MAT 143 or MAT 119. 3 lecture and 3 laboratory hours per week. 4 credit hours.

EET 204 Electromechanical Devices and Systems/Robotics

The analysis, synthesis, and integration of systems encompassing electromechanical, electronic, electrical, and mechanical subsystems. Actuators, motors, generators, sensors, transducers, tachometers, amplifiers, signal conditioners, and displays are studied. Analog, digital, and hybrid (analog/digital) control systems, instrumentation and measurement techniques are also studied. Further study of the integration of automatic control systems and computers involve programmable controllers, robotics, and automated manufacturing systems. In the laboratory the student performs experiments on these systems and subsystems with emphasis on diagnostic testing, interfacing, measurement, troubleshooting, calibration, programming, and servicing techniques. Prerequisites: EET 211 and EET 213. 3 lecture and 3 laboratory hours per week. 4 credit hours.

EET 211 Computer Systems/Microprocessors

A continuation of EET 111. A study of digital computer sub-assemblies such as the central processing unit (CPU), data registers, data bus configurations, address registers, and various peripherals. Hardware, software, and firmware aspects of computer systems are studied with emphasis on microprocessor architecture and machine language programming. In the laboratory the student is required to build and troubleshoot complex control circuits and to program and interface a microprocessor with various input/output (I/O) devices and peripherals. Prerequisite: EET 111. 3 lecture and 3 laboratory hours per week. 4 credit hours.

EET 213 Semiconductor Devices and Circuits

The study of solid state devices such as diodes, bipolar junction transistors, field effect transistors, unijunction transistors, silicon controlled rectifiers, and other four-layer devices and their application in basic circuits. Multistage amplifiers, differential amplifiers, operational amplifiers, rectifiers, regulators, and control circuits are also studied. In the laboratory the student is required to analyze, synthesize, test, troubleshoot and evaluate circuits and devices, and become proficient in the use of test equipment and development of measurement techniques. Prerequisite: EET 102. 4 lecture and 3 laboratory hours per week. 5 credit hours.

EET 265 Fiber Optic Communication Systems

Principles and techniques associated with the transmission of digital and analog signals through optical waveguides (fibers). Topics will include: properties of optical fibers and waveguides, components and basic circuits of optical communication systems, baseband and pulse modulation, quantization, digital signaling techniques, multiplexing and coherent optical communications. The laboratory component will provide hands-on experience in the handling of fibers, splicing and connecting, measurement of fiber properties, the building and testing of a fiber optic communication system. Prerequisites: EET 213. 3 lecture and 3 laboratory hours per week. 4 credit hours.

EET 285 Special Topics in Electromechanical Technology

The study of topics of current interest in electromechanical technology. The course content is arranged to satisfy the particular needs and interest of the students. Prerequisite: Permission from EEET Coordinator. Credit by arrangement.

EET 290 Co-op Education Experience

An externship at the facilities of an appropriate firm, with or without compensation, arranged with program coordinator's approval. 3 credit hours.

EET 295 Independent Study

A special research and/or development project in electromechanical technology for the advanced student with individual needs. Prerequisite: Permission from EEET Coordinator. Credit by arrangement.

EGG • Engineering

EGG 105 Introduction to Fundamentals of Engineering

Introduction to engineering methods through the study of numerous problems. Orderly analyses and accurate computation are stressed. In addition, the course provides the student with a preliminary insight into the field of engineering and an acquaintance with various aspects of college encountered by engineering students. Prerequisites: MAT 144, ENG 089 and ENG 099. 3 lecture hours per week. 3 credit hours.

EGG 108 Engineering Drawings

A study of the major elements of the engineering drawing. Topics include multiview (2-dimensional), sections and pictorial views, dimensioning practices, ANSI standard Limits and Fits, surface finishes and fasteners. Geometric dimensioning and tolerances (GD&T) are covered with attention to tolerances of form, orientation, location, runout, and position. Also included are applications of symbols, datums, material condition modifiers, bonus tolerances and virtual conditions. Lab topics include drawing entities, display control, editing techniques, layers and linetypes, hatching, dimensioning, and scaling. Project drawings such as detailed machine parts will require application of model and paper space, templates, viewports and external references. 3 lecture hours and 1 laboratory hour per week. 3 credit hours.

EGG 111 Engineering & Computer Graphics

This course is a fundamental study of the engineering drawing using computeraided engineering software (Autodesk Inventor) to construct solid and parametric modeling drawings. Topics covered include 3-D solid modeling, 2-D multiview drawings, parametric dimensioning, section views, auxiliary views, and assembly modeling. CAD projects include 3-D solid model drawings and 2-D orthographic drawings, which address topics such as geometric constraints, feature interactions, parametric dimensions, and associative functionality. 1 lecture hour and 3 laboratory hours per week. 2 credit hours.

EGG 201 Engineering Mechanics (Statics)

A study of basic structural and mechanical systems in static equilibrium. Freebody diagrams, vector algebra, and scalar analysis are used to find resultants of forces and moments, and for solving equilibrium problems; applications including simple structures and machines, dry friction, center of gravity, centroids, area and mass moments of inertia by integration. Prerequisites: MAT 171, PHY 111. 3 lecture hours per week. 3 credit hours.

EGG 202 Engineering Mechanics (Dynamics)

A study of the kinematics and kinetics of motion, including rectilinear and curvilinear motion, force and acceleration, work and energy, impulse and momentum, for particles and rigid bodies. Calculus is used throughout for problem solving. Prerequisites: MAT 172 and EGG 201. 3 lecture hours per week. 3 credit hours.

EGG 203 Applications of Computers in Science and Engineering

This course emphasizes hands-on experience with stand-alone microcomputers. Simulations, data analysis, graphics techniques, and structured programming are used to show the range of computer problem-solving techniques. Other topics covered are program correctness, operating systems, a survey of computer languages, the relationship of the components internal and external to the computer. The increasingly popular language Pascal is used as necessary. 2 lecture and 3 laboratory hours per week. 3 credit hours.

EGG 205 Surveying

Theory and practice of measurements and their applications. Topics include use of instruments, recording of data, computations and mapping; theory and use of simple curves; earthwork measurements and computation. 2 lecture and 3 field laboratory hours per week. 3 credit hours.

EGG 207 Principles of Electrical Engineering

Introduction to the fundamental concepts of electric circuits. Course covers mesh and nodal analysis, network theorems and applications, steady state analysis, and phasor diagrams. Introduction includes time-varying analysis R-L, R-C, and R-L-C circuits. Prerequisite: PHY 201. Corequisite: MAT 272. 3 lecture and 3 laboratory hours per week. 4 credit hours.

EGG 213 3-D AutoCAD

Through the user coordinate system (UCS) and viewports the student will learn to create 3-D wire frame drawings clad with 3-D faces and meshes in order to create realistic images via hidden line removal and perspective view. 3-D solid geometry techniques will be emphasized to increase drawing efficiency. Shade and Animator will be illustrated. Prerequisite: MET 109 or permission of instructor. 2 lecture hours and 2 laboratory hours per week. 3 credit hours.

EGG 251 Digital Design

A study of the fundamentals of digital computers including number state machines systems, Boolean algebra, Karnaugh maps, logic functions, logic gates, and the implementation of logic functions using discrete and integrated circuit components. Combinations of fundamental circuits are developed to form counters, registers, encoders, decoders, multiplexers, demultiplexers, arithmetic, and memory units. 3 lecture hours per week. 3 credit hours.

EHS • Emergency Health

EHS 200 Case Studies in Emergency Medicine

In this course students will prepare emergency medicine patient case studies in an effort to enhance their patient care management. Various teaching methods will be utilized including role-playing, patient care report documentation, transfer of care, mock trial and deposition. This program is intended to provide the student with a better understanding of effective patient care, documentation and their role in the continuum of care. Prerequisites: ENG 102, acceptance into the AS - Emergency Health Science Program. 3 lecture hours per week. 3 credit hours.

EHS 201 Health Care Leadership

This course will focus on effective ways to enhance health care leadership styles while focusing on the perspective of Emergency Medicine. Students will review and develop the essentials of leadership personality traits that enhance job satisfaction, customer satisfaction and patient advocacy. Ways to promote the profession and enhance profession growth will be discussed. The curriculum is designed to foster critical thinking, enhance interpersonal and leadership skills, promote ethical sensitivity, and professional responsibility in the delivery of healthcare. Students will work in small groups using their professional work experiences to enhance classroom learning. Prerequisites: ENG 102, acceptance into the AS -Emergency Health Science Program. 3 lecture hours per week. 3 credit hours.

EHS 202 Fundamentals of Health Care Administration

This course is designed to provide healthcare professionals with the necessary tools to be effective and successful managers. The course is designed to provide the student with basic management principles including legal and ethical concerns, quality improvement, human resources and employee relations, occupational safety, planning, and fiscal policy. Prerequisites: ENG 102, acceptance into the AS -Emergency Health Science Program. 3 lecture hours per week. 3 credit hours.

EIP • Educational Interpreting

EIP 201 Methods of Instruction for Educational Interpreters

This course is designed to provide educational interpreting students with a basic knowledge curriculum development, based upon student motivation and learning theories will be addressed as they relate to primary and secondary age students. Students will review the New Jersey Core Curriculum Content Standards, (CCCS), as well as unique curricula designed for students who are deaf/hard of hearing in the content areas. Instructional strategies for educational interpreters with an emphasis on vocabulary acquisition and language comprehension for students will be addressed. Collaborative strategies for educational interpreters working with regular education and special education teachers and related services personnel in a variety of educational settings are discussed as well as assessment of academic materials and successful completion of learning objectives according to established criteria in the students' individualized education programs (IEP) will be presented. 3 lecture hours. 3 credit hours.

EIP 202 Language Development for the Educational Interpreter

This course is designed to provide educational interpreting students with an understanding of the principles and theories of childhood language development and will compare the development of language for children with various degrees of hearing loss with language development of children without educational disabilities. Students will survey language intervention models for students who are deaf and hard of hearing. Additional issues impacting language development in children with hearing loss, including, but not limited to, alternative forms of communication, bilingual/bicultural issues, assistive technology and cochlear implants. 3 lecture hours. 3 credit hours.

EIP 203 Child Development for Educational Interpreters

This course is designed to provide educational Sign Language/English interpreting students with an overview and an understanding of the development of children from conception to adolescence; the interaction of physical, cognitive, emotional, linguistic, social and cultural factors within developmental stages; in addition, the students will have an understanding of the deaf and hard of hearing child from a developmental perspective; students will compare the development of children with out specialized needs with the development and issues facing children and families with specialized needs. 3 lecture hours. 3 credit hours.

EIP 204 Ethics and Laws for **Educational Interpreters**

This course is designed to provide students with an overview and understanding of the unique role and responsibilities of educational interpreters and the various interpreter assignments within multiple educational settings; collaboration and consultation models as the framework for the educational interpreters role with regular education teachers, special education teachers, school administration and parents; the role of educational interpreters as a member of the individualized education program (IEP) team; issues related to etiquette, confidentiality, supervision and evaluation; and finally, federal and state mandates which outline the provisions of educational interpreting as a related service. 3 lecture hours. 3 credit hours.

EMT 100 Cardiopulmonary Resuscitation

This program meets the requirements of the American Heart Association's Basic Life Support for Healthcare Providers, and the American Red Cross' CPR for the Professional Rescuer. This program is designed to teach techniques for basic airway assessment and management, cardiopulmonary resuscitation, and management of foreign-body airway obstruction for adults, children, and infants. The student will also be introduced to the automated external defibrillator (AED), and will become proficient in its use. An American Heart Association or American Red Cross-certified instructor will teach this program. A course completion card will also be issued by the appropriate certifying agency. 1 lecture hour per week. 1 credit hour.

EMT 102 Emergency Medical Technician - Basic

This course meets the requirements of the National Highway and Transportation Safety Administration's Emergency Medical Technician-Basic: National Standard Curriculum. The course is designed to instruct a student to the level of Emergency Medical Technician-Basic (EMT-B). The EMT-B serves as a vital link in the chain of the healthcare team. The student will learn all skills necessary to provide emergency medical care at a basic life support (BLS) level with an ambulance or other specialized service.

Upon successful completion of this course, the student will be eligible to take the state certification exam, which is required to obtain an EMT-B provider card issued by the NJ Department of Health and Senior Services - OEMS . Prerequisite: EMT 100 or proof of current CPR/AED certification at the healthcare/professional level by the American Heart Association, American Red Cross, ASHI, or National Safety Council. 6 lecture hours per week. 6 credit hours.

ENG • Enalish

ENG 087 Introduction to Language Arts

Introduction to Language Arts is a preparatory Basic Studies Program course designed to create a context for developmental reading and writing. The primary objectives of the course are to develop in the students the ability to manage time relevant to the requirements of ENG 088 and ENG 098, to assimilate diverse educational materials centered on a theme, and to assist in the expression of their ideas, both written and oral. 6 lecture hours per week. 6 credit hours.

ENG 088 Introduction to College Reading I

Part of a multi-semester sequence designed to help the student whose reading ability indicates the need for concentrated involvement in the reading process, particularly to improve comprehension, critical reading and vocabulary. Prerequisite: ENG 087, if needed. 4 lecture hours per week. 4 credit hours.

ENG 089 Introduction to College Reading II

Highest level of a multi-semester sequence providing intensive involvement in the reading process. Prerequisite: ENG 088, if needed. 4 lecture hours per week. 4 credit hours.

ENG 098 Introduction to College Writing I

Part of a multi-semester sequence designed to help the student whose writing indicates the need for concentrated attention and practice with the process of language use. Particular attention is given to producing compositions that have sufficient information. Prerequisite: ENG 087, if needed. 4 lecture hours per week. 4 credit hours.

ENG 099 Introduction to College Writing II

Highest level of a multi-semester sequence providing intensive involvement in the writing process. Prerequisite: ENG 098, if needed. 4 lecture hours per week. 4 credit hours.

ENG 101 English Composition I

First half of a two-semester sequence, completed by either ENG 102 or ENG 122 as required by program of study, which focuses on the development of the student's skill in writing expository prose. Prerequisite: ENG 099, if needed. 3 lecture hours and one conference hour per week. 3 credit hours.

ENGH 101 English Composition I (Honors)

First half of a two-semester sequence, completed by either ENG 102 or ENG 122 as required by program of study, which focuses on the development of the student's skill in writing expository prose. Consistent with the philosophy of Honors Studies, this course is conducted in a seminar format, and students are encouraged to work with other students and to direct their own learning by selecting from a variety of opportunities that will be made available to them. Prerequisites: ENG 099, if required, and permission of instructor or coordinator of Honors Studies. 3 lecture hours and 1 conference hour per week. 3 credit hours.

ENG 102 English Composition II

Second half of a two-semester sequence, which focuses on the continued development of the student's skill in writing expository prose as well as an introduction to literature. Prerequisites: ENG 089, if needed, ENG 101 or ENG 112. 3 lecture hours and 1 conference hour per week. 3 credit hours.

ENGH 102 English Composition II (Honors)

This is the second half of a two-semester sequence, which focuses on the continued development of the student's skill in writing expository prose as well as an introduction to literature. Consistent with the philosophy of Honors Studies, this course is conducted in a seminar format, and students are encouraged to work with other students and to direct their own learning by selecting from a variety of opportunities that will be made available to them. Prerequisites: ENG 089, if required, ENG 101 or ENG 112, and permission of instructor or coordinator of Honors Studies. 3 lecture hours and 1 conference hour per week. 3 credit hours.

ENG 111 English Composition for Speakers of Other Languages I

This course is the first semester of a twosemester sequence of college composition for students whose first language is not English. The sequence serves in lieu of the foreign language requirement and as a substitute for ENG 101 for non-native speakers of English. Prerequisite: ESL 065 and ESL 092 or ESL Placement Test. 3 lecture hours and 1 conference hour per week. 3 credit hours.

ENG 112 English Composition for Speakers of Other Languages II

This course is the second semester of a two-semester sequence of college composition for students whose first language is not English. The sequence serves in lieu of the foreign language requirement and as a substitute for ENG 101 for non-native speakers of English. Prerequisite: ENG 111 and ESL 082. 3 lecture hours and 1 conference hour per week. 3 credit hours.

ENG 122 Introductory Technical and Business Writing

Second half of a two-semester sequence, with focus on the types of writing used in business and industry, including process analysis, mechanism descriptions, summaries, proposals, research projects, letters, memorandums and resumes. Prerequisites: ENG 089, if needed, ENG 101. 3 lecture hours and 1 conference hour per week. 3 credit hours.

ENG 128 The Dynamics of Communication

The study of human relationships with emphasis on communication as a process. Topics covered will include selfconcept, perception, listening, language, assertiveness, and conflict resolution and their roles in human relationships. Communication concepts will be supplemented by classroom exercises. 3 lecture hours per week. 3 credit hours.

ENG 129 Public Speaking

Instruction and practice in oral communication. Course includes training in impromptu and extemporaneous speaking, logical organization of material, methods of proof, persuasion, audience analysis, techniques of delivery, and fundamentals of group discussion and debate. 3 lecture hours per week. 3 credit hours.

ENG 201 Literature of the Western World I

A survey of the major periods in the development of Western literature from ancient Greece and Rome through the Medieval era, with an emphasis on the major figures such as: Homer, Sophocles, Plato, Virgil, Paul, Augustine, Dante, and Chaucer. The place of literature in the social and political history of the West will also be explored. Prerequisite: ENG 102 or ENG 122. 3 lecture hours per week. 3 credit hours.

ENG 202 Literature of the Western World II

A survey of the major periods in the development of Western literature from the Renaissance to the postmodern with an emphasis on the major figures such as Machiavelli, Shakespeare, Voltaire, Goethe, Tolstoy, Kafka, Eliot, and Borges. The place of literature in the social and political history of the West will also be explored. Prerequisite: ENG 102 or ENG 122. 3 lecture hours per week. 3 credit hours.

ENG 205 British Literature I

Study of the major British poets and prose writers from Beowulf to Pope and Swift, studied in their historical context and in their aspects of enduring merit. Prerequisite: ENG 102 or ENG 122. 3 lecture hours per week. 3 credit hours.

ENG 206 British Literature II

Study of the major British poets and prose writers from the pre-Romantic poets to the present, studied in their historical context and in their aspects of enduring merit. Prerequisite: ENG 102 or ENG 122. 3 lecture hours per week. 3 credit hours.

ENG 207 American Literature I

A survey of major works in American Literature from Colonial diarists to Whitman. Prerequisite: ENG 102 or ENG 122. 3 lecture hours per week. 3 credit hours.

ENG 208 American Literature II

A survey of major works in American Literature from Dickinson to the present. Prerequisite: ENG 102 or ENG 122. 3 lecture hours per week. 3 credit hours.

ENG 209 World Literature I

A study of some of the representative classics of both Western and Eastern literature from antiquity to 1650. Readings may include selections from the Bible, the Greek and Roman classics, Gilgamesh, Confucius and The Mahabharata, The Dhammapada, The Qur'an, the Popol Vuh, Beowulf, Chaucer, as well as Machiavelli, Shakespeare, Donne, and Milton. Through a study of these texts, students should develop a knowing appreciation of some of the great cultural traditions of the world. Prerequisite: ENG 102 or ENG 122. 3 lecture hours per week. 3 credit hours.

ENG 210 World Literature II

A study of some of the major representative classics of both Western and Eastern literature from 1650 to the present. Readings will include selections from Asia, the Middle East, Africa, Oceania, as well as Europe and the Americas. Through a study of the texts from these diverse cultures, students should develop a knowing appreciation of some of the great cultural traditions of the world. Prerequisite: ENG 102 or ENG 122. 3 lecture hours per week. 3 credit hours.

ENG 215 Creative Writing

An introduction to the various forms of creative writing with emphasis on the development of superior craftsmanship in imaginative writing. Assignments are given to encourage students who have demonstrated advanced skills in writing to experiment with various forms. (Note: This course does not fulfill the 200-level literature requirement.) Prerequisite: ENG 102 or ENG 122 or instructor's permission. 3 lecture hours per week. 3 credit hours.

ENG 216 Contemporary Literature

A study of writers from 1945 to the present, presenting major literary movements and their philosophical implications. Emphasis is on those novelists, playwrights, and poets who represent the contemporary trends in form, content, and style. Prerequisite: ENG 102 or ENG 122. 3 lecture hours per week. 3 credit hours.

ENG 217 Literature and the Arts I

A period study of literature using the fine arts to reveal the artistic environment of each era. The fine arts, films, and other creative media are used to show how artists working in their various disciplines have handled the same themes as those which are read, from Ancient Greece to Impressionism. Prerequisites: ENG 102 or ENG 122, HIS 101-102 or permission of instructor. 3 lecture hours per week. 3 credit hours.

ENG 218 Literature and the Arts II

A period study of literature using the fine arts to reveal the artistic environment of each era. The fine arts, films, and other creative media are used to show how artists working in their various disciplines have handled the same themes as those which are read, from Impressionism to the present. Prerequisite: ENG 102 or ENG 122, HIS 101-102 or permission of the instructor. 3 lecture hours per week. 3 credit hours.

ENG 220 Drama As Literature

A study of techniques, thematic approaches, and critical analyses of dramatic literature. Students read to critically analyze plays and attend actual performances. Additional activities may include student line readings, character portrayals, and participation in a performance. Prerequisite: ENG 102 or ENG 122. See also FIA 205-206, Introduction to Drama. 3 lecture hours per week. 3 credit hours.

ENG 227 African American Literature I

A survey of selected writings by African Americans emphasizing the literary significance of each work and author, studied in its historical and sociological contexts from slave narratives and early folk tradition to the beginnings of the Harlem Renaissance of the 1920's. Prerequisite: ENG 102 or ENG 122. 3 lecture hours per week. 3 credit hours.

ENG 228 African American Literature II

A survey of the selected writings by African Americans emphasizing the literary significance of each work and author, studied in its historical and sociological contexts from the Harlem Renaissance of the 1920s to the resurgent cultural self-consciousness of the 1960s to the present proliferation of African American literature. Prerequisite: ENG 102 or ENG 122. 3 lecture hours per week. 3 credit hours.

ENG 229 Introduction to Poetry

An introductory study of the major poets and genres of poetry in English, beginning with early ballads and songs, visiting each of the major periods and styles, featuring in-depth views of major figures in the development of poetry (Shakespeare, Blake, Whitman, etc.) and concluding with a study of representative 20th Century voices. Technical aspects of poetry will be discussed, as well as the cultural context and enduring nature of poetic expression. Prerequisite: ENG 102 or ENG 122. 3 lecture hours per week. 3 credit hours.

ENG 230 American Poetry

An introductory study of the major poets and genres of American poetry, beginning with Colonial and Federal era poets, visiting each of the major periods and styles, featuring in-depth views of major figures in the development of American poetry (Whitman, Dickinson, Williams, Eliot, Ginsburg, etc.) and concluding with a study of representative 20th and early 21st Century voices. Technical aspects of poetry will be discussed, as well as the cultural context and enduring nature of poetic expression within a specifically American idiom. Prerequisite: ENG 102 or ENG 122. 3 lecture hours per week. 3 credit hours.

ENG 235 Introduction to Shakespeare

An introductory study of Shakespeare as poet and dramatist, with close reading of the representative plays. The enduring nature of Shakespeare's ideas is stressed. Prerequisite: ENG 102 or ENG 122. 3 lecture hours per week. 3 credit hours.

ENG 245(WMS 245) Women in Literature

A study of major female characters (by both male and female authors) in literature from ancient times to the modern period. The main emphasis is on examination of the changing role of the female through the ages as reflected in literature. Consideration will be given to historical feminist articles in an effort to understand the changing roles of the woman in society. Prerequisite: ENG 102 or ENG 122. 3 lecture hours per week. 3 credit hours.

ENG 247(WMS 247) Women Authors

A study of major female authors, emphasizing the historical and literary development of female literacy and authorship in British and American poetry (but not limited to the English-speaking world), drama, fiction, and non-fiction. Prerequisite: ENG 102 or ENG 122. 3 lecture hours per week. 3 credit hours.

ENG 279 Survey of Yiddish Literature

A survey of Yiddish literature in English translation from Yiddish medieval romance through the "Classical" period (including Sholem Aleichem, I.L. Peretz and Mendele Mocher Sefarim) to the writers of the modern era. The literature will be studied in relation to the social background of each period. An analysis of the origin and development of the Yiddish language will also be included. Prerequisites: ENG 102 or ENG 122 or permission of the instructor. 3 lecture hours per week. 3 credit hours.

ENG 270-289 Themes in Literature

A study of the way one theme (or several related themes) finds embodiment in literature and of the way it influences literary form and structure. Works chosen for reading and discussion express intense concern for a theme such as the adolescent, violence, the hero, the artist as pariah, death, war, or the absurd. Prerequisite: ENG 102 or ENG 122. 3 lecture hours per week. 3 credit hours.

ESL • English as a Second Ľanguage

ESL 012, 013, 014, 015 (Beginning)

Students learn basic English vocabulary and sentence structure. Simple conversation is developed. Beginning reading and writing skills are introduced. Prerequisite: ESL Placement Test. 12 lecture hours per week. 3 credit hours each.

ESL 022, 023, 024, 025 (High Beginning)

Students learn high beginning English vocabulary and sentence structure. Conversation, listening, basic reading and writing skills are further developed. Prerequisite: ESL Placement Test or successful completion of ESL 015. 12 lecture hours per week. 3 credit hours each.

ESL 032, 033, 034, 035 (Low Intermediate)

These courses develop low intermediate vocabulary, conversation, listening, and sentence structure. Intermediate reading and writing skills are developed. Prerequisite: ESL Placement Test, successful completion of ESL 025, or by the instructor's recommendation. 12 lecture hours per week. 3 credit hours each.

ESL 042, 043, 044, 045 (Intermediate)

These courses further develop intermediate vocabulary, conversation, listening, and sentence structure. Intermediate reading and writing skills are emphasized. Prerequisite: ESL Placement Test, successful completion of ESL 035, or by the instructor's recommendation. 12 lecture hours per week. 3 credit hours each.

ESL 046 Biographies of the 20th Century

This course is part of the fourth level of instruction for students who have graduated from a U.S. high school and who have been designated for special assistance with reading, writing and academic English. The course content focuses on personalities of the 20th century who have made significant contributions in a variety of fields. Prerequisites: ESL 035 or placement into an ESL level four section designated for U.S. high school graduates. Corequisites: Project Succeed sections of ESL 042, ESL 043, ESL 044, ESL 045 (Project Succeed is a special section of ESL level four reserved for U.S. high school graduates who place into intermediate ESL.) 3 lecture hours per week. 3 credit hours.

ESL 054, 055 High Intermediate **English for the Non-Native** Speaker

These courses are part of the fifth level of ESL instruction. They cover (a) high intermediate level structure skills and (b) high intermediate level conversation and listening practice based on academic contexts and on study skills topics. The goal is to give students English language preparation to succeed at the college level and comprehensive introduction to the American college. Prerequisite: ESL 045 or ESL Placement Test. 6 lecture hours per week. 3 credit hours each.

ESL 064, 065 Advanced English for the Non-Native Speaker

These courses are part of the sixth level of instruction. They cover (a) advanced level structure skills with emphasis on the systems of the English language and (b) advanced level conversation and listening practice based on academic contexts and on study skills topics. The goals are to help students enhance their language proficiency in order to succeed at the college level. Prerequisite: ESL 055 or ESL Placement Test. 6 lecture hours per week. 3 credit hours each.

THE INSTITUTE FOR INTENSIVE

Non-native students whose tests indicate insufficient fluency in English are required to take courses for Speakers of Other Languages, offered in the Institute for Intensive English or ENG 111-112.

PROGRAM OF STUDY IN THE INSTITUTE FOR INTENSIVE ENGLISH

After an oral interview and a written examination to determine language proficiency, a student enters one of six sequential levels. During the final week of each semester, the student's ability is again measured. A student either advances to the next level or repeats the course if additional study is needed. Upon satisfactory completion of the sixth level, a certificate is awarded.

ESL 071 Advanced Conversation and Culture

This course reinforces and expands English communication skills in a conversational cultural setting. It meets the individual needs of advanced students of English as a Second Language. Prerequisite: ESL 045 or ESL Placement Test. 3 lecture hours per week. 3 credit hours.

ESL 080 American English **Pronunciation for ESL Speaker**

This course provides instruction in the pronunciation of the unique aspects of spoken American English. The goal is increased oral/aural intelligibility and fluency. Prerequisite: ESL 025 or ESL Placement Test. 3 lecture hours per week. 3 credit hours.

ESL 081 Reading I

This course is part of the fifth level of instruction. The purpose of the course is to acquaint students with American narrative and expository texts and to assist students in their written interaction with these texts. Prerequisite: ESL 045 or ESL Placement Test. Corequisites: ESL 054, ESL 055. 3 lecture hours per week. 3 credit hours.

ESL 082 Reading II

This course is part of the sixth level of instruction. The course focuses on reading comprehension and fluency for academic purposes. Students read and respond to narrative and expository texts from multicultural sources. Prerequisite: ESL 081 or ESL Placement Test. Corequisites: ESL 064, ESL 065. 3 lecture hours per week. 3 credit hours.

ESL 083 Advanced Reading in **Business for ESL**

This course is paired with and serves as a support course for ESL level six students enrolled in a sheltered section of Business 101. The purposes of the course are (1) to give students practice in reading and responding to academic texts in the area of business as presented in expository texts and (2) to help students develop reading skills and strategies they can apply in other academic work. Prerequisite: ESL 081 or ESL Placement Test. Corequisites: BUS 101-ESL, ESL 064, ESL 065. 3 lecture hours per week. 3 credit hours.

ESL 084 Advanced Reading in Psychology for ESL

This course is paired with and serves as a support course for ESL level six students enrolled in a sheltered section of Psychology 101. The purposes of the course are (1) to give students practice in responding to expository texts, fiction and articles in the area of psychology and (2) to help students develop reading skills and strategies they can apply in other academic work. Prerequisite: ESL 081 or ESL Placement Test. Corequisites: PSY 101-ESL, ESL 064, ESL 065. 3 lecture hours per week. 3 credit hours.

ESL 091 Writing I

This course is part of the fifth level of instruction. The purpose of the course is to develop in students the ability to express their concerns and experiences in clear, organized American English. Prerequisite: ESL 045 or ESL Placement Test. Corequisites: ESL 054, ESL 055. 3 lecture hours per week. 3 credit hours.

ESL 092 Writing II

This course is part of the sixth level of instruction. Students write papers which range from the personal narrative to projects which incorporate information from a variety of sources. Prerequisite: ESL 091 or ÉSL Placement Test. Corequisites: ESL 064, ESL 065. 3 lecture hours per week. 3 credit hours.

FHR • Food Industry Marketing & Management

FHR 101 Career Orientation and Professional Development in the Hospitality Business

This course provides an overview of various hospitality management career areas; defines professionalism; and investigates each student's specific interests in relation to these areas. Prerequisite: Completion of all required developmental work or acceptable scores on basic skills tests. 1 lecture hour per week. 1 credit hour.

FHR 102 Professional Skill **Development: Work Experience**

Students develop job acquisition, problem solving, interpersonal, stress and time management skills, and prepare for monitored work experience, generally in the following summer, of 400 hours. Prerequisite: FHR 101. 1 lecture hour per week. 1 credit hour.

FHR 103 Management Values and **Professional Standards**

Focuses on management and attitudes consistent with professional standards, and the manager's role in the business and community. Prerequisite: FHR 102. 1 lecture hour per week. 1 credit hour.

FHR 104 The Hospitality Manager and Law: Work Experience

Students examine various legal considerations in a professional hospitality management environment and prepare for a monitored work experience, generally in the following summer, of 400 hours. Prerequisite: FHR 103. 1 lecture hour per week. 1 credit hour.

FHR 105 Managerial Challenges in the New Workplace

This course focuses on the application of professionalism in the workplace, emphasizing contemporary issues, challenges and opportunities. 1 lecture hour per week. 1 credit hour.

FHR 204 Property Management

Students study the planning, design and management of hospitality facilities and systems. Competencies are developed in: theories of operations, property support systems, management of records and preventive maintenance routines, protection of public and employee comfort, health and safety, contemporary issues confronting facility managers, e.g., indoor air quality, ADA, safety training, energy and resource conservation, construction and renovation, land use planning, utility and engineering systems. 3 lecture hours per week. 3 credit hours.

FHR 225 Casino Management

The student who successfully completes this course will have an understanding of the organization structure of key casino operating departments as well as an understanding of the positive and negative impact that a casino/hotel will have on urban society. The course material will consist of lectures, group discussions, hand-outs with a major emphasis placed on student participation. 3 lecture hours per week. 3 credit hours.

FHR 320 Hospitality Operations

Examines many areas of the hospitality industry including tourism, hotel management, restaurant management, hospitality accounting, and human resource management. The course will look inside each of these areas and examine the components and systems that enable an operation to perform efficiently and effectively. Competencies are developed in: organizational structures of the food service and lodging industries, effective marketing and sales planning, and proper accounting systems. Classes will utilize various methods including lectures, experimental exercises, and presentation of student papers and case studies. 3 lecture hours per week. 3 credit hours.

FIA • Fine Arts

FIA 103 Fundamentals of Music

The acquisition of basic music skills including learning to read music, playing simple instruments, conducting and teaching songs by note. This course should be of particular interest to those considering a career in elementary education. 3 lecture hours per week. 3 credit hours.

FIA 104 Basic Design

This studio art course using several mediums provides a practical and theoretical analysis of the elements of design (line, shape, color, texture, and value) in the image-making process. Additionally, this course examines the principles of organization and aesthetics that govern their interaction in a formal compositional setting. This course serves as an introduction and prerequisite to studio art and architecture courses. 3 lecture hours per week. 3 credit hours.

FIA 105 Music Appreciation

Development of a greater sensitivity for the "Aesthetic Experience" through music. The emphasis is on discussions of and listening to classical, non-western and women composers in music. This course also includes discussions of and listening to rock and jazz, where appropriate. 3 lecture hours per week. 3 credit hours.

FIA 106 History of Music

Introduction to the development of different styles and periods of music. Discussions and listening illuminate differences and similarities of these various styles as well as their causes. A general look at how music reflects the period in which it was written provides a historical perspective. 3 lecture hours per week. 3 credit hours.

FIA 107 Introduction to Dance

Begins with the explanation of the elements of Modern Dance-time, space, and energy. During the last half of the semester these elements are applied to the fundamental study of ballet. The course is taught through basic studio movement (warm-up, technique, and dance phrases) and through concert attendance, readings, videotapes, lectures, and discussions. 3 lecture hours per week. 3 credit hours.

FIA 108 Appreciation of Art

A lecture course examining the aesthetics of the visual arts. The course will focus in on the many ways to see and understand two and three dimensional art forms. Studies include painting, sculpture, drawing, photography, the crafts, and other visual expressions examined through formal, iconographic, and conceptual means. A variety of art will be covered ranging from western, eastern, African, feminist, and other alternative, culturally significant art forms. 3 lecture hours per week. 3 credit hours.

FIA 109 Drawing I

Study of basic visual elements in drawing, emphasizing observation, selection, and recording of perceptual form. Value relationships, spatial organization, linear gesture, composition, balance, and the human figure are explored using graphic media. 3 lecture hours per week. 3 credit hours.

FIA 110 Painting I

Exploration of the basic visual elements using painting media and techniques. 3 lecture hours per week. 3 credit hours.

FIA 111 History of Art I

A historical and visual survey of art and architecture from prehistoric beginnings through the Medieval Period. Study includes aesthetic, cultural, historic, and formal examination of works of art in a chronological, evolutionary sequence. A considerable amount of time is spent focusing on diversity and multicultural issues that have defined and shaped the process of development historic to human creative activity. Lecture course with supplemental visual presentation. 3 lecture hours per week. 3 credit hours.

FIA 112 History of Art II

A visual survey of art and architecture from the Gothic Period through the 19th Century. Study includes an aesthetic, formal, historic, and cultural examination of painting, drawing, sculpture, and architecture in a chronological, evolutionary sequence. Time is spent focusing on how issues of cultural diversity and gender define and shape creative activity. Lecture course with supplemental visual presentation. 3 lecture hours per week. 3 credit hours.

FIA 115 Drawing II

Advanced drawing study using graphic media as a tool for expressive interpretation of the human figure and other visual problems. Study focuses on the tools, techniques, concepts, and approaches of two-dimensional image making. 3 lecture hours per week. 3 credit hours.

FIA 116 Painting II

Advanced study of painting concepts and technical processes involving light, shape, form, space, and composition. 3 lecture hours per week. 3 credit hours.

FIA 117 Music in the Twentieth Century

An examination of the development of Classical, Film, Musical Theater, Non-Western, Jazz and Rock music composed in the twentieth century, including Women, Latino, and African-American composers and their contribution to twentieth century music. 3 lecture hours per week. 3 credit hours.

FIA 119 History of Architecture I

This course examines the history of Western architecture from primitive building structures up to the Early Medieval period (c. 600-1000 AD). Included periods (and their related arts) are Egyptian, Greek, Roman, and Islamic. Student renderings from these and other periods will help visualize these structures in terms of architectural schema. 3 lecture hours per week. 3 credit hours.

FIA 120 History of Architecture II

This course examines the history of Western architecture from the Romanesque Period (c. 1000-1150) up to contemporary structures. Included periods are Gothic, Renaissance, Baroque and Rococo, neo-classical, art nouveau, deStijl, Bauhaus, International, and Post-Modernism. Student renderings and criticisms from these and other periods will help visualize these structures in terms of architectural schema. Prerequisite: FIA 119 or permission of instructor. 3 lecture hours per week. 3 credit hours.

FIA 121 Architectural **Graphics/Perspective**

Study of graphic styles used in architecture and development of perspective renderings of interior and exterior buildings. Prerequisite: FIA 109 or permission of instructor. 3 lecture hours per week. 3 credit hours.

FIA 202 Graphic Design I

An introductory design studio course which provides a basic vocabulary and fundamental understanding of the technique, concepts, and processes involved in the visual communication field of Graphic Design. Topics include a historic and contemporary examination of graphic communication, paste-up, layout, preparation of comps, roughs, and mechanicals, and an introduction to computers and design-related software. Prerequisite: FIA 104 or permission of instructor. 3 lecture hours per week. 3 credit hours.

FIA 203 Modern Dance

The study of three major modern dance styles focusing on technique and choreography. The course is designed to lead students to the development of their own movement style through studio dance, lecture, readings, concert attendance, videotapes, films, and discussions. Prerequisite: FIA 107 or permission of instructor. 3 lecture hours per week. 3 credit hours.

FIA 204 Graphic Design II

An advanced course in graphic design that serves as a continuation of Graphic Design I. A more specific emphasis on beginning and advanced design problem solving is provided using learned graphic design skills. Study includes a more complete understanding of the graphic design production process including typesetting, typography and lettering, advanced use of computers and software duotone and four-color production. Prerequisite: FIA 202 or permission from instructor. 3 lecture hours per week. 3 credit hours.

FIA 205 Introduction to Drama I

A study of the classics of European drama both as "text" and "event." Readings of selected masterworks together with active class participation in several modes of drama through scene study, criticism, improvisation, field trips and, for those interested, playwriting and directing. Readings include Aeschylus, the Elizabethans, and Moliere. Prerequisite: ENG 101. 3 lecture hours per week. 3 credit hours.

FIA 206 Introduction to Drama II

A study of classics from the modern theater both as "text" and "event". Readings of selected masterworks together with active class participation in several modes of drama through scene study, criticism, improvisation, field trips and, for those interested, playwriting and directing. Readings include Ibsen, Shaw, Tennessee Williams, Harold Pinter, and others. Prerequisite: ENG 101. 3 lecture hours per week. 3 credit hours.

FIA 207 Acting I

Basics of voice, movement, and interpretation. Development of imagination and observation leading to the ability to present these skills in all forms of dramatic presentations. Prerequisite: FIA 205 or FIA 206 or permission of instructor. 3 lecture hours per week. 3 credit

FIA 208 Acting II

Advanced work on developing voice, body, and imagination as components of the actor's "instrument". Discovering styles suitable for works from different periods and the relationship between the actor and the text. An examination of tradition and techniques of the principal modes of theater: tragedy, comedy, realism, fantasy, and farce. Prerequisite: FIA 207 or permission of instructor. 3 lecture hours per week. 3 credit hours.

FIA 209 Illustration I

An introductory studio course which provides the student with a basic vocabulary and fundamental understanding of the concepts, techniques, and skills involved in the visual arts communication field of illustration. Along with a historic and contemporary examination of illustration, the student is taught to differentiate between product, journalistic, and advertising forms of illustration. Considerable time is spent on specific studio approaches to illustration including use of pencil and dry media, pen and ink, watercolor, oil, gouache, tempera, acrylic painting techniques and applied computer technology Prerequisites: FIA 109 or FIA 110 or permission of instructor. 3 lecture hours per week. 3 credit hours.

FIA 210 Illustration II

An advanced commercial art course in illustration that serves as a continuation of the Illustration I course. A more specific focus on beginning and advanced problem solving is provided using learned studio illustration skills. Study includes the preparation of black and white, three-color, and four-color illustrations and comps for various journalistic, product, and advertising purposes. Emphasis is on visualization, originality of expression, and concept/problem solving using applied computer technology. Prerequisites: FIA 109 or FIA 110 and FIA 209 or permission of instructor. 3 lecture hours per week. 3 credit hours.

FIA 220 History of Photography

A course examining the history of photography from 1839 to the present. Emphasis is placed on a study of the evolution of photographic processes, art historical and sociological impact, trends and major artists. 3 lecture hours per week. 3 credit hours.

FIA 221 Black-and-White Photography I

An introduction to photography principles and practices including 35mm camera operation, film development, print processing, exposure technique, and some contemporary issues of photographic practice in the arts. Prerequisite: Students must have their own appropriate camera (or access to one). 3 lecture hours per week. 3 credit hours.

FIA 222 Black-and-White Photography II

An advanced black and white photography course with an emphasis on the zone system exposure and printing methods. Course includes an introduction to large format cameras and studio lighting. Prerequisite: FIA 221 or equivalent or permission of instructor. 3 lecture hours per week. 3 credit hours.

FIA 223 Color Photography

An introduction to color photography involving film exposure, print processing, color correcting and analysis, with an exploration of contemporary issues/techniques of color photography. Prerequisite: FIA 221 or equivalent or permission of instructor. 3 lecture hours per week. 3 credit hours.

FIA 224 Digital Imaging for Art and Photography I

This course provides students with an introduction to the technical and creative aspects of manipulating photographic and digitally generated images in a Macintosh computer environment utilizing state of the art hardware and software. It is recommended that students complete study in either FIA 202 -Graphic Design I or FIA 221 - Black & White Photography I (or FIA 223 -Color Photography) or COM 101 -Mass Communications before enrolling in Digital Imaging for Art and Photography. 3 lecture hours per week. 3 credit hours.

FIA 225 Advanced Digital Imaging for Art and Photography

This course provides students with advanced technical training in the field of digital imaging and an opportunity to apply learned skills to create digitally manipulated images from two-dimensional and three-dimensional photographic and computer generated sources. An integrated component of this course focuses on the use of "state of the art" digital hardware and software to output high resolution, exhibition quality, ink jet and dye sublimation images on a diversity of media. Students are required to complete study in Digital Imaging for Art and Photography I prior to enrollment in the Advanced Digital Imaging for Art and Photography course (or by securing special permission by the instructor). It is also recommended that students complete study in either FIA 202 - Graphic Design I, FIA 221 - Black & White Photography I (or FIA 223 - Color Photography) or COM 101 - Mass Communications before enrolling in Advanced Digital Imaging. 3 lecture hours per week. 3 credit hours.

FJM • Food Industry Marketing & Management

FIM 201 Food Marketing and Merchandising

Food Marketing and Merchandising provides an introduction to the food industry. Topics include the structure of the food industry, product and service categories, and regulations affecting food merchandising. Students will be introduced to store layout, buying and price management, advertising, and promotion, profitability, and potential career options. Prerequisites: BUS 105, BUS 208. 3 lecture hours per week. 3 credit hours.

FIM 202 Environmental Sanitation in **Food Service Operations**

Techniques and procedures for employing hygienic practice in the food industry including food sanitation and microbiology, food spoilage and foodborne illnesses, and education and training in sanitation of food industry personnel. Government regulations, as they pertain to the food industry, will be studied. 3 lecture hours per week. 3 credit hours.

FIM 203 Food Distribution Sales and Production

The course focuses on the production as well as the dimensions of channel structure functions of leadership, formulation of channel roles, and marketing logistics. The description and analysis of customer service, logistical cost, and system planning and management are discussed. Topics include transportation, warehousing and handling inventory management, and order processing. The physical and information flows involved in moving food allied products from origin to destination. Discussions include management of the sales force, including structuring and allocation territories, setting quotas, administering the sales force, sales training, and motivation. The role of modern information systems technology in managing the sales force will be assessed. Prerequisite: FIM 201. 3 lecture hours per week. 3 credit hours.

FIM 204 Food Management Co-op

This course enables the student to learn and practice food marketing skills under professional guidance in a college approved work environment. The student's work is supervised by a trained faculty member. Students must work a minimum of 180 hours for the semester and attend the weekly seminar. Prerequisites: FIM 202, FIM 203. 1 lecture and 12 clinical hours per week. 3 credit hours.

FIM 205 Issues and Problems in Food Industry Management

Strategic food issues and problems including the strategic basic aspects of food marketing and management are discussed. As the capstone course of the Food Industry Management Program, this course integrates theoretical concepts from a variety of business administration fields with current issues and problems in the food industry. Prerequisites: FIM 202, FIM 203. 3 lecture hours per week. 3 credit hours.

FMG • Food Industry Marketing & Management

FMG 100 Food and Beverage Management

The course emphasizes the food and beverage concepts essential to all hospitality managers. Areas such as menu planning, beverage operations, food production systems, food service, and delivery systems are studied. Prerequisites: FHR 101, ACC 103. Corequisite: FHR 102. 3 lecture hours per week. 3 credit hours.

FMG 101 Food Production Systems and Equipment/Food Service Systems

Design and organization for storage; preparation, and cooking and service in restaurants; quick service, retailing, beverage, commissary, institutional applica-tions are discussed. Specific work systems are discussed with an emphasis on equipment specification, planning for efficiency and effectiveness, organization of personnel, and integrating management concepts. Design and organization of service and delivery including a la carte dining rooms, cafeterias, quick service outlets, vending, beverage units, etc., are discussed. Organizing principles for service staff, equipment, serviceware, furniture and fixtures are emphasized. Prerequisite: FHR 101. Corequisite: FHR 103. 3 lecture hours per week. 3 credit hours.

FMG 102 Quantity Food Production Operations/Restaurant **Operations**

The management of volume food production in catering, healthcare, institutional, commissary, and airline applications are discussed. Menu and production planning and organization, control, analysis and performance improvement are emphasized. Management of food production and food service in a la carte restaurants: management activities in planning, personnel organization, preparation and cooking systems, service and control are stressed. Specific operations are examined in order to develop the organizing concepts of a la carte restaurants. Prerequisites: FHR 103, FMG 101. Corequisite: FHR 104. 1 lecture hour per week. 1 credit hour.

FRE • French

FRE 101 Beginning French I

Development of the fundamental skills of understanding, speaking, reading, and writing. Listening practice available. NOT open to native French speakers. Prerequisite: ENG 088. 3 lecture hours per week. 3 credit hours.

FRE 102 Beginning French II

A continuation of FRE 101. NOT open to native French speakers. Prerequisite: FRE 101. 3 lecture hours per week. 3 credit hours.

FRE 111 Intermediate French I

Review of fundamental skills of understanding, speaking, reading and writing. Not generally open to native French speakers. Prerequisite: FRE 102 or 2 years high school French. 3 lecture hours per week. 3 credit hours.

FRE 112 Intermediate French II

A continuation of FRE 111. Not generally open to native French speakers. Prerequisite: FRE 111. 3 lecture hours per week. 3 credit hours.

FRE 115 French Culture and Civilization (Foreign Study)

A comprehensive survey of French culture and civilization including geographical, social, and economic factors. The achievements in painting, sculpture and architecture will be examined. This course is offered in conjunction with a trip to France or French Canada and fulfills one semester of the French Modern Language requirement. 3 credit hours.

FRE 121 Advanced French I

Further development of skills in reading, composition and conversation. Prerequisites: FRE 112, 3 years high school French or its equivalent. 3 lecture hours per week. 3 credit hours.

FRE 122 Advanced French II

A continuation of FRE 121. Prerequisite: FRE 121. 3 lecture hours per week. 3 credit hours.

FRE 215 History of French Film

A survey of the major periods in the evolution of French film from the silent era through the New Wave to the present, with an emphasis on the major filmmakers: Renoir, Truffaut, Godard. The place of French film in the social and political history of the twentieth-century France will be explored. Prerequisites: ENG 102 or ENG 122 or permission of instructor or Modern Languages coordinator. 3 lecture hours per week. 3 credit hours.

FST • Fire Science Technology

FST 102 Building Construction

This course provides professional fire service personnel and individuals in related fields with an understanding of the basic principles of building construction. It presents background information concerning the national and local building codes, the national fire codes and how they affect modern design and building construction. It relates these principles to practical problems of the fire service. Prerequisite: ENG 098. 3 lecture hours per week. 3 credit hours.

FST 103 Fire Protection

An introductory course designed to examine general aspects of fire protection. Students study the behavior of fire, the extinguishing agents used in suppressing fire, and the strategies used to prevent fires. The roles of public and private fire protection services are also analyzed. 3 lecture hours per week. 3 credit hours.

FST 105 Fire Prevention

A study of the basic principles of fire prevention and inspection with emphasis on the recognition of fire hazards in commercial and in industrial occupancies, the various protection systems dealing with these hazards, the use of practical test facilities, and the enforcement of building laws, fire ordinances, and municipal codes. Prerequisite: ENG 098. 3 lecture hours per week. 3 credit hours.

FST 106 Fire Fighting Tactics

An examination of the tactical capabilities and limitations of company-level operations at emergency incidents. Particular attention is given to the operation of the basic tactical units of fire departments: Engine, Ladder, and Rescue companies. 3 lecture hours per week. 3 credit hours.

FST 107 Hazardous Materials

A course for professional fire and safety personnel concerned with hazards found in industry and techniques used to control them. A study of the use, proper storage, and transportation of hazardous materials, with particular emphasis placed on safety measures to be followed when handling these materials at a fire or other emergency. 3 lecture hours per week. 3 credit hours.

FST 108 Fire Hydraulics

This course provides fire protection personnel and professional firemen with an understanding of the properties, principles, and concepts of fluid materials, particularly water. The course presents a background of the basic properties of fluids, pressures, flows, pumps, and practical applications. Prerequisites: ENG 088, ENG 098, MAT 011. 3 lecture hours per week. 3 credit hours.

FST 109 Fire Protection Systems

Introduction to fire detection and suppression devices. The design, operation and maintenance of, and code requirements for, the various systems are examined, with special emphasis on the special problems created by hazardous occupancies. Prerequisites: ENG 088, ENG 098, MAT 011. 3 lecture hours per week. 3 credit hours.

FST 111 Fire Causes and Detection

The course will provide the student with an understanding of the history, development, and philosophy of fire investigation and detection; the gathering of evidence and development of technical reports; and the processing of criminal evidence and examination of criminal procedures as they relate to arson investigation. Prerequisites: ENG 088, ENG 098, MAT 011. 3 lecture hours per week. 3 credit hours.

FST 112 Emergency Rescue **Operations**

Students are instructed in various aspects of rescue operations. Topics of discussion include: responsibilities of the officer in command, the use of specialized rescue tools and equipment, problems of vehicle rescue, and techniques for handling casualties. Prerequisites: ENG 088, ENG 098. 3 lecture hours per week. 3 credit hours.

FST 113 Fire Department Organization and Management

The course provides the student with the basic concepts of management and organization of fire departments. It examines the structure and types of fire department organizations, the functions of the manager, and the role of leadership. Prerequisites: ENG 088, ENG 098. 3 lecture hours per week. 3 credit hours.

FST 114 Legal Aspects of Fire Protection

A study of legal rights and obligations, liability concerns and responsibilities involving fire department organizations carrying out their duties. 3 lecture hours per week. 3 credit hours.

FST 115 Insurance Grading Schedules

This course develops an understanding of all aspects of fire insurance. A major emphasis includes its function, type of carriers, provisions, and how rating systems are established. Additionally, it examines handling of risk and settlement claims. 3 lecture hours per week. 3 credit hours.

FST 116 Fire Safety Code

A study of the history and development of codes, with emphasis on the nature and scope of legal statutes and related codes in fire protection control. Prerequisites: ENG 088, ENG 098, MAT 011. 3 lecture hours per week. 3 credit hours.

FST 119 Incident Command

A study of the command and control of operations at major incidents or disasters. The role of the fireground or incident commander is stressed: major features include central control over and coordination of human and material resources with particular recognition given to the safety of fire personnel and disaster victims. Prerequisite: FST 106. 3 lecture hours per week. 3 credit hours.

FST 218 Fireground Strategies and Concepts

A study of the advanced tactical procedures and underlying strategic concepts required for effective operations at emergency incidents. Emphasis is on multi-unit and special emergency operations. Prerequisite: FST 106. 3 lecture hours per week. 3 credit hours.

GDP • Game Design Development

GDP 101 Fundamentals of Game Design

This course covers the many aspects of game design. The course explains the process of how a game is designed and developed from the original concept through its distribution. Other topics included in the course are fundamental rules of good game design, basic storytelling, understanding the importance of game design development teams, and incorporating external resources to complete the game. Prerequisites: ENG 089 and ENG 099. 3 lecture hours per week. 3 credit hours.

GDP 110 Game Design and Development I

This course provides students with the basics of game design. Students will be familiar with videogames, computer games, and just plain games. Students will have the opportunity to learn about a variety of games from non-computer games - Monopoly to Diplomacy - to computer games. Topics include the four essential elements of game design: imagining a game, defining the way that it works, describing its internal elements, and communicating this information to others. Prerequisites: ENG 089, ENG 099. 3 lecture hours per week. 3 credit hours.

GDP 115 The Business of Gaming

This course covers many aspects about the business of game development including new media and intellectual property. Students learn about legal issues that concern the game industry. Some of these issues are choosing a business entity to finance, human resources, intellectual property protection, publishing contract negotiation, and licensing. This course will help students become more efficient in the game development industry. Prerequisites: ENG 089 and ENG 099. 3 lecture hours per week. 3 credit hours.

GDP 201 Principles of Animation

This course provides students with animation techniques. Students will learn facial animation, cloth simulation, animation blending, soft body mesh deformation. Prerequisites: ENG 101, GDP 110, MAT 119. 2 lecture and 2 laboratory hours per week. 3 credit hours.

GDP 210 Game Design and Development II

This course provides students with the basic mechanics of building a double buffered sprite engine and the ability to write their own games using Visual Basic along with Windows API routines and DirectX. Students will learn about the game engine and how it is used as well as interactivity. Prerequisites: GDP 110, CIS 130, MAT 119. 2 lecture hours and 2 laboratory hours per week. 3 credit hours.

GDP 215 3D Game Programming

This course provides students with the fundamentals of 3D Programming. Students will explore topics such as lighting, materials, particles and dynamics, character animation, rendering and using paint effects. Another topic covered is the modeling technique, NURBS which is Non-Uniform Rational B-Splines. Prerequisite: GDP 210. 2 lecture and 2 laboratory hours per week. 3 credit hours.

GDP 280 Game Development Portfolio

In this course students will development their own games from design to completion. Students will be using the practical skills that they learned in previous courses in game development. This portfolio can then be used by students looking for employment. Prerequisite: Completion of all third semester courses and a GPA of at least 2.0. 3 credit hours.

GEO • Geography

GEO 201 World Geography

This course is an introduction to the physical and political geography of the world. It explores how the physical features, natural resources, and climate connect with economics and politics to shape the various human cultures on this planet. The major world geographic regions are explored. Corequisite: ENG 101 or permission of instructor or Department Chair. 3 lecture hours per week. 3 credit hours.

GER • German

GER 101 Beginning German I

Development of the fundamental skills of understanding, speaking, reading and writing. Listening practice available. Prerequisite: ENG 088. 3 lecture hours per week. 3 credit hours.

GER 102 Beginning German II

A continuation of GER 101. Prerequisite: GER 101. 3 lecture hours per week. 3 credit hours.

GER 105 Conversational German I

Development of ability to communicate orally in German. The course stresses the development of aural/oral skills through conversation based on topics of everyday life. Students who wish to take German 105 must have completed two years of high school German or German 102, or must have the permission of the instructor. Fulfills one semester of the foreign language requirement. Not open to native German speakers. Prerequisites: ENG 088, ENG 098. 3 lecture hours per week. 3 credit hours.

GEY • Geology

GEY 101 Physical Geology

Study of the origin and nature of rocks and minerals, volcanism and metamorphism, surficial processes of erosion and deposition; problems of water supply and pollution. One or more all day field trips are required in addition to regularly scheduled lab sessions. 3 lecture and 3 laboratory hours per week. 4 credit hours.

GEY 102 Historical Geology

Study of structural geology and sedimentation, evolution of continents and ocean basins; evolution of animals and plants, plate tectonics and continental drift; man's place in evolution. One or more all day field trips are required in addition to regularly scheduled lab sessions. 3 lecture and 3 laboratory hours per week. 4 credit hours.

GEY 121 Physical Geology

GEY 101 without the laboratory component. This course will not fulfill a college laboratory science requirement. Permission of Department Chair required. 3 lecture hours per week. 3 credit hours.

GEY 122 Historical Geology

GEY 102 without the laboratory component. This course will not fulfill a college laboratory science requirement. Permission of Department Chair required. 3 lecture hours per week. 3 credit hours.

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GEY 270-299 Topics in Geology

Studies in an area of the geological sciences. A specialized topic, announced during the prior semester, will be chosen in an area of geology that is of interest or use to students and the general public. Guest lecturers from geology and other disciplines may be involved. Methods of instruction may include lectures by faculty and students, seminar discussions, field trips and visits to museums and other institutions. 1, 2, or 3 credits are offered depending on hours and course format.

GEY 290-299 Independent Study in Geology

One-semester courses designed to cover an approved in-depth exploration of some aspect of Geology. The course is intended to provide the student with an opportunity to expand his or her knowledge in one area beyond that which is presently offered in current Geology courses. This course will not fulfill a laboratory science requirement and requires the recommendation and permission of the Department Chair or instructor as a prerequisite for registration. It is recommended that the student have at least two semesters of college Geology. 1, 2, 3 or 4 credit hours.

GOV • Government

GOV 105 Introduction to Contemporary Government and Politics

An introduction to the basic concepts of government and politics through analyses of current political events. It is designed to help prepare students for sophomore level courses, particularly in government. Basics of research and writing in this area are covered. Prerequisite: ENG 087. 3 lecture hours per week. 3 credit hours.

GOV 201 American Government and **Politics**

Comprehensive analysis of American political institutions on the federal, state, and local levels. Study of the U.S. Constitution, federalism, public opinion, political parties, elections, pressure groups, and the role of the citizen in the American political process. Prerequisites: ENG 089, ENG 099 or permission of instructor or Department Chair. 3 lecture hours per week. 3 credit hours.

GOV 202 American National Government

Comprehensive analysis of the organization, functions, and administration of the American national government, study of the Presidency, the Congress, the Judiciary, civil rights and civil liberties, constitutional law, domestic and foreign policy. Prerequisites: ENG 089, ENG 099 or permission of instructor or Department Chair. 3 lecture hours per week. 3 credit hours.

GOV 203 Urban Government and Politics

An investigation of urban government and politics, and those political structures, forces, and issues that particularly affect the urban community. Topics include machine politics, the politics of reform, the service challenge, and civil disorders. Prerequisites: ENG 089, ENG 099 or permission of instructor or Department Chair. 3 lecture hours per week. 3 credit hours.

GOV 204 Public Administration

An analysis of government utilization of human and material resources in developing and executing public policy. Concepts examined include bureaucracy, leadership, decision making, personnel and fiscal management. Prerequisites: ENG 089, ENG 099 or permission of instructor or Department Chair. 3 lecture hours per week. 3 credit hours

GOV 205 Comparative Governments

This course provides a traditional introduction to the comparative analysis of political systems. It focuses on governmental institutions and processes. Case studies include the United Kingdom, France, Germany, and Russia, as well as non-Western states. Prerequisite: ENG 101 or permission of instructor or Department Chair. 3 lecture hours per week. 3 credit hours.

GOV 207 International Politics

This course provides a traditional introduction to international politics. The nature of the state system, national power, national interest, war, the rise and collapse of the Soviet Union, the United Nations, and the impact of the socalled Third World are considered. Prerequisite: ENG 101 or permission of instructor or Department Chair. Corequisite: GÖV 201 or GOV 202. 3 lecture hours per week. 3 credit hours.

GOV 208 New Jersey Government and Politics

An analysis of state and urban government with emphasis on New Jersey; local and political problems of the state; governmental organization; the relations of the state with units of local government. Prerequisites: ENG 089, ENG 099 or permission of instructor or Department Chair. 3 lecture hours per week. 3 credit hours.

GOV 210 Seminar on the Third World, the United Nations, and International Law

This seminar examines the emergence of the non-Western world since the end of World War II. The role of the United Nations, particularly with regard to issues of decolonization, is discussed, as well as the impact these newly independent states have had on the development of international law. Prerequisites: ENG 101 and GOV 202 or GOV 207 or permission of instructor or Department Chair. 3 lecture hours per week. 3 credit hours.

GOV 215 (WMS 215) Women and **American Politics**

Through an examination of our nation's changing attitudes towards women, their evolving roles in society and current events, the students will come to understand the relationship between gender and politics. The course will examine the roles played by women in our democracy and how they affect the American experience. The distinction between men and women in the political context continues despite the gains women have made in this area. Prerequisite: GOV 201 or GOV 202 or permission of instructor or Department Chair. 3 lecture hours per week. 3 credit hours.

GOV 216 (WMS 216) Women and the Justice System

The laws of any society are a codification of contemporary values and beliefs. The students will examine legal history and the changing roles of women in society. This includes an examination of the daily challenges women face and the treatment women receive once they have become involved in the justice system (both civil and criminal). It is designed to explore Constitutional, familial, educational, employment and criminal issues. Prerequisite: GOV 201 or GOV 202 or permission of instructor or Department Chair. 3 lecture hours per week. 3 credit hours.

GOV 270-289 Issues in Government

Selected problems and topics in government and politics are viewed from the perspective of the perennial questions underlying political science. Topics are chosen in accord with the interests of the entire community and their professional suitability. These courses are of a nature so specialized or timely that they can best be offered not on a regular scheduled basis, but rather periodically. Individual topics are announced prior to registration; one, two, or three credits are offered depending on hours and course format. With permission of instructor.

Prerequisites: ENG 089, ENG 099.

HIS 091 Contemporary American Issues

Conducted within the general framework of American history, this course emphasizes a topical approach to contemporary American issues. These issues form the bases for readings and discussions. Working back into time, the historic origin and development of these issues and their interaction with the total social milieu are explained and analyzed. Prerequisite: ENG 087. 3 lecture hours per week. 3 credit hours.

HIS 101 Introduction to Western Civilization I

This course examines the history of Western Civilization from ancient times to about 1600. It covers the development of the Greek, Roman, Medieval, and Early Modern civilizations. Political, economic, social, religious, and cultural factors are considered. Prerequisites: ENG 088, ENG 098. 3 lecture hours per week. 3 credit hours.

HIS 102 Introduction to Western Civilization II

This course continues the exploration of Western Civilization from the early modern period to the present. It discusses such topics as absolutism, constitutionalism, modern science, revolution, industrialization, colonialism, world wars, totalitarianism, the Cold War, and the forming of a new global civilization. Political, economic, social, religious, and cultural factors are considered. Prerequisites: ENG 088, ENG 098. 3 lecture hours per week. 3 credit hours.

HIS 103 Introduction to World History I

A study of the major elements of world history from ancient times to 1500. Attention is given to prehistoric humans; the irrigation societies of Mesopotamia, Egypt, and India; the classical civilizations of Greece, Rome, India, and China; the later cultures of Byzantium, Islam, East Asia, Africa, the Americas, and Europe. Students may take this course, with its more global emphasis, instead of HIS 101 in any program where HIS 101 is required. Students will not, however, earn credit for both HIS 101 and this course. Prerequisites: ENG 088, ENG 098. 3 lecture hours per week. 3 credit hours.

HIS 104 Introduction to World History II

A study of the major elements of world history from 1500 to the present. Attention is given to the Protestant Reformation, the Enlightenment, the rise of absolutism, the impact of revolution, democracy and nationalism, the world wars, and challenges faced by contemporary humankind in an age of global interdependence. Students may take this course with its more global emphasis, instead of HIS 102 in any program where HIS 102 is required. Students will not, however, earn credit for both HIS 102 and this course. Prerequisites: ENG 088, ENG 098. 3 lecture hours per week. 3 credit hours.

HIS 105 Afro-American History I

A history of Black people from their advent in the new World to the Civil War. The African heritage and its contributions to the development of African-American culture are considered along with the slave trade and the effects of the institution of slavery. Also included are the early struggles for emancipation, resistance to slavery, the Abolitionist movement viewed from both the black and white perspective, the reasons behind the Emancipation proclamation, and the impact of the Civil War on American society. In order to satisfy degree requirements, students may substitute this course for HIS 101 or HIS 201 with the approval of the Department Chair. Prerequisites: ENG 088, ENG 098. 3 lecture hours per week. 3 credit hours.

HIS 106 Afro-American History II

A history of Black people from the Reconstruction to the present. The promise and disappointment of freedom in the post-Civil War world and the emergence of the new black leadership in the struggle for equality and dignity are considered. From Booker T. Washington's cooperative approach to the present militancy, the student studies the forces that are shaping the emergence of Black people as full participants in American Life in the twentieth century. In order to satisfy degree requirements, students may substitute this course for HIS 102 or HIS 202 with the approval of the Department Chair. Prerequisites: ENG 088, ENG 098. 3 lecture hours per week. 3 credit hours.

HIS 201 United States History to 1865

An examination of colonial foundations, the struggle for independence, and the early life of the Republic up to the Civil War. Political, economic, social and intellectual factors are considered. Prerequisites: ENG 089, ENG 099 or permission of instructor or Department Chair. 3 lecture hours per week. 3 credit hours.

HIS 202 United States History Since 1865

An examination of the life of the nation from Reconstruction to the current era. Attention focuses on political, diplomatic, economic, social, and intellectual developments. Prerequisites: ENG 088, ENG 099 or permission of instructor or Department Chair. 3 lecture hours per week. 3 credit hours.

HIS 205 English History from 1600 to the Present

A study of the major political, economic, social and cultural events and issues from the end of the Tudor period to the present. Emphasis is on the unification of the national state, the growth of parliamentary democracy and its effects on the American Revolution, the Industrial Revolution, the growth and decline of the Empire, the Welfare State, and the entrance into the Common Market. Prerequisites: ENG 089, ENG 099 or permission of instructor or Department Chair. 3 lecture hours per week. 3 credit hours.

HIS 209 Twentieth Century **European History**

An examination of the economic, social, and political trends of the twentieth century. The focus is on Europe, but attention is also given to the impact of the two world wars and their after-effects on the rest of the world. Prerequisites: ENG 089, ENG 099 or permission of instructor or Department Chair. 3 lecture hours per week. 3 credit hours.

HIS 215 The American Experience in the Twentieth Century

An investigation of twentieth century America covering major events, trends, and ideas. Flexibility within the course permits focusing on themes of special interest such as the Great Depression, Urbanization, the Cold War, the Counter-culture, and the complexities of current national life. Prerequisites: ENG 089, ENG 099 or permission of instructor or Department Chair. 3 lecture hours per week. 3 credit hours.

HIS 270-289 Topics in History

Studies of selected events, personalities, and issues in history, stressing interpretation and historical methods. Topics are chosen on the basis of their impact on succeeding generations and their connection with present concerns. These courses are of a nature so specialized or timely that they can best be offered periodically rather than on a regular scheduled basis. Individual topics are announced prior to registration; one, two or three credits are offered depending on hours and course format. With permission of instructor, or Department Chair. Prerequisites: ENG 089, ENG 099.

HIS 270 The Classical Heritage of Greece and Rome

An introduction to Greek and Roman history and culture through on site visitations in Sicily and Rome. Sicily has more extant Greek temples than are found in modern day Greece. Rome is a treasure trove of history for any age since the days of the early Roman republic. Personal experiences and guided readings link the present with the past in this exciting course. Prerequisites: ENG 089, ENG 099 or permission of instructor or Department Chair. 3 lecture hours per week. 3 cred-

HIS 279 New Jersey History

This course covers the history of New Jersey from early exploration and settlement to the present, with more emphasis on the origins and establishment of New Jersey as a colony and a state, and the role the state has played in the development of the nation. The historical background will serve as a springboard for the study of the 19th and 20th century industrial growth that would make New Jersey one of the most influential states in the nation. Prerequisites: ENG 088, ENG 099 or permission of instructor or Department Chair. 3 lecture hours per week. 3 credit hours.

HIS 281 The Era of the **American Revolution**

This course is designed as an examination of the people, events, meaning, and impact of the American Revolution. It will undertake an analysis of the transformation of the imperial debate in the mid-eighteenth century between Great Britain and her North American colonies into a political movement that led to resistance, armed rebellion, and ultimately to the creation of the American republic. The course will also explore the military and political events within the context of the cultural, economic, and social developments of the period. Throughout the course students will assess the meaning and legacy of the American Revolution for both contemporaries and for our society today. Prerequisite: HIS 201. Students who register for this course will have earned a grade of B or better in HIS 201. Prerequisites can be waived by permission of instructor or Department Chair. 3 lecture hours per week. 3 credit hours.

HIS 290 Independent Study

A special research or development project or a course not currently offered in the Economics/Government/History Department. Reserved for the advanced student with individual needs. With permission of instructor. 2 credit hours.

HRS • Honors

HRS 103 Honors Seminar in Cross-Cultural Studies

In order to help students appreciate the complexity and diversity of other cultures, this course will select a specific issue and explore it from multiple cultural perspectives. Attention will be paid to the contexts that help inform and shape the views of particular cultures on a given issue. Suggested topics could include: the construction of the family, the concept of God, the relationship between the individual and the community, the representation of death. In order to promote closer student/faculty collaboration and encourage independent learning, enrollment in this course will be limited to 20 students, class will be conducted in a seminar format, and students will be encouraged to work with other students and to direct their own learning by selecting from a variety of opportunities that will be made available to them. Prerequisites: ENG 089 and ENG 099 and, together with the approval of the Coordinator of Honors Studies, one of the following: a minimum GPA of 3.0; high incoming test scores or transferring grades; a demonstrated desire for higher thinking with a special talent, background, or experience. This course satisfies the Humanities elective. 3 lecture hours per week. 3 credit hours.

HRS 104 Honors Seminar in Multidisciplinary Study

This course will explore a specific issue across academic disciplines with emphasis placed on the importance of multidisciplinary approaches to the study of issues that do not readily fall under the purview of any single discipline. For example, students might consider the problem of global warming from the multiple perspectives of science, business, law, and public policy; or the issue of high-stakes testing in public schools from the perspectives of education, psychology, business, and the arts; or new biotechnologies from the perspectives of science, medicine, business, law, philosophy, and religion; or the problem of global terrorism from the perspectives of politics, economics, sociology, psychology, and law enforcement. Other suggested topics could include: globalization, storytelling, and race relations. In order to promote closer student/faculty collaboration and encourage independent learning, enrollment in this course will be limited to 20 students, the class will be conducted in a seminar format, and students will be encouraged to work with other students and to direct their own learning by selecting from a variety of opportunities that will be made available to them. Prerequisites: ENG 089 and ENG 099 and, together with the approval of the Coordinator of Honors Studies, one of the following: a minimum GPA of 3.0; high incoming test scores or transferring grades; a demonstrated desire for higher thinking with a special talent, background, or experience. This course satisfies the Social Science elective. 3 lecture hours per week. 3 credit hours.

HRS 203 Honors Independent Study

This course is intended for students who are interested in pursuing an independent study project and working closely on it with an individual faculty member. Such projects can be linked directly to an academic discipline and end in the traditional research paper. However, projects could also include volunteer work, service to the college community, undertaking an artistic endeavor, or travel abroad. If no other means of receiving credit is available, this course can also be used to receive credit for work completed in a study abroad program or study in another community. Any faculty member or eligible student can initiate the independent study, although all projects must be approved by the Coordinator of Honors Studies and eventually reviewed by the faculty Honors Studies committee. Prerequisites: ENG 089, ENG 099 and the approval of the Coordinator of Honors Studies. 3 credit hours.

HRS 204 Honors Independent Study

This course is intended for students who have already completed HRS 203 and are interested in pursuing another independent study project and working closely on it with an individual faculty member. Such projects can be linked directly to an academic discipline and end in the traditional research paper. However, projects could also include volunteer work, service to the college community, undertaking an artistic endeavor, or travel abroad. If no other means of receiving credit is available, this course can also be used to receive credit for work completed in a study abroad program or study in another community. Any faculty member or eligible student can initiate the independent study, although all projects must be approved by the Coordinator of Honors Studies and eventually reviewed by the faculty Honors Studies committee. Prerequisites: HRS 203 and the approval of the Coordinator of Honors Studies. 3 credit hours.

HSM • Hospitality

HSM 100 - Introduction to the Hospitality Industry

This course takes a management perspective in introducing students to the organization and structure of hotels, restaurants, clubs, cruise ships, and casino hotels. The emphasis is on business ethics, franchising, management contracts, and areas of management responsibility such as human resources, marketing and sales, and advertising. Prerequisites: ENG 089 and ENG 099. 3 lecture hours per week. 3 credit

HSM 105 - Planning and Control of Food and Beverage Operations

This course explains the principles and procedures involved in an effective food and beverage control system, including standards determination, the operating budget, cost-volume-profit analysis, income and cost control, menu pricing, theft prevention, labor cost control, and computer applications. Prerequisite: HSM 100. 3 lecture hours per week. 3 credit hours.

HSM 110 - Food and Beverage Management

This course gives students a basic understanding of the management process in food and beverage operations. All aspects of food and beverage operations are covered, including organization, marketing, menus, costs and pricing, production, service, safety, and finances. Prerequisite: HSM 100. 3 lecture hours per week. 3 credit hours.

HSM 210 - Managing Front Office **Operations**

This course presents a systematic approach to front office procedures by detailing the flow of business through a hotel, from the reservations process to check-out and account settlement. The course also examines the various elements of effective front office management, paying particular attention to the planning and evaluation of front office operations and to human resources management. Front office procedures and management are placed within the context of the overall operation of a hotel. Prerequisites: HSM 110, ENG 101. 3 lecture hours per week. 3 credit hours.

HSM 220 - Managing Housekeeping **Operations**

This course presents a systematic approach to managing housekeeping operations in the hospitality industry. Topics include inventory lists, frequency schedules, and performance and productivity standards. Prerequisites: HSM 105, ENG 101. 3 lecture hours per week. 3 credit hours.

HSM 240 – Hospitality Sales and Marketing

This course is designed to provide students with a solid background in hospitality sales and marketing. The main focus is on practical sales techniques for selling to targeted markets. Prerequisite: HSM 210. 3 lecture hours per week. 3 credit hours.

HSM 280 - Internship in Hospitality Management

This one-semester internship in an approved hospitality organization reinforces classroom and textbook theory with practical hospitality operations experience. This course provides a forum where students can apply the management concepts learned in class and can acquire the hands-on experience necessary to qualify for an entry-level position in the hospitality industry. A weekly seminar on campus is included. This course is only open to matriculated students in the hospitality management program. This course should be taken in the student's last semester of the program. Prerequisites: HSM 210 and HSM 220. 3 credit hours.

HUD • American Sign Language & Deaf Studies

HUD 103 Text and Discourse Analysis for Interpreting

This course will focus on text and discourse analysis of American Sign Language and English in different registers/styles. Processes of text and discourse analysis, semantics and pragmatics, sociolinguistics, structures of ASL and English discourse will be discussed. The course will take an in-depth look at discourse through selected written texts, videotapes and live demonstrations. Lectures and videotapes will be used for skill development in text/discourse analysis and students will practice and apply discourse structures and semantics/pragmatics in ASL and English. Pre or Corequisites: HUD 105, ASL 205 and ASL 208 or permission of instructor. 3 lecture hours per week. 3 credits hours.

HUD 104 Fingerspelling

This course is designed to advance students on the skill development of hand configuration, basic word patterns, rhythm, comprehension of fingerspelled works, phrases, and numbers. Additional focus will be placed on fingerspelled loan signs. Prerequisites: ASL 101 and ASL 102. Corequisites: ASL 103 and ASL 104. 1/2 lecture hour and 1 laboratory hour per week. 1 credit hour.

HUD 105 Interpreting Processes: Theory and Practice

A survey course introducing theories, principles, and practices of interpreting for Deaf persons. The course covers interpreting processes, physical and mental factors, attitudes, ethics, roles of the interpreter, perspectives of the consumers (deaf and hearing), and NIC (RID-NAD) certifications. Prerequisite skills for interpreting will be introduced in this course through instruction for application in interpreting. Students are exposed to basic interpreting situations in a variety of settings through field observations and through use of videotapes. Prerequisites: ASL 201 and ASL 205 or permission of instructor. 3 lecture hours per week and 25 field observation hours. 3 credit hours.

HUD 106 Interpreting Process Application in ASL to English

A review of theoretical components and principles of interpreting processes discussed in Interpreting Process: Theory and Practice (HUD 105) for application towards basic skill development in interpreting and transliterating from ASL/Signed English to Spoken English. Theories and Techniques of public speaking are discussed and applied. Strategies for effective comprehension and text analysis are discussed and practiced. Skill development application will be conducted within class. 12 hours of field observation on specific aspects of ASL to English Interpreting will be required. Prerequisites: ASL 202 and HUD 105. 2 lecture hours and 2 laboratory hours per week and 12 field observation hours. 3 credit hours.

HUD 108 Interpreting Process Application in English to ASL

A review of theoretical components and principles of interpreting process discussed in Interpreting Process (HUD 105) for application towards basic skill development in interpreting and transliterating from spoken English to ASL/Signed English. Strategies for effective listening skills, text analysis, conceptual accuracy and linguistic factors of sign language will be discussed and applied. Classroom practice is provided. 12 hours of field observation on specific aspects of Sign to voice interpreting will be required. 12 laboratory hours are required. Prerequisites: ASL 202 and HUD 105 and demonstration of proficiency by examination. 2 lecture hours and 2 class laboratory hours per week and 12 field observation hours. 3 credit hours.

HUD 109 Preventive Measures against Cumulative Trauma Disorder in Interpreting

This course will give sign language students and interpreters information and tools that may help prevent and manage cumulative trauma disorders (CTD). The course will cover an orientation and survey of issues related to CTD among sign language interpreters; factors that can lead to symptoms of overuse; preventive and management techniques to help reduce the likelihood of developing overuse symptoms; management techniques for dealing effectively with existing symptoms due to overuse. Prerequisite: HUD 105 or permission of instructor. 1/2 lecture hour and 2 laboratory hours per week. 1 credit hour.

HUD 110 Interpreter Role and Ethics

This course will provide exploration of ethical standards and dilemmas in interpretation through discussion, case studies, scenarios and role-plays emphasizing the dynamics of the interpreting team and similarities and differences between advocates, peer counselors, and interpreters. Emphases are on values, ethics, and morality; professional principles, power and responsibility; group dynamics; and decision making. RID-NAD's Code of Ethics are discussed, practiced and applied in role-plays and scenarios. Prerequisites: HUD 105 and HUD 103 or permission of instructor. 3 lecture hours per week. 3 credit hours.

HUD 215 Advanced Techniques of Interpreting

This course is a classroom practice to provide more in-depth skill and technique development in interpreting and transliterating and introduces students to specifically interpreting situations: education and technical, medical, mental health, legal, oral, deaf-blind, etc. Strategies for enhancing professional attitudes and ethical behaviors in interpreters, team interpreting and working with deaf interpreters are discussed. This course is highly interactive with literatures and group discussions as part of the institutional approach. Prerequisites: HUD 106 and HUD 108. 2 lecture hours per week. 2 credit hours.

HUD 216 Field Experience in Interpreting

90 hours of interpreting observation and hands-on experience with supervision. Students will gain experience interpreting in a variety of settings with Deaf consumers who have diverse linguistic preferences. Attendance to seminars and lab activities are required in conjunction with field experience activities. Development of paper and video portfolio are required for this course. Prerequisites: HUD 215 and HUS 201, demonstration of proficiency via examination and permission of instructor. 3 credit hours.

HUD 270-289 Selected Topics in Sign Language Interpretation

Studies of selected events, contemporary issues, topics or skill development in Sign Language Interpretation on the basis of timely concerns, community interests, students' requests, etc. These courses are of a continuation of professional skill development and of a timely or specialized nature and can be best offered not on a regularly scheduled basis, but periodically. Individual topics will be announced prior to registration; one, two or three credits will be offered depending on the nature of the course format and class hours. 1, 2 or 3 credit hours.

HUG • Gerontology

HUG 101 Multidisciplinary Perspectives on Aging

An introduction to the study of aging and older adulthood, giving an overview of the field, and developing a multidisciplinary background in theory and research along with an understanding of the needs of older adults. The course covers social, physiological, psychological, economic, and health aspects of aging. Prerequisite: ENG 088. 3 lecture hours per week. 3 credit hours.

HUG 201 Recreation for Older Adults

This course is designed to prepare participants to function ethically and effectively in the prevailing healthcare climate. It introduces the participant to professional organizations and helps students become aware of state and federal regulations. Methods of service delivery in Activities and Recreation for special populations are learned. Various treatment modalities such as use of the arts and reminiscence are also presented. This course, together with its preand corequisites, can also be counted as part of a program leading to national certification. Prerequisites: HUG 101 and HUS 101. Corequisite: HUS 201. 3 lecture hours per week. 3 credit hours.

HUS • Human Services

HUS 101 Community Resources in Human Services

An introduction of human service needs and how various community service agencies are organized on the local, county, state and federal levels to meet these needs. The course examines how service agencies function in the areas of public health, welfare, mental health, rehabilitation, employment, correction and protection. Existing programs and their operation in the alleviation of personal and social problems are evaluated. 3 hours per week. 3 credit hours.

HUS 103 Introduction to Techniques of Interviewing and Counseling

An examination of various counseling and interviewing styles and techniques and the theoretical foundation of each. Students develop skills and an understanding of developmental behavioral, nondirective, psychodynamic, transactional, and other approaches to individual and group counseling. Interviewing skills are developed through the use of student interaction, role playing, videotape, and recordings of actual student interviews. Specific attention is given to the nature, purpose, objectives, and approaches in health, welfare, social service, and rehabilitation agencies. Prerequisite: HUS 101 or permission of the instructor. It is recommended that the student has completed or is concurrently taking PSY 102. 3 lecture hours per week. 3 credit hours.

HUS 104 Understanding Social Research

The application of scientific methods to the study of human behavior. The relationship between theory and research is examined. Students develop skills in understanding and using such techniques as case studies, surveys, experiments, participant observation, testing, and basic statistical devices to analyze data. Prerequisite: HUS 101. 3 credit hours.

HUS 105 Workforce and Career Development I

This is the first course in a series that (together with work experience) helps prepare customer service workers in a variety of workforce development positions for a national Certificate in Career Development Facilitation (Human Resources Management). This is an applied theory and practice course, which focuses on labor market information and resources, helping skills, diverse populations, and technology use in career facilitation. Prerequisites: HUS 101 or present employment in the One-Stop Career Center network. 3 credit hours.

HUS 106 Workforce and Career Development II

This is the second in a 3-part series that helps prepare customer service workers in a variety of workforce development positions for a national Certificate in Career Development Facilitation (Human Resources Management). This is an applied theory and practice course, which focuses on career development models, advanced helping skills, career development assessment tools, diverse populations, ethical and legal issues, and computer applications for career development. Prerequisite: HUS 105. 3 credit hours.

HUS 107 Workforce and Career Development III

This is the final course in a series that helps prepare customer service workers in a variety of workforce development positions for a national Certificate in Career Development Facilitation (Human Resources Management). It includes an internship and seminar sessions. Topics covered in the seminar will relate the skills and knowledge acquired in the first two courses – HUS 105 and HUS 106 - to the internship experience. Prerequisite: HUS 106. 3 credit hours.

HUS 201 Externship in Human Services

A 90-hour field placement of the student as an observer-participant in two or more human service facilities/agencies. The course provides the student with an in-depth study of agencies related to their field of study and acquaints them with the services of the agencies and needs of the agencies' clients. Log reports and seminars are used in conjunction with the field activities. Prerequisite: HUS 101. 3 credit hours.

IDH • Interdisciplinary Health Studies

IDH 101 Fundamentals of Health and Disease

This course is adapted to the needs of the allied health student whose specialization will be as a part of a health care team. The general goal is to provide a survey or introduction to human disease by a method that is somewhat less intensive than the classic and general systematic pathology that is offered to medical students. It is intended to provide the student with a better understanding and appreciation of the human body in both health and disease. An examination of health problems, disease processes, and discussions of normal functions for comparisons occur. Classification, symptoms, and terminology associated with disease and wellness are discussed. An orientation to treatment, diagnosis, and prognosis is presented. 3 lecture hours per week. 3 credit hours.

IDS • Interdisciplinary Studies

IDS 128 Business Communications

This course offers the Walt Disney College Program participant the opportunity to learn the concepts inherent in business communication and apply them in the workplace. The skills taught are applicable to a wide variety of business environments. Participants will learn about the elements of communication, explore methods used to process information, identify basic listening skills, and recognize inclusive communication approaches. Other topics include meetinas and aroup dynamics, presentations, and public communications. This course does not fulfill curriculum requirements for ENG 128 or ENG 129. Corequisite: Participation in Walt Disney College Program. 3 hours per week. 3 credit hours.

IDT • Interpreting Spoken Laṅguag

INT 101 Interpreting I

Interpreting I is the first of a two-part sequence that develops the students' interpreting skills. Bilingual students in any spoken language will learn, practice, and acquire consecutive interpreting skills. These skills include: listening skills, analytical ability, note-taking, short-term memory enhancement, paraphrasing, rapid language switching, and self-monitoring of accuracy. An introduction to sight translation will also be included. 3 lecture hours per week. 3 credit hours.

INT 102 Interpreting II

Interpreting II is a continuation of Interpreting I. In this course students will continue to improve on the skills needed to do professional interpreting in spoken languages. Interpreting II will incorporate more difficult passages to interpret and will introduce simultaneous interpreting. Students will focus on the separate skills necessary for the simultaneous interpreting task, such as determining lag time, shadowing, improving comprehension by chunking, focusing on production by modulating delivery, and developing an intuitive ability in their target language. An important aspect of this course will be to teach students techniques they can use to maintain and improve their skills long after they have finished the program. 3 lecture hours per week. 3 credit hours.

INT 105 The Role of the Interpreter

The Role of the Interpreter will be a practical course on the many aspects of the profession that are not so obvious to the novice. The Interpreters Code of Ethics and Professional Conduct and its implications for impartiality will be stressed. Cultural considerations for interpreting will be discussed, especially the notion of interpreting content and style rather than grammar and vocabulary. The course will also deal with the role of professional organizations and tools that translators and interpreters use in their work. The course requires students to observe professional interpreters in a courtroom. This course is open only to students enrolled in the Certificate Program for Interpreting Spoken Languages. 3 lecture hours per week. 3 credit hours.

ITA • Italian

ITA 101 Beginning Italian I

Development of the fundamental skills of understanding, speaking, reading, and writing. Listening practice available. Not open to native Italian speakers. Prerequisite: ENG 088. 3 lecture hours per week. 3 credit hours.

ITA 102 Beginning Italian II

A continuation of ITA 101; not open to native Italian speakers. Prerequisite: ITA 101. 3 lecture hours per week. 3 credit

ITA 111 Intermediate Italian I

Review of fundamental skills of understanding, speaking, reading, and writing. Prerequisite: ITA 102 or 3 years of high school Italian. 3 lecture hours per week. 3 credit hours.

ITA 112 Intermediate Italian II

A continuation of ITA 111. Prerequisite: ITA 111. 3 lecture hours per week. 3 credit hours.

ITA 115 Italy: Its Art and Culture (Foreign Study)

A survey of Italian art, culture, and civilization. Emphasis is on how geographical, political, social, and economic factors have shaped Italian life through the centuries. The aesthetic achievements in Italian painting, sculpture, and architecture are examined from the ancient period through Renaissance and Baroque art. This course is offered in conjunction with a trip to Italy and fulfills 3 credits in the Modern Language or Fine Arts Department. 3 credit hours.

ITA 215 History of Italian Film

A survey of the major periods in the evolution of Italian film from the silent era through neorealism to the present, with an emphasis on the major filmmakers: De Sica, Fellini, Antonioni. The place of Italian film in the social and political history of twentieth-century Italy will also be explored. Prerequisites: ENG 102 or ENG 122 or permission of instructor or Modern Languages coordinator. 3 lecture hours per week. 3 credit hours.

LGL • Paralegal Studies

LGL 101 Ethics and the Legal **Profession**

This course introduces the student to the paralegal profession and the proper role of the paralegal in the legal system. Topics include the regulation of paralegals stressing attorney and paralegal ethics; introduction to the variety of paralegal practice environments and general career trends as well as an overview of the structure of the federal and state court systems and the role of the paralegal in the litigation process. Includes an overview of basic subject areas of law and legal terminology, and introduces the specific skills required of a paralegal in the law office. Prerequisites: All developmental requirements must be met. 3 lecture hours per week. 3 credit hours.

LGL 110 Legal Research

Through the use of hands-on manual research methods and computer based research techniques which include Lexis-Nexis, Internet based research and CD-ROM materials, students will learn to locate federal and state sources of law, including identification of primary and secondary sources of law. The digest system, key system, law reports, encyclopedic materials and the Shephardization process will be taught to familiarize the student with the many resources available in the law library. Students will learn to analyze fact patterns, identify relevant legal issues and understand the concept of precedent. Corequisite: ENG 101. 3 lecture hours per week. 3 credit hours.

LGL 111 Legal Writing

This course is designed to familiarize students with procedures for writing memoranda of law and legal briefs. Students will learn proper format of these documents, including acceptable forms of citations for various types of legal source materials. Emphasis will be placed on developing a legal writing style that is clear and concise. Prerequisites: LGL 101 and LGL 110. 3 lecture hours per week. 3 credit hours.



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LGL 120 Contract Law

This course examines the rules governing formation of contracts and contractual disputes. The student will learn the elements of a valid contract, how to draft a contract, the enforceability of contracts, remedies available when a party fails to perform under a contract and third party interests. An examination of the Uniform Commercial Code and the Restatement of Contracts 2nd will enable the students to spot the issues relevant to their case. Students will explore the roles of the paralegal in assisting an attorney in drafting the legal contract in order to avoid potential disputes and how to assist a plaintiff's attorney and a defendant's attorney handling a case involving a contract dispute should one arise. Students will also be introduced to the trend toward arbitration. Corequisite: LGL 111. 3 lecture hours per week. 3 credit hours.

LGL 140 - PROPERTY LAW

Topics include laws governing real and personal property, types of ownership, the sale and transfer of real and personal property interests, bailments, cooperatives and condominiums, easements and licenses, surveys and land descriptions, and public regulations and encumbrances. Students will examine the procedure for transfer of ownership of real property, including preparation and review of the real estate contract, title examinations, title insurance aspects of real estate finance, mortgage forms and provisions, and the real estate closing. Current real estate software will be used in order to prepare the student to enter the workforce with the requisite technology skills. Emphasis is placed upon the role of the paralegal assisting with the real estate closing and ethical considerations. Prerequisites: LGL 101, LGL 110. 2 lecture hours and 2 lab hours per week. 3 credit hours.

LGL 210 Tort Law

This course introduces the concept of Torts – the civil wrongs perpetrated by one citizen against another. These wrongs result in an injury or harm constituting the basis for a claim by the injured party. The three general categories of torts: intentional, negligent, and strict liability will be discussed along with the numerous specific torts including trespass, assault, battery, negligence, products liability, and intentional infliction of emotional distress. Because many judges and states utilize the Restatement of Torts (2nd) as an influential guide, the student will also examine this publication and be able to identify the fact patterns and evidentiary standards. Emphasis will be placed on pleading and discovery practice. Prerequisite: LGL 111. 3 lecture hours per week. 3 credit hours.

LGL 215 Law Office Management

Through this course, students will become familiar with the workings of a law office and corporate legal department. Topics include staffing and structure, role of associates and partners and the ethical obligations of attorneys and office employees. Stress will be placed on organizational skills relating to docket and case management, library maintenance and billing procedures. Students will learn, through a hands-on approach, the various software applications including database management systems, litigation support software, telecommunications software, and legal timekeeping and billing software programs. Prerequisites: LGL 111, LGL 120 and CIS 100. 2 lecture hours and 2 laboratory hours per week. 3 credit hours.

LGL 220 Litigation I

In this course, students will examine the initial steps of the litigation process including client interviews, pre-litigation investigation and evaluation of the cause of action, drafting complaints and answers. The student will learn the details of filing a lawsuit including the jurisdiction and venue considerations and service of process. The structure of the court system and rules governing litigation are presented and students will explore the workings of a litigation practice and the role played by the paralegal. Emphasis is placed upon forms and documents used in litigation practice, and the ethical guidelines for the paralegal employed in a litigation firm. Prerequisite: LGL 111. 3 lecture hours per week. 3 credit hours.

LGL 221 Litigation II

In this course, students will learn about the discovery and trial preparation process including the preparation of interrogatories, depositions, document production and inspection requests and requests for admissions. Through a hands-on approach, students will learn to abstract depositions and organize case files. Prerequisite: LGL 220. 3 lecture hours per week. 3 credit hours.

LGL 230 Family Law

In this course, students will examine issues and procedures in matrimonial and family law matters. Topics include ethnical considerations for the attorney and paralegal in family law, premarital agreements, formation and dissolution of marriage, divorce grounds and procedures, spousal and child support, division of property, separation agreements, child custody, legal status of children, adoption, and contemporary issues in the field of family law. Students will become familiar with the forms and documents used in the family law practice. Prerequisites: LGL 111 and LGL 120. 3 lecture hours per week. 3 credit hours.

LGL 231 Criminal Law

This course will familiarize the student with the criminal law process from criminal investigations through appeal. Topics include probable cause, search and seizure, post arrest issues, evidence in criminal cases, the Miranda rule, arraignment and discovery, accessories and attempt, crimes against the person and crimes against property, crimes against the public order, trial procedure, defenses, sentencing and appeal. Emphasis is placed upon the role of the paralegal and ethical issues involved in working on a criminal case. Prerequisites: LGL 111 and LGL 210. 3 lecture hours per week. 3 credit hours.

LGL 235 Wills, Estates & Trusts

This course examines the purpose and need for a will and legal and procedures issues involved with the drafting, execution and administration of an estate. Students will explore the laws of testate or intestate succession, will validity requirements, modification and revocation of a will, probate administration, and types of trusts. Tax considerations in the administration of estates and ethical principles relevant to paralegals will also be discussed. Prerequisites: LGL 111 and LGL 120. 3 lecture hours per week. 3 credit hours.

LGL 238 Paralegal Internship

Students gain hands-on work experience while working a minimum of ten hours per week in a legal environment. Students meet with department chair each week to discuss internship goals and their progress. Prerequisites: LGL 111, LGL 120, prior approval of Program Director and minimum overall GPA of 3.0.

LGL 240 Business Organizations

In this course, students will study the forms of business organizations and considerations in choosing a business entity. Topics include the formation and organization of sole proprietorships, partnerships, limited liability companies, corporations and tax considerations associated with each of these entities. Students will examine the documentation required to establish and maintain the various types of business organizations including articles of incorporation, stock ledgers, resolutions and minutes and procedures for filing. Prerequisite: LGL 120. 3 lecture hours per week. 3 credit hours.

LGL 260 – EMPLOYMENT LAW

An overview of the legal framework governing employer-employee relations, employment discrimination, employment related common law torts and certain federal and state statutory schemes governing leave, unemployment, benefits and workplace injuries. Prerequisites: LGL 111, LGL 120. 3 lecture hours. 3 credit hours.

LGL 290 Paralegal Internship

Students gain hands-on work experience in a legal environment while working 15 hours per week for a total of 300 hours for the semester. The goal of the experience is to bridge the gap between classroom learning and the realities of the "working-world". Participants will be potentially placed in private law offices, corporate legal departments, public agencies, legal services, and other organizations. Students meet with department chair at the beginning of the semester for an orientation meeting and once a month thereafter to discuss internship goals and their progress. This course is a paralegal elective in the Program and will be taken in the last semester before the student graduates. Prerequisites: LGL 210 and 221, prior approval of Program Director and minimum overall GPA of 3.0 and completion of 30 credits of college work. 3 credit hours.

LIS • Library Science

LIS 105 Methods in Library Research

A systematic approach to Library resources in the new technological environment, designed to meet the needs of the student. The course covers the primary tools of a modern academic library: the catalog, the reference collection, online databases, and Internet searching, while developing the conceptual knowledge necessary for effective searching, evaluation, selection and use of information. Methods of research strategy are taught in conjunction with other course-assigned projects. A technology enriched class with many components online. 1 lecture hour per week. 1 credit hour.

MAT • Mathematics

MAT 003 A Brief Review of Computational Skills

The course reviews the basic skills required as a prerequisite for Elementary Algebra. Topics covered include décimals, fractions, whole numbers, and operations involving them. Basic problems involving proportions, percent, and negative integers are emphasized. This course is limited to students who have achieved an appropriate score on the computation portion of the College Basic Skills Placement Test and who are invited by the Department. 1 credit hour.

MAT 004 Basic Skills Review in Elementary Algebra

The course is a brief review of the basic skills necessary to pass the elementary algebra portion of the College Basic Skills Placement Test. The topics covered include polynomials, signed numbers, exponents, factoring, equations, and systems of equations. This course is limited to students who have achieved an appropriate score on the Computation and Elementary Algebra portions of the College Basic Skills Placement Test and who are invited by the Department. 1 credit hour.

MAT 011 Introduction to Mathematical Concepts

A course for students whose College Basic Skills Test scores indicate the need for preparatory work in arithmetic. A comprehensive study of arithmetic and allied processes with the purpose of preparing students for algebra. Emphasis is on the purpose and techniques of mathematics. Topics include arithmetic operations, fractions, decimals, percents, factors, negative numbers, elementary equations. 3 lecture hours per week. 3 credit hours.

The Mathematics Department

... offers courses designed to serve the various degree programs in the areas of Biology, Engineering, Engineering Technology, Liberal Arts, Business, Physical Science, and Allied Health fields. In order to meet the degree requirements, students must select courses according to the following guidelines.

College policy requires permission of the Department before you may register for a third attempt at a particular course. No third attempts will be allowed for any mathematics course unless the student involved has successfully completed the prerequisite of that course immediately before the third attempt. This applies to F's and W's. Absolutely no fourth attempts will be permitted.

Engineering & Physical cience Programs

Sequence:

MAT 143, MAT 144, MAT 171, MAT 172, MAT 271, MAT 272. Through testing students are placed into MAT 143, MAT 144, or directly into MAT 171. Students requiring additional developmental work may be placed into MAT 011, MAT 015 or MAT 022.

Biology Program

Sequence:

MAT 143, MAT 144 or MAT 171, MAT 172. Through testing students are placed into MAT 143, MAT 144 or directly into MAT 171. Students requiring additional developmental work may be placed into MAT 011, MAT 015, or MAT 022.

Business Programs

Sequence:

See advisor for first semester placement. For their second semester of mathematics students may take MAT 146 or MAT 171. MAT 246 may be substituted for MAT 146. Through testing students are placed into MAT 143, MAT 146, or MAT 171. Students requiring additional developmental work may be placed into MAT 011, MAT 015 or MAT 022.

NOTE 1: Students taking MAT 143 in the first semester may substitute MAT 144 for MAT 146 or MAT 246.

NOTE 2: MAT 146 (or MAT 171) is strongly recommended for all Business students planning to continue their studies in four-year institutions.

Liberal Arts Programs

A) Students with backgrounds limited to Algebra I and Geometry.

Sequence:

MAT 011, MAT 015, MAT 016, MAT 117 (or MAT 119), or MAT 011, MAT 022, MAT 117 (or MAT 119); in options requiring a full year of credit mathematics the sequence may be completed with one of the following: MAT 125 (Liberal Arts or Education), MAT 126 (Management or Social Science) MAT 127. Through testing, students are placed into MAT 011, MAT 015, MAT 022 or directly into MAT 117 (or MAT 119).

NOTE 1: Students with an algebra deficiency must qualify to take MAT 022 in place of MAT 015, MAT 016.

NOTE 2: Students planning to continue their studies at four-year institutions should consult a counselor to determine if MAT 117 or MAT 119 is more appropriate.

B) Students whose background includes the equivalent of Algebra II or higher may take the sequence in (A) above, but it is recommended that they take one of the sequences shown under the Biology or Business programs.

Students in programs leading to an A.A.S. in Business (Accounting/Data Processing, Business Management, Computer Science/Data Processing, Marketing, Office Administration), Engineering Technology (Civil/Construction, Electromechanical, Electronics, Electronics/Laser, Manufacturing, Mechanical), or Health Careers must satisfactorily complete those courses specified in their program outline.

Students in a program leading to a diploma or certificate must satisfactorily complete those mathematics courses, if any, specified in their program outline. Students are expected to complete developmental requirements before admission to most diploma or certificate programs. Consult with your program coordinator for more information.

Students are urged to consult with their advisor whenever in doubt or when their interests lie in programs other than those listed above.

MAT 015 Beginning Algebra I

A course designed for students with little or no previous experience with algebra. The course will cover signed numbers, exponents, the solution of equations, and verbal problems. Prerequisite: MAT 011 or satisfactory performance on the College Basic Skills Placement Test. 3 lecture hours per week. 3 credit hours.

MAT 016 Beginning Algebra II

A course for students who have successfully completed Beginning Algebra I (MAT 015). This course will cover factoring, radicals, polynomials, rational expressions, verbal problems, quadratics, and exponents. Prerequisite: A grade of "C" or better in MAT 015. NOTE: Completing the MAT 015, MAT 016 sequence is equivalent to completing MAT 022. 4 lecture hours per week. 4 credit hours.

MAT 022 Introduction to Algebra

A course for students whose College Basic Skills Test scores indicate the need for preparatory work in algebra. The course includes solving equations, polynomials, factoring, and graphing linear equations. Prerequisite: MAT 011 or satisfactory performance on the College Basic Skills Placement Test. 4 lecture hours per week. 4 credit hours.

MAT 113 Business Mathematics

A course in the essentials of business mathematics to provide general knowledge in the solution of practical financial problems of a business and personal nature. The course includes a comprehensive review of decimals, fractions, and percentages. Business topics covered are: payrolls, cash discounts, trade discounts, markups, simple interest, compound interest, promissory notes, annuities, amortization, depreciation, and stocks and bonds. Prerequisites: MAT 011 and ENG 088, or satisfactory performance on the College Basic Skills Placement Test. 3 lecture hours per week. 3 credit hours.

MAT 117 An Introduction to Mathematical Ideas

A course for students enrolled in Liberal Arts and General Education Programs. The course is not recommended for students who have completed Algebra II or higher. Prerequisites: MAT 016 or MAT 022, ENG 089, and ENG 099, or satisfactory performance on the College Basic Skills Placement Test. 3 lecture hours per week. 3 credit hours.

MAT 119 Algebra

The fundamentals of college algebra, including graphs of linear equations, equations of lines, systems of equations, inequalities, the algebra of polynomials, factoring, rational expressions, radical expressions, and rational exponents. Prerequisites: A grade of "C" or higher in MAT 016 or MAT 022, and ENG 089, or satisfactory performance on the College Basic Skills Placement Test. 3 lecture hours per week. 3 credit hours.

MAT 125 Survey of Special Topics in Mathematics

This course is designed for liberal arts majors. Its objective is to give students an appreciation of the beauty and utility of mathematics, and to give them a better idea of what mathematics is and where it can be applied. Topics include Set Theory, Logic, Geometry, Operations Research & Game Theory, and Voting & Social Choice. To promote information literacy, all students in this course will be expected to complete a research project, which will demonstrate the connection between mathematics and the student's discipline or other interests. Course structure combines a mixture of projects, written assignments, group work, and class discussion. Prerequisites: MAT 117 or MAT 119 or special permission by the department based on demonstrated proficiency. 4 lecture hours per week. 4 credit hours.

MAT 126 Mathematics for Management & Social Sciences

An introduction to linear systems with applications in business and management. Systems of linear equations, matrices, linear programming, the simplex method, and the transportation problem are covered. Prerequisites: ENG 089; a satisfactory score on the mathematics portion of the College Basic Skills Test, or grade of "C" or better in MAT 016 or MAT 022, or successful completion of MAT 117 or MAT 119 or equivalent. 3 lecture hours per week. 3 credit hours.

MAT 127 Elementary Statistics

An elementary course in descriptive statistics and statistical inference. Measures of central tendencies, standard deviation, sampling, and probability distributions, including binomial, normal, and others. Practical problems involving correlation, linear regression, and hypothesis testing are included. Prerequisites: ENG 089; a satisfactory score on the mathematics portion of the College Basic Skills Test, or grade of "C" or better in MAT 016 or MAT 022, or successful completion of MAT 117 or MAT 119, or equivalent. 4 lecture hours per week. 4 credit hours.

MAT 143 Elementary Mathematical Analysis I

An introduction to the concepts and techniques needed to proceed to more advanced mathematics and science courses, such as calculus. Topics include the solution of linear and quadratic equations and inequalities; operations with polynomials, rational expressions, and radicals; linear systems; exponents; Cartesian coordinates; slope; circles; parabolas; polynomials; rationals; functions; synthetic division; the factor and remainder theorems; exponential and logarithmic functions. Prerequisites: ENG 089 and a grade of "C" or better in MAT 119 or satisfactory performance on the "Higher Level Mathematics Test". 4 lecture hours per week. 4 credit hours.

MAT 144 Elementary Mathematical Analysis II

A continuation of Elementary Mathematical Analysis I, specifically intended for students continuing on to Calculus or studying Engineering Technology. Topics include exponential and logarithmic equations; compound interest; logarithms scales; exponential growth and decay; right triangle trigonometry; angular velocity; graphing trigonometric functions; laws of sines and cosines; inverse trigonometric functions; the sum, difference, double and half angle formulas; trigonometric equations; DeMoivre's Theorem; polar coordinates; conics; and an introduction to matrices and determinants. Prerequisites: ENG 089 and a grade of "C" or better in MAT 143 or a satisfactory score on the Mathematics Department's "Higher Level Mathematics Test". 4 lecture hours per week. 4 credit hours.

MAT 146 Brief Calculus with Applications

An elementary course in the application of the fundamentals of calculus to the management, social, and life sciences. Topics include limits, continuity, differentiation, maxima, minima, integration of elementary functions, and applications. Prerequisites: ENG 089 and MAT 143 or equivalent. 3 lecture hours per week. 3 credit hours.

MAT 148 Introduction to Graphics Calculators/Derive

A course designed to familiarize students with graphics calculators and the Derive computer algebra system. Equation solving, symbolic algebra, graphic features, and calculus applications will be studied. Corequisite: MAT 171 or PHY 111 or permission of the instructor. 1 lecture hour per week. 1 credit hour.

MAT 171 Unified Calculus I

Analytic geometry; limits and continuity; differentiation and integration of algebraic and transcendental functions; extrema; definite and indefinite integrals; applications to geometric and physical problems. Prerequisites: ENG 089 and a grade of "C" or better in MAT 144 or permission of the Mathematics Department. Corequisite: MAT 148 or permission of the Mathematics Department. 4 lecture hours per week. 4 credit hours.

MAT 172 Unified Calculus II

A continuation of MAT 171. Techniques of integration, infinite series, conic sections, parametric equations, and polar coordinates. Prerequisites: ENG 089 and a grade of "C" or better in MAT 171. 4 lecture hours per week. 4 credit hours.

MAT 230 (WMS230) Women in **Mathematics and Science**

This course will focus on the contributions of women to the disciplines of mathematics and science, with both historical and contemporary references, building on students' knowledge base from other Women's/Gender Studies and General Education courses especially Mathematics and Science. Discussions will emphasize the obstacles encountered in entering these fields as a result of gender issues, as well as the impact these women have had upon their fields and society as a whole. Current trends in education and employment for women in the fields of mathematics and science will be explored. Course structure will combine a mix of lectures, discussion, group work, films, and guest speakers. Prerequisite: MAT 119 or higher (advisement required). 3 lecture hours per week. 3 credits hours.

MAT 246 Business Statistical Analysis

Application of statistical methods to business. An introduction to descriptive statistics, probability theory, sampling, estimations, hypothesis testing, analysis of frequencies, linear regression and correlation, time-series analysis and computer applications. Recommended as the foundation course in quantitative analysis as generally prescribed by AACSB member colleges for business administration students. Prerequisites: ENG 089, ENG 099, and MAT 143 or permission of the instructor. 3 lecture hours and 1 laboratory hour per week. 4 credit hours.

MAT 265 Linear Algebra

Linear algebra over the real number system. Vector spaces, linear transformations, matrices, systems of linear equations, determinants, the Gram-Schmidt Orthogonalization Process, eigenvalues and eigenvectors. Prerequisites: ENG 089 and MAT 172 or permission of the instructor. 3 lecture hours per week. 3 credit hours.

MAT 267 Discrete Mathematics

Topics include sets, numbers, algorithms, logic, computer arithmetic, applied modern algebra, combinations, recursion principles, graph theory, trees, and digraphs. Prerequisites: CSC 102, ENG 089, and MAT 143 or permission of the instructor. 3 lecture hours per week. 3 credit hours.

MAT 271 Unified Calculus III

Additional topics in calculus and analytic geometry, including indeterminate forms, vector functions and calculus, functions of several variables, multiple integrals, partial derivatives, directional derivatives, divergence, curl, line integrals, and Green's Theorem. Prerequisites: ENG 089 and a grade of "C" or better in MAT 172 or permission of the instructor. 4 lecture hours per week. 4 credit hours.

MAT 272 Differential Equations

Fundamental theorems on existence and uniqueness for solutions of ordinary differential equations; solution and applications of equations of the first order and first degree; linear equations of higher order; Laplace transforms; solution by series. Prerequisites: ENG 089 and a grade of "C" or better in MAT 271. 4 lecture hours per week. 4 credit hours.

MAT 280-299 Projects in Mathematics

Particular topics in mathematics are explored. Topics covered change from semester to semester. Examples are: Mathematics in Art and Music, The Development of Mathematics, Design of Experiments, Non-Euclidean Geometries, game theory, and Basic concepts of Modern Algebra. Prerequisite: Permission of the instructor. 3 lecture hours per week. 3 credit hours.

MET • Mechanical Engineering Technology

MET 104 Engineering Drawings

A study of the major elements of the engineering drawing. Topics include multiview (2-dimensional) sections and pictorial views, dimensioning practices, ANSI standard limits and fits, surface finishes and fasteners. Measuring instruments will be used to confirm sizes and tolerances. Geometric dimensioning and tolerances (GD&T) are covered with attention to tolerances of form, orientation, location, runout and position. Also included are applications of symbols, datums, material condition modifiers, bonus tolerances, and virtual conditions. 3 lecture hours and 1 laboratory hour per week. 3 credit hours.

MET 106 Engineering Materials and **Processes**

A study of the basic materials used in engineering: their properties, manufacture, selection, and uses. Some materials will be studied and evaluated in laboratory experiments and demonstrations. Materials working machines and techniques (e.g., lathes, welding) are covered. 2 lecture hours and 3 laboratory hours per week. 3 credit hours.

MET 109 Computer-Aided Drafting

A project based introduction to 2-dimensional, computer-aided drafting using AutoCAD software. Topics include drawing entities, display control, editing techniques, layers and linetypes, hatching, dimensioning, scaling, library blocks, and attributes. Project drawings such as detailed machine parts, surveyed plot plans, and architectural floor plans will require application of model and paper space, templates, viewports and external references. 2 lecture hours and 3 laboratory hours per week. 3 credit hours.

MET 112 Mechanics-Statics

A study of the basic principles of static equilibrium of forces, including the use of free-body diagrams, the location of centroids, and the calculation of moment of inertia. Practical problems involving simple machines, trusses, and frames are analyzed. Calculations use units from both the English Gravitational System and the International System (Metric). Prerequisite: MAT 143. 3 lecture hours per week. 3 credit hours.

MET 213 3-D Solid Modeling

This course is a fundamental study of the engineering drawing using computer-aided engineering software, (Autodesk Inventor), to construct solid and parametric modeling drawings. Topics covered include 3-D solid modeling, 2-D multi-view drawings, parametric dimensioning, section views, auxiliary views, and assembly modeling. CAD projects include 3-D solid model drawings and 2-D orthographic drawings, which address topics such as geometric constraints, feature interactions, parametric dimensions, and associative functionality. 1 lecture hour and 3 laboratory hours per week. 2 credit hours.

MET 219 CAD/CAM

This course introduces Computer-Aided Manufacturing using Mastercam software. The basics of Numerical Control (NC) programming are covered including G and M codes, absolute and incremental positioning and canned cycles. Part geometry is created and edited using Mastercam software. Job setups are prepared, tool path is specified and a tool library is created. Part machining is verified graphically and NC code is post processed and downloaded to CNC machine tools to produce actual parts. Prerequisites: MET 106 and MET 109. 2 lecture hours and 3 laboratory hours per week. 3 credit hours.

MET 285 Special Topics in Mechanical Engineering Technology

A topic of current interest in Mechanical Engineering Technology, which meets the needs and interests of the student, arranged in advance with program coordinator approval. Student will submit a proposal conforming to UCC syllabus format outlining course content, objectives and learning outcomes. Prerequisite: Permission of the Coordinator. Credit by arrangement.

MET 295 Independent Study

A special research or development project or a course not currently offered in the Mechanical Engineering Technology program. Reserved for the advanced student with individual needs. Credit by arrangement.

NMTM • Nuclear Medicine

NMTM 101 Introduction to Nuclear Medicine for Radiographers

Introduces radiographers to nuclear medicine instrumentation, procedures, and radiopharmacy; radiation protection and regulations specific to nuclear medicine; reviews biomedical ethics and law and health care safety; discusses the basics of effective communication; covers the basic processes involved in human pathology. 20 lecture and laboratory contact hours during first 3 weeks of fall semester. 1 credit hour.

NMTM 102 Introduction to Nuclear Medicine for Non-Radiographers

Introduces non-radiographers to nuclear medicine instrumentation, procedures and radiopharmacy; teaches biomedical ethics and law and health care safety; discusses the basics of effective communication: teaches patient care as it applies to nuclear medicine; covers the basic processes involved in human pathology. 20 lecture and laboratory contact hours during first 3 weeks of fall semester, plus 2 lecture hours per week. 3 credit hours.

NMTM 110 Nuclear Medicine Physics

Covers the nature of radiation, radioactive decay, interactions of radiation with matter, and production of radionuclides. 3 lecture hours per week.

3 credit hours.

NMTM 120 Nuclear Medicine Procedures I

Includes a review of the anatomy and physiology of systems covered. Teaches pathology and the nuclear medicine procedures used to evaluate a body system or disease state. Clinical Practicum I is taken concurrently as a laboratory with this course. The student observes, assists with and performs procedures in the clinical setting. Students participate in clinical practice for two full days per week. 4 lectures hours per week. 4 credit hours.

NMTM 121 Nuclear Medicine Procedures II

Includes a review of the anatomy and physiology of systems covered. Teaches pathology, and the nuclear medicine procedures used to evaluate a body system or disease state. Clinical Practicum Il is taken concurrently as a laboratory with this course. The student observes, assists with and performs procedures in the clinical setting. Students participate in clinical practice for three full days per week during the fall session and five days per week during the winter intersession. 4 credit hours.

NMTM 130 Nuclear Medicine Instrumentation I

Covers the components, function, operation, and quality assurance procedures for nuclear medicine imaging equipment, including planar, SPECT, and multicrystal cameras, and 511 keV imaging units. Also includes nuclear medicine computers and image recording devices. 3 lecture hours and 3 laboratory hours per week. 4 credit hours.

NMTM 131 Nuclear Medicine Instrumentation II

Covers the components, function, operation, and quality assurance procedures for non-imaging nuclear medicine equipment, including survey meters, dose calibrators, well counters, and uptake probes. 3 lecture hours per week. 3 credit hours.

NMTM 135 Radiation Biology and **Radiation Protection**

For non-radiographers. Teaches radiation biology, radiation protection and regulations specific to nuclear medicine. 3 lecture hours per week.

3 credit hours.

NMTM 140 Radiochemistry and Radiopharmacy

Covers all aspects of radiopharmacy including kit and dose preparation, biorouting, quality control, interfering agents, chemical composition, and radiation safety. Only offered spring semester. Corequisite/Prerequisite: CHE 105. 3 lecture hours per week and 50 hours of laboratory per semester. 4 credit hours.

NMTM 201 Health Care Today

This course is designed to create a broad overview of the health care industry today. It will introduce the student to delivery of healthcare, economics, insurance programs, administrative roles, leadership, management, budget and planning, internal politics, capital allocation, operating budgets, government roles and employee relations. Fall semester. Online, Muhlenberg campus. 2 lecture hours per week. 2 credit hours.

NMTM 202 Electrophysiology

Teaches preparation of patient for ECG and interpretation of normal and abnormal ECG's. 2 lecture hours per week for 6 week summer session. 1 credit hour.

NMTM 222 Nuclear Medicine Procedures III

Includes a review of the anatomy and physiology of systems covered. Teaches pathology, and the nuclear medicine procedures used to evaluate a body system or disease state. Clinical Practicum III is taken concurrently as a laboratory with this course. The student observes, assists with and performs procedures in the clinical setting. Student participates in clinical practice for four full days per week. 2 lecture hours per week. 2 credit hours.

NMTM 240 Nuclear Medicine Seminar I

Includes studies in interpersonal communications, problem solving, biomedical ethics and medical law. Only offered summer session. Prerequisites: NMTM 120, NMTM 121, NMTM 130, NMTM 131, NMTM 140. 1 lecture hour per week for summer session. 1 credit hour.

NMTM 241 Nuclear Medicine Seminar II

Includes clinical correlations of studies with various disease states, case study presentations, and reviews of research and technical literature. Prerequisite: NMTM 240. 2 lecture hours per week summer session. 2 credit hours.

NURE • Nursing, Trinitas

NURE 130 Nursing Trends and Concepts

This course introduces the student to the profession of nursing, its evolution, current trends and issues. The role of the nurse within the health care delivery system is incorporated throughout the course. An overview of nursing theories and conceptual frameworks, will be presented. Nursing process will be introduced as the method of formulating and providing care in nurse-client interactions. Elements of normal nutrition will be introduced. A review of basic math principles will be conducted with later emphasis on dosage calculation for medication administration. The theory base provided in NURE 130 will be built upon and applied in subsequent nursing courses. Prerequisites: Completion of all developmental courses and GPA of 2.3 (2.5 effective 1/07) or higher. Corequisites BIO 105, CHE 105 or CHE 113, ENG 101. 4 lecture hours per week. 4 credit hours.

NURE 131 Nursing I

Nursing 131 is an introductory course designed to establish the foundations of knowledge, attitudes and psychomotor skills necessary for beginning practice. The role of the nurse in the multicultural health care delivery system will focus on nursing care for selected health problems. Commonly seen health deviations within the adult population will be introduced. Basic health assessment skills will be introduced. Students participate in clinical experiences in the Learning/Simulation Lab and acute and extended care settings for the application of fundamental nursing principles. Prerequisites: NURE 130, BIO 105, ENG 101, CHE 105 or CHE 113, GPA 2.5 effective 9/07. Corequisites: BIO 106, PSY 101. 4 lecture hours and 12 clinical hours per week. 8 credit hours.

NURE 132 Nursing II

Nursing 132 builds upon the foundation of Nursing 130/131. It explores the roles of the professional nurse as a member of the health care team utilizing critical thinking and problem solving skills with expansion of health assessment techniques while caring for adults experiencing acute/chronic disruptions of existing patterns of normalcy. The student will be utilizing the nursing process, developing and refining clinical skills as well as establishing priorities in predictable health care situations. Learning experiences are provided in the classroom, learning lab and in multicultural adult medical/surgical facilities and the community. Prerequisites: NURE 131, BIO 106, PŚY 101; GPA 2.3 (2.5 effective 1/08); Corequisites: BIO 108, PSY 205. 4 lecture hours and 12 clinical hours per week. 8 credit hours.

NURE 211 Bridge-to-Professional **Nursing Core Concepts**

This transition course introduces the LPNto-RN student to the framework and concepts of the Trinitas School of Nursing program. Role socialization, communication principles, nursing process, concept care mapping, teaching/learning principles, critical thinking, legal-ethical standards/issues and the role of cultural competence in contemporary nursing will be explored. Pharmacological concepts will be discussed and a review of medication administration with emphasis on drug/IV calculations will be conducted and regularly reinforced throughout the course. Prerequisites: Proof of current LPN license, satisfactory completion of NJ Basic Skills Test or waiver; all buyback credits; BIO 105, BIO 106, BIO 108; CHE 105 or CHE 113/114; ENG 101,ENG 102, PSY 101, PSY 205; SOC 101, Humanities 6 credits, GPA 2.3 (2.5 effective 9/07), one-year employment as an LPN in a health care setting. Corequisite: NURE 212. 3 lecture hours per week. 3 credit hours.

NURE 212 Health and Physical Assessment

This course builds upon the foundation of LPN education and introduces the student to holistic health assessment and physical examination. The course aims to develop the student's abilities in gathering data to determine client's health status, practices and goals as influenced by his/her own culture. Starting with assessment of normal health parameters, the student will learn to differentiate between what is within and out of acceptable limits. Within the context of care of the perioperative or gerontological client, the student will learn and use physical assessment techniques of inspection, palpation, percussion and auscultation as well as other forms of data collection, such as, client interview, chart review, and analysis of laboratory and diagnostic results. The roles of the RN and the LPN in physical assessment/data collection will be discussed. The student will practice physical assessment skills and participate in laboratory experiences using scenarios involving a patient simulator in the Skills laboratory and in the application of concepts in acute health care settings. Students will also review and perform basic clinical nursing skills. Prerequisites: Same as NURE 211; GPA 2.3 (2.5 effective 9/07). Corequisite: NURE 211. 2 lecture hours and 6 clinical hours per week. 4 credit hours.

NURE 231 Nursing III

Nursing 231 builds upon the foundation of NURE 130, 131, and 132. It explores the nurse's role in caring for the pediatric client and childbearing family. In addition, it explores the clients' situations with acute and chronic disruptions of health, as well as complex health deviations which may be life threatening. Clinical experiences are provided in a variety of structured multicultural health care settings with a parent-child focus. Prerequisites: NURE 132, BIO 108, PSY 205; GPA 2.3 (2.5 effective 9/08). Corequisites: ENG 102, SOC 101. 4 lecture hours and 12 clinical hours per week. 8 credit hours.

NURE 232 Nursing IV

This course emphasizes the practice of nursing as it relates to adults experiencing complex health deviations that are potentially life threatening events. Within the context of the nursing process, the NURE 232 nursing student, utilizing critical thinking skills, gains experiences in organizing, prioritizing and evaluating care for clients by assisting them to overcome those deficits which interfere with self-care. Experiences are provided in a variety of multicultural health care settings such as the mental health units, acute care units and medical/surgical units. Prerequisites: NURE 231, SOC 101, ENG 102, CHE 114 if CHE 113 was taken; GPA of 2.3 (2.5 effective 1/09); all buy-back credits. Corequisites: 2 Humanities Electives. 5 lecture hours and 15 clinical hours per week. 10 credit hours.

NURE 240-242 Selected Topics in Nursing (Elective Course)

Studies of selected events, topics, issues, or skills based on timely concerns, student requests, or community interest. These courses are designed to enhance or expand professional nursing knowledge and skills beyond the core curriculum. Individual topics will be announced prior to registration. One, two, or three credits will be offered depending on the course format and hours. Prerequisites: Permission of the instructor. 1, 2, or 3 credit hours.

NURE 250 Nursing Care of the Client with a Medical Surgical Health Deviation

This course builds upon the foundation of NURE 211 and NURE 212. It introduces the LPN to RN student to the roles of the professional nurse in clinical practice. Within the context of the nursing process, the student will be refining and developing clinical skills while caring for clients experiencing acute/chronic disruptions in normalcy with emphasis on critical thinking, physical assessment and teaching/learning principles. Clinical experiences are provided in a variety of structured, multicultural acute/chronic health care settings. Other learning experiences will occur in the classroom with assigned activities in the computer and skills laboratories. Prerequisites: NURE 211, NURE 212, GPA of 2.3 (2.5 effective 1/08). 3 lecture hours and 9 clinical hours per week. 6 credit hours.

NURE 260 Nursing Care of Children and their Families

This course builds upon the foundation of NURE 250 and LPN education, utilizing Orem's Self-Care Framework. It explores the role of the professional registered nurse in caring for the pediatric client. Emphasis is placed on pediatric normalcy in a child experiencing an acute or chronic health deviation from infancy through adolescence. A significant aspect of this course is an understanding of the concepts of atraumatic care, family advocacy, and an interdisciplinary approach to health care. The student will continue to utilize and modify the nursing process and teaching/learning strategies while refining critical thinking and clinical skills. Clinical experiences are provided in a variety of structured, multicultural pediatric health care settings. Other learning experiences will occur in the classroom with assigned activities in the computer and skills laboratories. Prerequisites: NURE 250; GPA 2.3 (2.5 effective 5/08). 3 lecture hours and 9 clinical hours per week over 7 weeks. 3 credit

NURE 270 Nursing Care of Women and the Childbearing Family

This course builds upon the foundation of NURE 250 and LPN education, utilizing Orem's Self-Care Framework. It explores the role of the professional registered nurse as a member of a multidisciplinary team in caring for women and the childbearing family. Emphasis is placed on health education and community resources in relation to women's health and the childbearing cycle. Deviations from the normal physiologic and psychosocial development are explored. The student will continue to utilize and modify the nursing process and teaching/learning strategies while refining critical thinking and clinical skills. Clinical experiences are provided in a variety of structured, multicultural health care settings. Other learning experiences will occur in the classroom with assigned activities in the computer and skills laboratories. Prerequisites: NURE 250; GPA 2.3 (2.5 effective 5/08). 3 lecture hours and 9 clinical hours per week over 7 weeks. 3 credit hours.

NURE 280 Nursing Care of the Client with Mental Illness

This course builds upon the foundation of NURE 250 and LPN education, utilizing Orem's Self Care Framework. It explores the role of the Professional Registered Nurse as a member of a multidisciplinary health care team in caring for clients with mental illness. Emphasis is placed on mental health education and community resources available to the client and their families. The student will continue to utilize and modify the nursing process and teaching/learning strategies, while refining critical thinking and clinical skills. Clinical experiences are provided in a variety of structured, multicultural, psychiatric/mental health care settings. Other learning experiences will occur in the classroom with assigned activities as well as the computer laboratory. Prerequisites: NURE 260, NURE 270; GPA 2.3 (2.5 effective 9/08). 3 lecture hours and 9 clinical hours per week over 7 weeks. 3 credit hours.

NURE 290 Nursing Care Of The Client With Complex Multi-System Medical/Surgical **Health Deviation**

NURE 290 builds upon the foundations of NURE 260, NURE 270, NURE 280 and LPN education. It explores the role of the professional registered nurse as a member of a multidisciplinary team in caring for clients with complex multi-system medical/surgical health deviations. Emphasis is placed on organizing, prioritizing, and evaluating nursing care for clients by assisting them with selfcare deficits. The student will continue to utilize and modify the nursing process and teaching/learning strategies while refining critical thinking in clinical health care settings. Other learning experiences will occur in the classroom with assigned activities in the computer and skills laboratories. Prerequisite: NURE 280, GPA 2.3 (2.5 effective 9/08). Corequisite: NURE 291. 3 lecture hours and 9 clinical hours per week over 7 weeks. 3 credit hours.

NURE 291 Leadership and Management Seminar

This course provides students with a forum to explore and discuss professional practice issues dealing with the role of the nurse as a manager of care, such as, delegation, priority setting, conflict resolution, evidence-based practice, standards of care, healthy work environments, current trends in health care and health care delivery systems. Prerequisites: NURÉ 280, GPA 2.3 (2.5 effective 9/08). Corequisite: NURE 290. 2 lecture hours per week over 7 weeks. 1 credit hour.

NURM • Nursing, Muhlenburg

NURM 100 Mathematics for Pharmacology

A course primarily designed to prepare students with the definitive mathematical concepts necessary to ensure safe administration of medications. The metric and household systems are reviewed and applied. In addition to mathematical concepts, correlation of pharmacological theory to nursing practice will be emphasized. 1 lecture hour per week. 1 credit hour.

NURM 119 Introduction to Nursing

This course is designed to provide the student nurse with the knowledge necessary for registered nurse practice. The role of the accountable, responsible registered nurse is explored through such topics as the profession of nursing, its historical perspectives and Orem's Self Care Theory. Emphasis is placed on the nursing process and the critical thinking necessary for practice. Integrated throughout the course are concepts and issues that relate to nursing practice: the nurse patient relationship, effective communication, self care and wellness, culture, teaching and learning, nutrition, pharmacology and current ethical and legal considerations. The theory base provided for in this course will be built upon and applied in subsequent nursing courses. 3 credit hours.

NURM 120 LPN Transition Course

NURM 120 serves as a bridge course designed to facilitate the transition of the student from the role of the LPN to the role of a student preparing for RN practice. The course will introduce the student to the philosophy, objectives, and conceptual framework of the Muhlenberg Regional Medical Center School of Nursing program. The nursing process will be introduced and utilized in planning care for adults with selected basic care need/self-care deficits. Nursing theory, nutrition, pharmacology, psychosocial, ethical and legal concepts related to nursing practice will be examined. The role of the registered nurse as a member of the nursing and health teams will be explored. Laboratory experiences will be provided in adult medical-surgical clinical and classroom facilities. Prerequisites: Current LPN license, BIO 105 and BIO 106, PSY 101, ENG 101, CHE 105 or CHE 113, and SOC 101. 7.5 lecture and 7.5 laboratory hours per week. 4 credit hours.

NURM 121 Nursing I

This course is designed to establish the foundation of knowledge, attitude and perceptual motor skills necessary for registered nurse practice. The role of the accountable, responsible registered nurse as it relates to the care of clients experiencing actual/potential, commonly occurring simple basic need/health deviations is explored. Within the context of the nursing process, the assessment phase is stressed. The student nurse gains experiences in the systematic data collection through the use of the nursing history and physical examination. Emphasis is placed on the application of beginning effective communication, self care and wellness, current legal, ethical and social problems and teaching and learning principles. Laboratory experiences are provided in the classroom laboratory setting as well as medical-surgical units, nursing homes and any other clinical sites to meet the course objectives. Prerequisites: BIO 105, CHE 105, ENG 101, NURM 100, NURM 119. Corequisites: BIO 106, PSY 101. 4 lecture hours and 12 laboratory hours per week. 8 credit hours.

NURM 122 Nursing II

This course explores the role of the accountable, responsible registered nurse as it relates to the care of the childbearing and childrearing family and clients experiencing actual/potential, commonly occurring, increasing to the complex health deviations. Within the context of the nursing process, the diagnostic phase is stressed. The student nurse gains experiences in analyzing and interpreting patient data for an accurate nursing diagnosis in the clinical setting. Emphasis is placed on the application of effective communication, self care and wellness, current legal, ethical and social problems and teaching/learning principles. Laboratory experiences are provided in the classroom laboratory setting as well as medical-surgical, obstetrical, pediatric units, community agencies and any other clinical sites to meet the course objectives. Prerequisites: NURM 121 and its corequisites. Corequisites: BIO 108, PSY 205. 4 lecture hours and 2 laboratory hours per week. 8 credit hours.

NURM 141 Accelerated Nursing

NURM 141 is a comprehensive course designed to establish a sound foundation of knowledge, attitudes and perceptual motor skills necessary for accountable, registered nurse practice. Theoretical nursing concepts and related skills with emphasis on self-care, developmental requisites and the basic needs of Man form the organizational framework of the course. The nursing process, ethical/legal/historical constructs, communication techniques, teaching-learning principles and nutritional, pathophysiological, pharmacological and psychosocial concepts are applied to meeting the nursing needs of clients experiencing commonly occurring health problems. Prerequisites: Baccalaureate degree or higher and BIO 105 and BIO 106, BIO 108, CHE 105, NURM 100, PSY 101 and PSY 205, ENG 101 and ENG 102, SOC 101, 2 Humanities electives. 6.5 lecture hours and 19.5 laboratory hours per week. 13 credit hours.

NURM 221 Nursing III

This course explores the role of the accountable, responsible registered nurse as it relates to the care of clients experiencing actual/potential, commonly occurring, complex health deviations. Within the context of the nursing process, the planning phase is stressed. The student nurse gains experiences in setting realistic patient outcomes and personalizing nursing interventions for two clients in the clinical setting. Emphasis is placed on developing therapeutic communication skills, beginning management skills, current legal, ethical and social problems and teaching-learning principles which assist the client in overcoming self-care deficits. Laboratory experiences are provided in the classroom laboratory setting as well as medical-surgical units, psychiatric facilities, community agencies, and other clinical sites to meet the course objectives. Prerequisites: NURM 122 and its corequisites. Corequisites: SOC 101, ENG 102. 4.5 lecture hours and 13.5 laboratory hours per week. 9 credit hours.

NURM 222 Nursing IV

This course emphasizes the role of the accountable, responsible registered nurse as it relates to the care of clients experiencing actual/potential, commonly occurring multiple complex deviations. Within the context of the nursing process, the evaluation phase is stressed. The student nurse gains experience in organizing, prioritizing and evaluating care for a small group of clients in the clinical setting. Emphasis is placed on the application of increasing therapeutic communication skills, management and leadership skills, current legal, ethical and social problems and teaching/learning principles which assist the client in overcoming self-care deficits. Laboratory experiences are provided in the classroom laboratory setting as well as medical-surgical and critical care units, community agencies and any other clinical sites to meet the course objectives Prerequisites: NURM 221 and its corequisites. Corequisites: 2 Humanities electives. 4.5 lecture hours and 13.5 laboratory hours per week. 9 credit hours.

NURM 241 Accelerated Nursing Summer

NURM 241 explores the role of the nurse as an accountable and responsible member of the health team. The student implements effective systems of nursing care with clients who are experiencing commonly-occurring psychological and psychosocial health deviations as well as the concerns of childbearing and childrearing. Ethical/legal, nutritional, pharmacological, medical-surgical, developmental, psychological, and sociological concepts related to meeting the nursing needs of clients are integrated. Emphasis is placed on teaching-learning principles and the development of therapeutic communication techniques within the nurse-client relationship. Laboratory experiences are provided in parent/child in-patient and community settings and also at behavioral health and adult health care and medical-surgical facilities (this is a condensed summer course). Prerequisites: NURM 141. 6.8 lecture hours and 20.6 laboratory hours per week. 11 credit hours.

NURM 242 Accelerated Nursing

This course emphasizes the role of the accountable, responsible registered nurse as it relates to the care of clients experiencing commonly occurring complex health deviations which may be chronic, acute, or potentially life threatening in nature. Within the content of the nursing process, the nursing student gains experiences in organizing, prioritizing and evaluating care for small groups of patients by assisting them to overcome those deficits which interfere with self-care. Nutritional, pharmacological, psychological and sociological needs of patients as well as ethical/legal issues related to the care of chronically ill and acutely ill patients are discussed. Emphasis is also placed on increasing communication skills and implementing teaching-learning principles. Experiences are provided in a variety of structured health care settings such as the acute care units and medical-surgical units. Prerequisite: NURM 241. 6.5 lecture hours and 19.5 laboratory hours per week. 13 credit hours.

OCE • Oceanography

OCE 101 Introduction to Marine Sciences

A field-oriented lower division undergraduate course covering the principal disciplines in the marine sciences. The course is designed to help the student evaluate his/her interest in the marine science. No prerequisites. 4 credit hours.

OCE 103 Introduction to Marine Biology

A field and laboratory-oriented undergraduate course covering the biology and characteristics of marine plants and animals. The course is designed to provide the student with instruction and experience in collecting and identifying examples of local marine flora and fauna. No prerequisites. 4 credit hours.

OCE 201 Oceanography

A study of the physical and chemical properties of sea water, oceanic circulation, waves and tides, and estuarine and shoreline processes. Prerequisite: Advanced standing in the physical or biological sciences or permission of the instructor. 4 credit hours.

PED • Physical Education

PED 101 Concepts of Adult Fitness

Through a series of lectures and practicums, 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 practicums, his/her own physical fitness profile and program. 2 lecture hours per week. 2 credit hours.

PED 107 Decisions for Wellness

BIO 107 without the laboratory component. This course will not fulfill a college laboratory science requirement. Permission of Department Chair required for registration. 3 lecture hours per week. 3 credit hours.

PED 110 Beginning Golf

Beginning golf covers the basic techniques of the game of golf. Also covered in the course are the history of the game, the rules and etiquette of golf, and basic golf equipment. 1 lecture hour and 1 laboratory/demonstration hour per week. 1 credit hour.

PED 290-299 Independent Study in Fitness and Wellness

One-semester courses designed to cover an approved in-depth exploration of some aspects of health, fitness, and/or wellness. The course is intended to provide the students with an opportunity to expand his or her knowledge in one area beyond that which is presently offered in current health, fitness, and/or wellness courses. This course will not fulfill a science requirement and requires the recommendation and permission of the Department Chair and instructor as a prerequisite for registration. It is recommended that the student have at least one semester of college Biology, PED 101, or a college-level health course. May be taken for 1, 2, 3 or 4 credit hours.

PED 296 Independent Study/Advanced Golf

This independent studies course will give the student who has completed PED 110 an opportunity to continue the study of golf and to become knowledgeable about the rules and playing strategies of golf. Two books dealing with the fundamentals and psychology of the sport of golf will be read and discussed. Students will be expected to play a minimum of five rounds of golf and to provide written critiques of each round. Prerequisite: PED 110 or permission of instructor. 3 credit hours.

PHI • Philosophy

PHI 105 Introduction to Logical Thinking

The understanding and development of the fundamental principles of disciplined thinking, language and thought, patterns of argument and fallacies, reasoning and human life. Prerequisites: ENG 088, ENG 098 or permission of instructor or Department Chair. 3 lecture hours per week. 3 credit hours.

PHI 205 Introduction to Philosophy

This course is an introduction to philosophy: what philosophy is, what its objectives are and what its major areas of focus and its methods are. The course is organized around a study of major problems and pertinent questions in philosophy, including the nature of being, of the world, of the person, of knowing, and of human conduct. These philosophical problems and related issues are explored through selected readings in philosophy that introduce the student to major philosophers within the Western philosophical tradition. Corequisite: ENG 101 or permission of instructor or Department Chair. 3 lecture hours per week. 3 credit hours.

PHI 206 History of Ancient and Medieval Philosophy

A study of the major figures and movements in Western thought from the early Greeks to the end of the Middle Ages. The central part of the course is devoted to Plato, Aristotle, Augustine, and Thomas Aguinas. Selected works are read and analyzed. Prerequisites: ENG 089, ENG 099, HIS 101-102 or permission of instructor or Department Chair. 3 lecture hours per week. 3 credit hours.

PHI 207 History of Modern Philosophy

A study of the major figures and movements in Western thought from 1600 to the present. The course focuses on the philosophies of Hobbes, Descartes, Hume, and Kant. Selected works are read and analyzed. Prerequisites: ENG 089, ENG 099, HIS 101-102 or permission of instructor or Department Chair. 3 lecture hours per week. 3 credit hours.

PHI 209 Social Justice

An analysis of some of the major theories of social justice, focusing on philosophical assumptions and practical applications. Special consideration is given to problems, such as political obligation and individual autonomy, the distribution of social goods, sovereignty and political disobedience, the nature of law, and justifications of punishment. Prerequisites: ENG 089, ENG 099 or permission of instructor or Department Chair. 3 lecture hours per week. 3 credit hours.

PHI 210 Ethics

A focus on both ethical theory and applied ethics as classical and contemporary ethical theories are examined and a variety of ethical issues and dilemmas are considered. This course can serve as either a general elective or a Humanities elective. Prerequisite: ENG 101 or permission of instructor or Department Chair. 3 lecture hours per week. 3 credit hours.

PHI 212 Logic and Critical Thinking

An exploration of the elements of sound reasoning, including the nature of arguments, both deductive and inductive, an examination of informal and formal fallacies, and of the nature of various forms of reasoning. Examples of fallacious reasoning will be drawn from politics, advertising, business, morality, and religion. This course is designed to enhance students' critical thinking and promote success in academic inquiry across the disciplines. Prerequisite: ÉNG 101 or permission of instructor or Department Chair. 3 lecture hours per week. 3 credit hours.

PHY • Physics

PHY 101 General Physics I

Basic concepts of measurement; composition and resolution of forces; force systems; kinematics of a particle; dynamics of a particle; systems of forces; rotational motion; work, energy and power; momentum; elastic properties of solids and liquids; mechanics of fluids; temperature and heat; thermal expansion; heat transfer. Prerequisites: ENG 088, PHY 005 or equivalent, MAT 143. Corequisite: PHYL 101. 3 lecture hours per week. 3 credit hours.

PHYL 101 General Physics I Laboratory

Physics laboratory to accompany PHY 101. Corequisite: PHY 101. 3 laboratory hours per week. 1 credit hour.

PHY 102 General Physics II

Ideal gas laws; thermodynamics; wave motion; stationary waves; sound waves; acoustics; light and illumination; reflection; refraction; thin lines; optical instruments; dispersion; spectra; interference and defraction; polarization of light; electrostatics; capacitance; electric circuits; power; magnetic field of electric current; induced E.M.F.; inductance; alternating current series circuits. Prerequisite: PHY 101. Corequisite: PHYL 102. 3 lecture hours per week. 3 credit hours.

PHYL 102 General Physics II Laboratory

Physics laboratory to accompany PHY 102. Corequisite: PHY 102. 3 laboratory hours per week. 1 credit hour.

PHY 111 Mechanics

Study of classical mechanics for engineering students, including kinematics, projectile and circular motion, Newton's laws of motion, friction, work and energy, impulse and momentum, conservation of energy and momentum, static equilibrium, and rotational dynamics. Prerequisites: EGG 105, MAT 171 and MAT 148. Corequisite: PHYL 111. 3 lecture hours per week. 3 credit hours.

PHYL 111 Mechanics Laboratory

Physics laboratory to accompany PHY 111. Corequisite: PHY 111. 3 laboratory hours per week. 1 credit hour.

PHY 125 Elements of Physics

Fundamental ideas and concepts of physics for students in health programs: measurements and units, motion of bodies, forces, work and energy, momentum, temperature and heat, waves, optics, electricity and magnetism, radiation, atomic and nuclear physics. Prerequisites: ENG 088, MAT 119. Corequisite: PHYL 125. 3 lecture hours per week. 3 credit hours.

PHYL 125 Elements of Physics Laboratory

Physics laboratory to accompany PHY 125. Corequisite: PHY 125. 2 laboratory hours per week. 1 credit hour.

PHY 201 Electricity and Magnetism

A study of electrostatics, electric and magnetic fields, electromagnetism, electric and magnetic circuits, induced electromotive forces, fundamental electrical measurements, circuits containing inductance and capacitance, basic electronics. Prerequisite: PHY 111. Corequisites: MAT 271 and PHYL 201. 3 lecture hours per week. 3 credit hours.

PHYL 201 Electricity and Magnetism Laboratory

Physics laboratory to accompany PHY 201. Corequisite: PHY 201. 3 laboratory hours per week. 1 credit hour.

PHY 285 Special Topics in Physics

Topics selected to meet the particular needs and interests of students. Credit by arrangement.

PMD • Paramedic

PMD 106 Paramedic I

This course will focus on an introduction to New Jersey EMS structure. Students will gain knowledge in the roles, responsibilities and regulation governing this profession. There will be a review of human structure and function. An extensive review of the Cardiac, Respiratory, Neurological and Renal systems will offer a foundation for assessment skills, differential diagnosis skills and understanding action potential of pharmaceutical agents. Students will understand pharmacology, drug dosaging, calculation and administration. Students will learn effective techniques for patient assessment and clinical decision making skills. Prerequisites: Please refer to certificate program requirements and MAT 022. Corequisite: PMD 107. 7 lecture hours per week. 7 credit hours.

PMD 107 Paramedic Procedures I

This course is intended to provide students with the ability to master the necessary clinical skills mandated by the U.S. DOT paramedic curriculum through hands-on learning and demonstration. The structure of this course will be through skills station rotations where students are in groups of four or less to each instructor. An overview of the skill and specific techniques for successful completion will be taught or reviewed. Students will be encouraged to decide treatment based upon clinical scenarios given by the instructor. Prerequisites: Please refer to certificate program requirements and MAT 022. Corequisite: PMD 106. 6 lecture hours per week. 6 credit hours.

PMD 108 Paramedic II

Students will gain intense knowledge on electrocardiology interpretation (EKG) and treatments. Upon completion of this course students will correctly treat, document and relay a detailed report to medical control. Students will describe the indications, contraindications and side effects of all MICU regulated procedures and 55 pharmaceutical agents carried by paramedics. Students will understand NJ State Standing Orders for adult and pediatric patients. Students will be able to identify patterns in assessments based upon specific medical emergencies. This course will prepare students for a safe approach to special situations involving harmful agents. Students will gain understanding in age specific education including geriatric and pediatrics. At the conclusion of this course, students will successfully complete both a written and practical final evaluation. Prerequisites: PMD 106 and PMD 107 with a grade of "C" or better. Corequisite: PMD 109. 7 lecture hours per week for 22 weeks. 10 credit hours.

PMD 109 Paramedic Procedures II

This course is intended to provide students with the ability to master the necessary clinical skills mandated by the U.S. DOT paramedic curriculum. The structure of this course will be through skill station rotations where students are in groups of four or less to each instructor. Students will be encouraged to decide treatment based upon clinical scenarios given by the instructor. Paramedic Procedures II reinforces the lecture material pertaining to clinical skills and clinical decision-making. This course will utilize assessment tools of skill proficiency set forth by the U.S. DOT national curriculum. Prerequisites: PMD 106 and PMD 107 with a grade of "C" or better. Corequisite: PMD 108. 6 lecture hours per week for 22 weeks. 9 credit hours.

PNU • Practical Nursing

PNU 190 Nursing Concepts

This course introduces the Practical Nursing student to the profession of nursing and the role of the LPN. Trends in nursing practice and the health care delivery system will be discussed. The integration of self-care and critical thinking principles into the nursing process will be a key focus. Fundamental nursing concepts and practices for health promotion, including communication, client teaching, assessment, nutritional support, and general pharmacological and safety principles, will be presented. Students will practice and demonstrate beginning proficiency in selected skills, including the calculation of drug dosages, measurement of vital signs, hygienic care, application of standard precautions, and the use of medical terminology. Prerequisites: All Developmental Course Work, GPA 2.5. Corequisites: ENG 101 or ENG 112, BIO 102 or BIO 106, PSY 101. 60 lecture hours and 45 clinical lab hours. 5 credit hours (4 theory, 1 clinical lab).

PNU 191 Adult Health I

In this course, the student will continue to use the nursing process, within the self-care framework, to assist adult clients in meeting their physiological and psychosocial self-care requisites in the long term and acute care setting. Emphasis will be placed on client assessment and an understanding of the commonly occurring and chronic conditions that alter an individual's state of wellness. Care of clients pre- and postoperatively, and those experiencing fluid and electrolyte imbalances, infectious diseases, and selected cardiovascular, respiratory, musculoskeletal, and endocrine deviations will be discussed. Principles of critical thinking and therapeutic communication will be integrated throughout the course. Content that is presented in the classroom will be reinforced with clinical experiences in the skills laboratory and client care settings where students will apply basic nursing principles and techniques. Prerequisites: PNU 190, ENG 101 or ENG 112, BIO 102, PSY 101, GPA 2.5. Corequisite: Elective. 105 lecture hours and 135 clinical lab hours. 10 credit hours (7 theory, 3 clinical lab).

PNU 210 Maternal/Child, Pediatric, and Mental Health Nursing

The focus of this course is the role of the Practical Nurse as a member of a multidisciplinary health team caring for clients and their families in obstetrical, pediatric, and mental health settings. Knowledge and skills are developed that will assist clients to attain self-care requisites, including therapeutic communication, application of growth and development principles, and incorporation of legal and ethical guidelines. Health promotion, maintenance, and restoration are emphasized in clinical experiences with clients and their families. Economic and sociocultural issues that influence the client and family will be discussed. The student will continue to use the nursing process within the self-care framework in providing care to clients during clinical experiences in inpatient and/or ambulatory obstetric, pediatric, and mental health settings.

Prerequisites: PNU 191, Elective, GPA 2.5. Corequisite: PSY 205. 90 lecture hours and 135 clinical lab hours. 9 credit hours (6 theory, 3 clinical lab).

PNU 211 Adult Health II & Role **Transition**

In this course the student focuses on meeting the holistic self-care needs of the adult client in the acute care setting. In collaboration with the clinical instructor and RN health team member, the student will be given the opportunity to demonstrate use of critical thinking skills in collecting subjective and objective information, prioritizing care, intervening in meeting client basic care needs, evaluating outcomes of care, and reporting and recording care. Concepts introduced in previous nursing courses are expanded and integrated into clinical and theory experiences. Emphasis in theory will be placed on more complex acute medical-surgical health deviations, the assessment of signs and symptoms and recognition of medical and nursing interventions, including medication and nutrition therapies. Critical thinking skills will continue to be an avenue for student success in test-taking and clinical performance. Concepts of role transition and accountability will be discussed, as well as skills required for obtaining employment in a health care agency. Content reviews, focused testing, and a clinical practicum will assist the student to prepare for the NCLEX - PN Licensure Examination and the assumption of a position as a Licensed Practical Nurse. Prerequisites: PNU 210, PSY 205, GPA 2.5. 120 lecture hours, 180 clinical lab hours. 12 credit hours (8 theory, 4 clinical lab).

PSRT • Psychosocial Rehabilitation

PSRT 1019 Clinical Practicum in Psychosocial Rehabilitation I

Students will observe and identify common interventions for working with the individual with serious mental illness. Clinical experiences (16 hours weekly, for a minimum of 240 hours) will emphasize participation under supervision in group activities, program tasks, skills training and skills practice. Classroom lectures and seminars will provide students with opportunities to integrate theory with practical experience. Prerequisites: UPR 101, PSRT 1102, PSRT 1103, PSRT 1204. 3 lecture hours and 16 clinical hours per week. 6 credit hours. This course is only available to students who have been accepted into a UMDNJ program. For the most current course description visit http://coursecatalog.umdnj.edu/

PSRT 1102 Communication Techniques in Interviewing and Counseling

Introduces students to the principles and skills necessary for the effective use of therapeutic communication. The student will learn about values and attitudes impacting on professional interpersonal relationships. Classroom lectures and practice sessions expose students to interviewing, and helping principles through active participation in a faculty supervised clinical practice. Prerequisite: UPR 101 or permission of Department Chair. 2 lecture hours and 2 laboratory hours per week. 3 credit hours. This course is only available to students who have been accepted into a UMDNJ program. For the most current course description visit http://coursecatalog.umdnj.edu/

PSRT 1103 Introduction to Group Dynamics

Introduces the student to the principles, and skills necessary for the effective use of groups to engage people, and achieve goals. Classroom lectures and practice sessions demonstrate group dynamics, and group process. Students also participate in faculty supervised group experiences. Prerequisite: UPR 101 or permission of Department Chair. 2 lecture hours and 2 laboratory hours per week. 3 credit hours. This course is only available to students who have been accepted into a UMDNJ program. For the most current course description visit http://coursecatalog.umdnj.edu/

PSRT 1204 Clinical Principles in Psychosocial Rehabilitation and Treatment

Introduces students to an understanding of psychopathology as it is addressed through psychosocial rehabilitation intervention efforts. Students will be able to define and differentiate between mental health and mental illness. The use of common psychotropic drugs and their side effects will also be covered. Current psychiatric practices will be discussed. Prerequisite: UPR 101. 3 lecture hours per week. 3 credit hours. This course is only available to students who have been accepted into a UMDNJ program. For the most current course description visit http://coursecatalog.umdnj.edu/

PSRT 2019 Clinical Practicum in Psychosocial Rehabilitation II

Enables students to continue to develop intervention skills and strategies. Faculty supervised field experience (16 hours weekly, for a minimum of 240 hours) provides students with opportunities to develop appropriate clinical judgment, as well as initial participation in service planning and choice of interventions. Students will begin to lead activities under supervision and be introduced to documentation requirements. Prerequisite: PSRT 1019. 3 lecture hours and 16 clinical hours per week. 6 credit hours. This course is only available to students who have been accepted into a UMDNJ program. For the most current course description visit http://coursecatalog.umdnj.edu/

PSRT 2121 Community Resource Management and the Individual with Severe Mental Illness

Introduces students to the principles and practices of systems utilization for the improved functioning of people with psychiatric disabilities. Needs evaluation and goal formulation will be the basis of case coordination and resource linking within a systems framework. Lectures and course activities provide students with opportunities to explore the relationship of services to the individual's needs. Web based course. Prerequisites: UPR 101, PSRT 1102, PSRT 1103, PSRT 1204. 3 lecture hours per week. 3 credit hours. This course is only available to students who have been accepted into a UMDNJ program. For the most current course description visit http://coursecatalog.umdnj.edu/

PSRT 2231 Emerging Topics in Psychosocial Rehabilitation and **Treatment**

Acquaints the students with emerging developments in the field of psychosocial rehabilitation and treatment, focusing on current issues and trends. The purpose of the course is to help the student conceptualize psychosocial rehabilitation as a diverse and evolving field. Web based course. Prerequisite: PSRT 1019, PSRT 2121. 3 lecture hours per week. 3 credit hours. This course is only available to students who have been accepted into a UMDNJ program. For the most current course description visit http://coursecatalog.umdnj.edu/

PSY • Psychology

PSY 101 General Psychology

Introduction to the scientific study of behavior, principles of motivation, emotions, perception, learning, memory, thinking, personality, and biological basis of behavior. Prerequisites: ENG 088, ENG 098, ENG 099 if required or permission of instructor. 3 lecture hours per week. 3 credit hours.

PSY 102 Psychology of Personality

Personality dynamics in the light of the major theories of personality, Freudian as well as non-Freudian. Includes an introduction to theory construction, personality assessment, and deviance. Prerequisite: PSY 101. 3 lecture hours per week. 3 credit hours.

PSY 105 Group Dynamics

An investigation of the roles and behavior of people in small group settings. Topics include roles and norms, leadership, decision processes, interpersonal communication, membership, attraction, and group theory. Participation in small group projects emphasized. Prerequisite: PSY 101. 3 lecture hours per week. 3 credit hours.

PSY 205 Child Psychology

Study of child behavior and development with reference to motor abilities, language, intelligence, emotional development. Emphasis is on normal human development in the early stages of life. Prerequisite: PSY 101, PSY 102. 3 lecture hours per week. 3 credit hours.

PSY 206 Adolescent Psychology

Study of physiological, social, emotional, and intellectual development of adolescents; interests, motivations, home and social problems, sex differences, recreation, maladjustment, and delinquency. Prerequisite: PSY 101, PSY 102 recommended. 3 lecture hours per week. 3 credit hours.

PSY 207 Social Psychology

The course will focus on the ways in which human behavior is influenced or determined by the social situations in which it occurs. Topics include: social perception, attitudes, prejudice, interpersonal attraction, aggression, conformity, and group dynamics. Prerequisite: PSY 101. 3 lecture hours per week. 3 credit hours.

PSY 208 Abnormal Psychology

A study of anxiety disorders, psychoses, and other maladaptive behavior patterns, with emphasis on current concepts of their origin and treatment. Prerequisite: PSY 102 or permission of instructor. 3 lecture hours per week. 3 credit hours.

PSY 210 Human Sexuality

The fundamentals of human sexuality: psychobiological mechanisms, psychosocial development, and cultural influences. Topics include the origins and development of sexuality, development of gender identities and sex roles, sexual behaviors and attitudes, and contemporary cultural issues. Prerequisite: PSY 101. 3 lecture hours per week. 3 credit hours.

PSY 211 Current Issues in Psychology

Presentation, and exploration of current social and/or psychological issues, material could include but is not limited to such issues as drugs, behavior disorders, eating disorders, sexually transmitted diseases, and adolescent suicides. Topics to be changed to remain current. 3 lecture hours per week. 3 credit hours.

PSY 212 Psychology of Adulthood and Aging

An investigation of the theory and research involved in the study of the psychology of adulthood and aging. Particular attention is focused on role and identity changes, personality changes, intelligence, sexuality, the psychosocial aspects of work and retirement, and death and dying. Participation in field work or service learning is highly recommended. Prerequisite: PSY 101. 3 lecture hours per week. 3 credit hours.

PSY 213 (SOC 213) Social Research Methods

This course explores the application of scientific methods to the study of human behavior and social interaction. The relationship between theory and research is examined. Students develop skills in understanding and using such techniques as case studies, surveys, experiments, participant observation, testing, and basic statistical devices to analyze data. Required prerequisite: HUS 101 and PSY 101 or SOC 101. 3 lecture hours per week. 3 credit hours.

PSY 215 Field Work in Psychology

With permission of the department, any student who has successfully completed either PSY 101 or SOC 101, and is enrolled in a psychology, sociology, or education course, or students with exceptional qualifications may elect to engage in field work. The student must attend periodic seminars and/or prepare reports or other projects as required by the department staff. Credit will be based on a minimum of 30 hours in an approved institution for each hour of college credit per semester. This course may be repeated once. 1-3 credit hours per semester.

PSY 218 (WMS 218) Psychology of Women

This course is designed to provide the student with up-to-date information on the Psychology of Women, the history of the field, and a view of the major theories of psychology from a genderfocused perspective. Instruction in research methods and critical thinking skills will enable the student to take a fresh look at issues such as women and the media, women and health (physical and mental), women and relationships and the diverse experiences of women from different backgrounds, all from a psychological viewpoint. Prerequisite: PSY 101. 3 lecture hours per week. 3 credit hours.

PSY 219 Child Abnormal Psychology

This course will introduce the student to the study of disordered behaviors in childhood and adolescence. The course will focus on the description and explanation of behavior and characteristics which significantly effect a child's functioning. Included areas of disorder are: Eating, Disruptive, Attention Deficit, Anxiety and Mood. Pervasive disorders, such as autism spectrum and mental retardation will be covered as well as those related to health and learning. Theoretical explanations and treatment will be emphasized. Diagnostic classification will also be a focus of the course. Prerequisites: PSY 101, PSY 205 or permission of instructor. 3 lecture hours per week. 3 credit hours.

PSY 270 Topics in Psychology

Studies of selected events, issues, or topics in psychology chosen on the basis of timely concerns, community interests, students' requests, etc. These courses are of a timely or specialized nature and can be best offered not on a regularly scheduled basis, but rather periodically. Individual topics will be announced prior to registration; one, two, or three credits will be offered depending on hours and course format. 1, 2, or 3 credit hours.

Physical Therapy

PTA 115 Functional Anatomy

Study of neuro-musculo-skeletal structures with an emphasis on the function of normal human movement. Review of basic kinesiological principles and how they affect human posture and movement. Introduction to manual muscle testing and goniometry. Prerequisites: (All with a grade of "C" or better) BIO 105, ENG 101, HUG 101, MAT 119, PSY 101. Corequisites: PTA 130, PTA 251. 3 lecture hours and 3 laboratory hours per week. 4 credit hours.

PTA 130 Physical Therapy Procedures I

This course teaches the student to implement basic physical therapy treatment programs. Didactic and laboratory practice are included for heat, light, and hydrotherapy modalities, ambulation, massage, bed positioning, wheelchair maneuverability, and transfers. Lab practice for selected nursing procedures is also included. An initial clinical experience of 8 hrs/week will allow the student an opportunity to utilize these skills under direct supervision. Prerequisite: (All with a grade of "C" or better) BIO 105, ENG 101, HUG 101, MAT 119, PSY 101. Corequisites: PTA 115, PTA 251. 3 lecture, 9 laboratory hours and 4 clinical hours per week. 7 credit hours.

PTA 140 Physical Therapy Procedure II

A review of the pathological process, evaluation, and appropriate physical therapy procedures for selected orthopedic conditions commonly seen in physical therapy. A problem solving approach will be utilized to provide the student the opportunity to identify patients' needs and determine treatment modifications. Prerequisites: PTA 115, PTA 130, PTA 251 all with a grade of "C+". 1 lecture hour and 6 laboratory hours per week. 3 credit hours.

PTA 217 Clinical Seminar and Practice I

This course is designed to integrate the students' clinical and didactic experiences by developing problem solving and interpersonal skills. Topics studied will include the health delivery system, legal and ethical issues relating to Physical Therapy intervention, documentation skills, and an introduction to The Guide to Physical Therapy Practice. The course will also explore the elements of effective interaction between a PTA and other professionals as well as the PTA and the patient. Areas including verbal and non-verbal communication, personal and cultural bias and social versus therapeutic helping relationships will be discussed. The students will participate in two days of supervised PTA clinical experience for 15 weeks. Students must provide their own transportation. Prerequisites: All previous professional coursework with a minimum grade of "C+". Corequisites: PTA 220, PTA 221, ENG 102 and BIO 106. 3 lecture hours and 4 clinical hours per week. 7 credit hours.

PTA 220 Physical Therapy Procedures III

A review of the pathophysiological process, medical treatment, and appropriate physical therapy procedures for selected neurological conditions commonly seen in physical therapy. Physical therapy treatments will include an introduction to evaluate and to advanced therapeutic exercise, as well as thorough coverage of ADL, basic therapeutic exercise and modalities as they relate to each neurological condition. The components and principles of orthotics is included. The physics, physiology and procedures of electrotherapy will be covered. Prerequisites: All previous professional course work passed with a minimum grade of "C+", ENG 102, BIO 106. Corequisites: PTA 217, PTA 221. 4 lecture hours and 6 laboratory hours per week. 6 credit hours.

PTA 221 Physical Therapy Procedures IV

A review of the pathophysiological process, medical treatment, and appropriate physical therapy procedures for selected medical and pediatric conditions commonly seen in physical therapy. Physical therapy treatments will include an introduction to evaluation and to advanced therapeutic exercise, a well as a thorough coverage of ADL, basic therapeutic exercises and assistive devices as they relate to each pediatric and medical condition. Prerequisites: All previous professional course work passed with a minimum grade of "C+" ENG 102, BIO 106. Corequisites: PTA 217, PTA 220. 3 lecture hours and 3 laboratory hours per week. 4 credit hours.

PTA 223 Clinical Seminar

Advanced therapeutic exercise, psychosocial aspects of disability and dying, continuation of total treatment programs for selected conditions, and entry level preparation. Prerequisites: ENG 102, PTA 217, PTA 220, PTA 221 all passed with a grade of "C+" or better. Corequisite: PTA 224. 3 lecture hours per week. 3 credit hours.

PTA 224 Clinical Practice II

Full time, supervised PTA clinical experience, own transportation required. Prerequisites: PTA 217, PTA 220, PTA 221. All previous professional course work passed with a minimum grade "C+." Corequisite: PTA 223 or permission of instructor. 36 clinical hours per week. 9 credit hours.

PTA 251 Independent Living for the Disabled

An overview of selected barriers to illustrate the impact that a disability may have on a patient's lifestyle. The course offers the student an opportunity for investigation into problem solving for a given disability and the implied functional limitations. Prerequisites: All passed with a grade of "C" or better: BIO 105, BIO 106, ENG 101, ENG 102, HUG 101, MAT 119, PSY 101. PTA 102 passed with a minimum grade of "C+." 2 lecture hours per week.

RADM • Radiology

RADM 102 Radiation Mathematics

To introduce the student to practical mathematics applications related to their field of study. The course will evolve through basic mathematics into formulas that apply to radiation exposure, dose, conversions, decay, attenuation, HVL, shielding, radiopharmaceutical and physics applications for all radiography, nuclear medicine technology and radiation therapy students. Prerequisite: MAT 119. 2 lecture hours per week. 2 credit hours.

RADM 110 Principles of Radiographic Exposure I

The first of a 2-semester series developing in detail the theory of x-ray technique and its practical application in radiography, the arithmetic of radiology, the formation of the latent image, the development and characteristics of screens, the prime factors of radiography and the factors affecting radiographic quality. The components of the darkroom, film, and chemistry will be presented for a better understanding of film production. Prerequisite: RNTM 103, MAT 119. 3 lecture hours per week. 3 credit hours.

RADM 120 Radiologic Procedures I

In this first course of a series, the student will be introduced to the concepts of radiographic position, projection and view; the terminology of movement and direction of body parts and the central ray, handling of radiographic equipment and the code of ethics for Radiologic Technologists. The student will investigate the anatomy, limited pathology and radiographic positioning of the chest, abdomen, bony thorax, urinary system and upper extremity. They will be introduced to the contrast agents and organs visualized by means of a contrast medium while studying intravenous urography and tomography. The students will be introduced to a critical thinking model as it applies to radiographic procedures. Clinical education, based upon Clinical Competency Evaluation, parallels the level of radiographic procedures, techniques and principles. Prerequisite: RNTM 101, BIO 105. 3 lecture hours per week. 3 credit hours.

RADM 121 Radiologic Procedures II

This course is a continuation of the concepts, techniques and critical thinking skills initiated in RADM 120. Students will investigate the anatomy, limited pathology and Radiologic positioning of the shoulder girdle, lower limb, femur, pelvis, hip and the entire spinal column. Clinical education, based on Clinical Competency Evaluation, parallels the level of Radiologic procedures, techniques and principles. Prerequisite: RADM 120. 3 lecture hours per week. 3 credit hours.

RADM 122 Radiologic Procedures III

This course includes a review of skull anatomy in which the student will identify the bones and structures of the skull. Radiographs will be used to locate and identify topographical landmarks and lines. Demonstration of proper positioning and film critique in the clinical setting will be utilized. The course will be accompanied by the appropriate clinical component. Prerequisite: RADM 120, BIO 105. 2 lecture hours per week. 2 credit hours.

RADM 135 Radiation Biology

A study of the genetic and somatic effects of ionizing radiation on biological systems. Includes study of the dangers of radiation, government standards, and rights of the public.

Prerequisite: RNTM 103. 2 lecture hours per week. 2 credit hours.

RADM 201 Radiographic Pathology

A survey of disease status of organs and organ systems with emphasis on the implication of radiographic technique employed with specific lesions. Prerequisites: RADM 122, RADM 223, BIO 106. 3 lecture hours per week. 3

RADM 211 Principles of Radiographic Exposure II

A continuation of RADM 110. Includes the development of the theory of x-ray technique and its practical application in radiography. Prerequisite: RADM 110. 3 lecture hours per week. 3 credit hours.

RADM 212 Radiographic Physics

This course will provide the student with the knowledge of basic physics as it relates to ionizing radiation and the principles of electromagnetism. The student will be provided with the knowledge on calculating voltage, current, and the power and transformer law formulas. The course also provides the student with knowledge of the construction of the x-ray tube and the necessary tests to ensure equipment and patient protection. Prerequisites: MAT 119, RADM 110, RADM 211. Corequisite: PHY 125. 3 lecture hours per week. 3 credit hours.

RADM 213 Radiographic Equipment

Course content will assist the student in the development of a knowledge base in radiographic, fluoroscopic, mobile and tomographic equipment requirements and design. Quality control will also be discussed. Prerequisites: RADM 212, RADM 110, RADM 211. 3 lecture hours per week. 3 credit hours.

RADM 223 Radiologic Procedures IV

This course is a continuation of the concepts, techniques, procedures and critical thinking skills learned in previous radiographic procedures courses. Students will investigate the anatomy, positioning and procedures related to the mouth, salivary glands, anterior neck, biliary and digestive systems. They will be introduced to the contrast agents needed to investigate these systems and will be introduced to the concept of fluoroscopy as it applies to the investigation of these systems. Clinical education, based upon Clinical Competency Evaluation, parallels the level of Radiologic procedures, techniques, and principles. Prerequisites: RADM 121, BIO 106. 3 lecture hours per week. 3 credit hours.

RADM 224 Radiologic Procedures V

This course is a continuation of the concepts, techniques, procedures and critical thinking skills learned in previous radiographic procedures courses. Students will be given an overview of other imaging modalities including: nuclear medicine, Radiation therapy, etc. Additionally they will study the cardiovascular and lymphatic systems, long bone measurement, foreign body localization, female radiography, pediatric radiography, geriatric radiography and trauma radiography. Clinical education, based on clinical competency evaluation, parallels the level of radiographic procedures. Prerequisite: RADM 223. 3 lecture hours per week. 3 credit hours.

RATM • Radiation Therapy

RATM 100 Basics of Radiation Therapy

This course is designed to introduce the student to the history of radiation therapy, to review the theories of radiation protection and to introduce the basic theories and terminology used in radiation therapy. The principles and policies of the program and the professional responsibilities of the radiation therapist will also be discussed and examined. Cultural diversity as it applies to the health care professional and the patient will also be examined and discussed. Fall semester. First year only. 3 lecture hours per week. 3 credit hours.

RATM 102 Radiation Therapy Patient Care

This course is designed to provide the student with foundation concepts and competencies in assessment and evaluation of the patient for service delivery. Psychological and physical needs, factors affecting treatment outcome, routine and emergency care procedures will be presented and examined. Fall semester. First year only. 2 lecture hours per week. 2 credit hours.

RATM 104 Treatment Planning I

This course is designed to review and expand concepts and theories taught in radiation physics, to introduce the simulation process, treatment planning and the relationship between simulation and treatment planning. Concepts covered include: geometric parameters and patient measurements, and the factors involved in dose calculations. Spring semester. First year only. Prerequisite: General Physics. 4 lecture hours per week. 4 credit hours.

RATM 106 Quality Management

This course will focus on the evolution of quality management (QM) programs and continuing quality improvements in radiation oncology. Topics will include the need for quality assurance (QA) checks; QA of the clinical aspects and chart checks; film checks; the various types of evaluations and tests performed on simulators, megavoltage therapy equipment and therapy planning units; the role of radiation therapists in quality management programs; legal and regulatory implications for maintaining appropriate QM guidelines as well as the role of computers and information systems serve within the radiation oncology department. Fall semester. Second year only. 2 lecture hours per week. 2 credit hours.

RATM 112 Neoplastic Diseases I

This course is designed to examine and evaluate the management of neoplastic disease. The epidemiology, etiology, pathology, diagnosis, detection and prognosis of neoplastic disease will be presented, discussed and evaluated. The histology, anatomical site and patterns of spread will also be presented and discussed. The management of neoplastic disease as it relates to the radiation therapist will be presented and discussed as well. This course covers the anatomic region from skin to head and neck neoplasms. Spring semester. First year only. 4 lecture hours per week. 4 credit hours.

RATM 114 Ethics and Law

This course is designed to provide sequential development, application, analysis, integration, synthesis and evaluation of ethical concepts and theories in radiation therapy. Through structured sequential assignments in clinical and lab facilities, concepts of team practice, patient-centered clinical practice and professional development shall be discussed, examined and evaluated. This course will also develop and use problem-solving and critical thinking skills in discussion of the sources of law, causes of action and litigation process as they relate to the professional practice of radiation therapy. Fall semester. First year only. 2 lecture hours per week. 2 credit hours.

RATM 118 Sectional Anatomy

This course is designed to provide the student with the knowledge base and skill set required to become a competent entry-level radiation therapist. The student will study normal sectional anatomy via diagrams and radiologic images. Spring semester. First year only. 3 lecture hours per week. 3 credit hours.

RATM 135 Radiation Biology

This course is designed to present basic concepts and principles of radiation biology. The material covered includes: biophysical events; radiation effects; radiosensitivity and response; and biologic principles of radiation therapy. Fall semester. Second year only. 2 lecture hours per week. 2 credit hours.

RATM 140 Radiation Therapy **Pathology**

This course is designed to introduce basic disease concepts, theories of disease causation and system-by-system pathophysiologic disorders most frequently encountered in clinical practice. Fall semester. Second year only. 2 lecture hours per week. 2 credit hours.

RATM 204 Treatment Planning II

This course is designed to establish factors that influence clinical planning of patient treatment. The concepts covered include: radiobiologic considerations as it relates to treatment planning; compensation and clinical application of treatment beams; treatment techniques and anatomic relationships; patient monitoring systems and documentation of simulation procedures. Summer semester. First year only. Prerequisite: RATM 104. 4 lecture hours per week. 4 credit hours.

RATM 212 Neoplastic Diseases II

This course is a continuation of RATM 112. It is designed to examine and evaluate the management of neoplastic disease. The epidemiology, etiology, diagnosis, detection and prognosis of neoplastic disease will be presented, discussed and evaluated. The histology, anatomical site and patterns of spread will be also be presented and discussed. The management of neoplastic disease as it relates to the radiation therapist will be presented and discussed as well. This course covers regions from CNS to breast, as well as pediatric, AIDS related, benign and emergency neoplasms. Prerequisite: RATM 112. Summer semester. First year only. 4 lecture hours per week. 4 credit hours.

RNTM • Nuclear Medicine

RNTM 101 Medical Terminology

This online course provides the student with a comprehensive study of medical terminology as it pertains to medical imaging. 1 credit hour.

RNTM 102 Health Care Today

This online course is a survey of the current health care delivery system as it pertains to medical imaging and therapeutic sciences. Prerequisites: RNTM 101, RNTM 103, RADM 120. Corequisites: RADM 121, RADM 110. 2 credit hours.

RNTM 103 Introduction to Medical Imaging

This course includes a survey of general principles, techniques and procedures in patient care, ethics and medico-legal. The basics of radiation protection will include comprehensive instruction on the usage of ionizing radiation, the effects and maximum permissible doses for the radiation worker and the public and the proficient and accurate application of all methods of radiation protection. Prerequisites: RNTM 101, ENG 101, MAT 119. Corequisite: RADM 120. 3 lecture hours per week. 4 credit hours.

RSTN • Respiratory Care – UMDNJ

RSTN 2000 Core Concepts in Respiratory Care

An orientation to general patient assessment and examination, to include: infection control, patient safety, interviewing and communication, record keeping, and clinical laboratory studies. Didactic and practical demonstrations will provide the basis for proficiencies practices in the laboratory and then performed during clinical practice. Corequisite: RSTN 2231. Summer Session. 8 lecture hours and 24 laboratory hours. 1 credit hour. This course is only available to students who have been accepted into a UMDNJ program. For the most current course description visit http://coursecatalog.umdnj.edu/

RSTN 2100 Fundamentals of Respiratory Care

An introduction to the basic therapeutic modalities used in respiratory care, to include: medical gas delivery, humidity and aerosol therapy, respiratory pharmacology, bronchial hygiene therapy, lung expansion therapy and emergency life support. Lectures, lab demonstrations and experimentation are integrated with clinical practice. Corequisites: RSTN 2000, RSTN 2231 and RSTN 2189. Summer session. 30 lecture hours and 45 laboratory hours. 4 credit hours. This course is only available to students who have been accepted into a UMDNJ program. For the most current course description visit http://coursecatalog.umdnj.edu/

RSTN 2189 Clinical Practice I

An orientation to the hospital environment and to the basic respiratory care procedures covered in both Core Concepts in Respiratory Care and Fundamentals of Respiratory Care. Clinical instruction and supervised practice are provided in the areas of basic patient assessment, infection control, vital signs, charting, oxygen administration, aerosol/humidity therapy, hyperinflation therapy and bronchial hygiene. Corequisites: RSTN 2000, RSTN 2100 and RSTN 2231. Summer session. 90 clinical hours per semester. 1 credit hour. This course is only available to students who have been accepted into a UMDNJ program. For the most current course description visit http://coursecatalog.umdnj.edu/

RSTN 2200 Cardiopulmonary Pharmacology

An overview of drugs affecting the cardiopulmonary system, including bronchodilators, steroids, antibiotics, skeletal muscle relaxants, central nervous system depressants, respiratory stimulants, diuretics and cardiovascular agents. Prerequisites: To enroll in RSTN 2200 you must have completed the first semester in the UMDNJ-SHRP Respiratory Care Program or have equivalent educational preparation. Corequisites: RSTN 2230 and RSTN 2232. 2 lecture hours per week. 2 credit hours. This course is only available to students who have been accepted into a UMDNJ program. For the most current course description visit http://coursecatalog.umdnj.edu/

RSTN 2230 Cardiopulmonary Evaluation

A lecture and laboratory course on invasive and noninvasive diagnostic and monitoring procedures including roentgenography, electrocardiography, pulmonary function testing, hemodynamic monitoring, arterial blood gas analysis, patient interviewing and physical assessment. Prerequisites: RSTN 2000 and RSTN 2231. Corequisites: RSTN 2200 and RSTN 2232. 15 lecture hours and 45 laboratory hours per semester. 2 credit hours. This course is only available to students who have been accepted into a UMDNJ program. For the most current course description visit http://coursecatalog.umdnj.edu/

RSTN 2231 Applied Cardiopulmonary Pathophysiology I

A study of the anatomy and physiology of the cardiopulmonary system as it relates to respiratory care. Includes basic anatomy of the pulmonary and cardiac system, physiology or circulation, gas exchange, control of respiration and an overview of the pathophysiology and treatment of common disorders of the cardiopulmonary system. Prerequisites: BIO 105 and BIO 106. Corequisites: RSTN 2000. Summer Session. 30 lecture hours. 2 credit hours. This course is only available to students who have been accepted into a UMDNJ program. For the most current course description visit http://coursecatalog.umdnj.edu/

RSTN 2232 Applied Cardiopulmonary Pathophysiology' II

A case-based study of the pathophysiology of common disorders affecting the cardiopulmonary system, that emphasizes diagnosis and treatment in the clinical setting. Prerequisites: BIO 105, BIO 106, RSTN 2000 and RSTN 2231. Corequisites: RSTN 2200 and RSTN 2230. 30 lecture hours per semester. 2 credit hours. This course is only available to students who have been accepted into a UMDNJ program. For the most current course description visit http://coursecatalog.umdnj.edu/

RSTN 2250 Principles of Ventilatory

Lectures, demonstrations, and lab exercises covering the physiologic principles and clinical procedures used to provide both invasive and non-invasive artificial ventilatory support to adults, children and infants. Topics include: respiratory failure, airway management, physics and physiology of ventilatory support, initiating and adjusting ventilatory support, managing and monitoring the patient in respiratory failure, and discontinuing ventilatory support. Prerequisites: Completion of the first semester in the UMDNJ-SHRP Respiratory Care Program or have equivalent educational preparation. Corequisites: RSTN 2200, RSTN 2230, RSTN 2232 and RSTN 2289. 30 lecture hours and 45 laboratory hours per semester. 4 credit hours. This course is only available to students who have been accepted into a UMDNJ program. For the most current course description visit http://coursecatalog.umdnj.edu/

RSTN 2289 Clinical Practice II

This clinical is designed to build on the skills which the student has developed during Clinical Practice I. The student will develop proficiency in skills relating to Fundamentals of Respiratory Care, Core Concepts procedures and Critical Care Rotation. Prerequisites: Completion of the first semester in the UMDNJ-SHRP Respiratory Care Program or have equivalent educational preparation. Corequisites: RSTN 2200, RSTN 2232 and RSTN 2250. 180 clinical hours per semester. 2 credit hours. This course is only available to students who have been accepted into a UMDNJ program. For the most current course description visit http://coursecatalog.umdnj.edu/

RSTN 2340 Patient Management Critical Care

An in-depth study of the clinical management of the cardiopulmonary patient in the critical care setting, emphasizing specialized respiratory assessment, advanced ventilatory management techniques, basic interpretation of the chest film, hemodynamic monitoring, electrocardiograph interpretation, and the effects of cardiopulmonary disorders on the other major body systems. Prerequisites: Completion of the first and second semesters in the UMDNJ-SHRP Respiratory Care Program or have equivalent educational preparation. Corequisites: RSTN 2355, RSTN 2370 and RSTN 2389. 3 credit hours. This course is only available to students who have been accepted into a UMDNJ program. For the most current course description visit http://coursecatalog.umdnj.edu/

RSTN 2355 Pediatric/Neonatal **Respiratory Care**

The course provides an in-depth analysis of pediatric and neonatal disorders requiring respiratory care intervention, including assessment techniques and applicable therapies and protocols. Prerequisites: Completion of the first and second semesters in the UMDNJ-SHRP Respiratory Care Program or have equivalent educational preparation. Corequisites: RSTN 2340, RSTN 2370 and RSTN 2389. 30 lecture hours and 45 laboratory hours per semester. 3 credit hours. This course is only available to students who have been accepted into a UMDNJ program. For the most current course description visit http://coursecatalog.umdnj.edu/

RSTN 2370 Long Term, Home and Rehabilitative Care

An analysis of the goals and methods underlying provision of respiratory care in non-acute settings. Includes standards and regulations governing non-acute respiratory care, team planning, patient selection, program design and provision and documentation of various clinical services in the home and in long-term care and rehabilitation facilities. Includes cost, reimbursement and ethical issues. Prerequisites: RSTN 2000, RSTN 2231, RSTN 2200, RSTN 2230 and RSTN 2289. 45 lecture hours. 3 credit hours. This course is only available to students who have been accepted into a UMDNJ program. For the most current course description visit http://coursecatalog.umdnj.edu/

RSTN 2389 Clinical Practice III

The course provides supervised experience in both acute care and alternative settings, with an emphasis on developing the skills necessary to function independently. Experiences include cardiopulmonary diagnostics, critical care of the adult, infant and child; and longterm, home and rehabilitative care. Prerequisites: Completion of the first and second semesters in the UMDNJ-SHRP Respiratory Care Program or have equivalent educational preparation. Corequisites: RSTN 2340, RSTN 2355 and RSTN 2370. 270 clinical hours. 3 credit hours. This course is only available to students who have been accepted into a UMDNJ program. For the most current course description visit http://coursecatalog.umdnj.edu/

SOC • Sociology

SOC 101 Principles of Sociology

Introduction to foundations of the scientific study of human social life, to theories and methods of sociology, and to such basic concepts as culture, society, social organization, social stratification, and social change. Prerequisites: ENG 088, ENG 098, if required or permission of instructor. 3 lecture hours per week. 3 credit hours.

SOC 102 Social Problems

Analysis of basic social problems, their causes and effects on society at large, deviant behavior and social disorganization as exemplified by mental disorders, crime, drug abuse, sexual deviance, and suicide. Policies to deal with social problems are discussed. Prerequisite: SOC 101. 3 lecture hours per week. 3 credit hours.

SOC 103 (WMS 101) Gender, Culture and Society

Gender, Culture and Society is for students who are interested in the ways that society's expectations of male and female gender roles influence how people act. This course examines how popular culture, biology, history, the media, social institutions, and other factors such as race and class influence the way we experience gender. This course is required for students who plan to major in Women's and Gender Studies, or can be taken as a social science or diversity elective. Prerequisites: ENG 088, ENG 098, ENG 099, if required. 3 lecture hours per week. 3 credit hours.

SOC 203 International Social Problems

This is an intermediate course designed to follow the introductory course in Sociology and to enable the student to view from a theoretical and practical perspective social phenomena which international communities view as deviant or problematic. This course will examine a number of socially relevant topics including, approaches to criminal justice, the educational system, social welfare, and social policy on drugs, alcohol, and health care. Students will examine these and other social problems as they are manifested in international societies compared to how these problems are addressed in the United States. A short fieldwork/travel experience to a country outside of the United States is required for completion of this course. Prerequisite: SOC 101. 3 lecture hours per week. 3 credit hours.

SOC 204 (WMS 201) Women and Social Change

Students will learn about women's roles and lives in different times and cultures; the history of women's movements and activism; and terminology and controversial issues concerning research in the field of women's studies. Women and Social Change is a course either for students who are majoring in Women's Studies, or for those who want a general overview of the academic study of women's issues. Prerequisites: SOC 101 or SOC 103/WMS 101. 3 lecture hours per week. 3 credit hours.

SOC 206 Minorities in American Life

A sociological investigation of the history and present status of minority-majority relations in American society, focusing upon ethnic, racial, and religious minorities. Special attention is given to such issues as the origin of prejudice and discrimination and the tensions and conflicts inherent in inter-group relations. Possible resolutions are discussed. Prerequisite: SOC 101. 3 lecture hours per week. 3 credit hours.

SOC 207 Social Inequality

Social Inequality is an intermediate course in Sociology, which will examine the concepts of race, gender and social class and how they are manifested in social life. A number of socially relevant topics will be discussed including, social class and power, racism, sexism and discrimination. In addition, class-based and gender-based social policy will also be examined. Possible resolutions to these and other issues are also explored. Prerequisite: SOC 101. 3 lecture hours per week. 3 credit hours.

SOC 209 Introduction to Social Policy and Welfare

Introduction to Social Policy and Welfare is an intermediate course in Sociology, which will provide an overview of the development of and social policies for social welfare and assistance in the United States and abroad. A number of socially relevant topics will be discussed including types of social welfare systems, public attitudes about social welfare policies, intersections of race, class and gender in social policy. In addition, there is discussion about the social work profession and private and non-profit sector social agencies. Prerequisite: SOC 101. 3 lecture hours per week. 3 credit hours.

SOC 213 (PSY 213) Social Research Methods

This course explores the application of scientific methods to the study of human behavior and social interaction. The relationship between theory and research is examined. Students develop skills in understanding and using such techniques as case studies, surveys, experiments, participant observation, testing, and basic statistical devices to analyze data. Prerequisites: HUS 101 and PSY 101 or SOC 101. 3 lecture hours per week. 3 credit hours.

SOC 215 Field Work in Sociology

With permission of the department, any student who has successfully completed either PSY 101 or SOC 101, and is enrolled in a psychology, sociology, or education course, or students with exceptional qualifications may elect to engage in field work. The student must attend periodic seminars and/or prepare reports or other projects as required by the department staff. Credit will be based on a minimum of 30 hours in an approved institution for each hour of college credit per semester. This course may be repeated once. 1-3 credits per semester.

SOC 219 (WMS 219) Gender and Work

This course explores the processes of how gender, racial, ethnic, and class relations shape work and perpetuate inequalities. It also offers students an intellectual guide to occupational development and empowers students with strategies for dealing with diversity issues. This course applies the major sociological frameworks to the development of analytical skills that will help students think critically about work in the past, the present, and the future. Gender and Work is designed for students who plan to major in Sociology or in Women's and Gender Studies. It is also taken as a social science or diversity elective. Prerequisite: SOC 101. 3 lecture hours per week. 3 credit hours.

SOC 270 Topics in Sociology

Studies of selected events, issues, or topics in sociology chosen on the basis of timely concerns, community interests, student requests, etc. These courses are of a time or specialized nature and can best be offered not on a regularly scheduled basis, but rather periodically. Individual topics will be announced prior to registration; one, two, or three credits will be offered depending on hours and course format. 1, 2, or 3 credit hours.

SOC 273 Marriage and Family

This course will use sociological perspectives to examine the diversity of families and explore the changing marriage patterns in contemporary society. The goal of the course is to help students develop a sound base for successful marriage and healthy family. Prerequisite: SOC 101. 3 lecture hours per week. 3 credit hours.

SPA • Spanish

SPA 101 Beginning Spanish I

Development of the fundamental skills of understanding, speaking, reading, and writing. Listening practice is available. Not open to native Spanish speakers. Prerequisite: ENG 088. 3 lecture hours per week. 3 credit hours.

SPA 102 Beginning Spanish II

A continuation of SPA 101. Prerequisite: SPA 101 or 2 years high school Spanish with A/B grade; not open to native Spanish speakers. 3 lecture hours per week. 3 credit hours.

SPA 105 Conversational Spanish I

Development of ability to communicate orally in Spanish. The course offers specialized vocabulary for various interest groups such as law enforcement, personnel, business, and health services. Students who wish to take SPA 105 must have completed two years of high school Spanish or SPA 102, or must have the permission of the instructor. Fulfills one semester of the foreign language requirement. Not open to native Spanish speakers. Prerequisite: ENG 088. 3 lecture hours per week. 3 credit hours.

SPA 106 Conversational Spanish II

A continuation of SPA 105. Not open to native Spanish speakers. 3 lecture hours per week. 3 credit hours.

SPA 109 Spanish Grammar and **Composition for Hispanics**

Study of peculiar grammatical and syntactical problems that confront native Spanish speakers. Topics include spelling, accentuation, theme writing. Those who take this course are normally required to complete the language requirement (if any) by taking SPA 121 course or higher. This course fulfills one semester of the foreign language requirement or can be taken for elective credit. 3 lecture hours per week. 3 credit hours.

SPA 111 Intermediate Spanish I

Review of fundamental skills of understanding, speaking, reading, and writing. Not generally open to native Spanish speakers. Prerequisite: SPA 101, SPA 102 or 3 years high school Spanish. 3 lecture hours per week. 3 credit hours.

SPA 112 Intermediate Spanish II

A continuation of SPA 111 or 3 years of high school Spanish; not generally open to native Spanish speakers. 3 lecture hours per week. 3 credit hours.

SPA 115 Spain: Its Culture and its People (Foreign Study)

A comprehensive survey of Spanish culture and civilization including geographical, historical, social, and economic factors. This course is offered in conjunction with a trip to Spain and fulfills one semester of the Spanish Modern Language requirement or may be taken as a free elective. 3 credit hours.

SPA 116 Civilization of Latin **American Countries** (Foreign Study)

An introduction to Hispanic life and civilization. This course is offered in conjunction with a trip to Latin America and fulfills one semester of the Spanish Modern Language requirement or may be taken as a free elective. 3 credit hours.

SPA 121 Advanced Spanish I

Further development of skills in reading, composition and conversation. Prerequisite: SPA 112, or its equivalent. 3 lecture hours per week. 3 credit hours.

SPA 122 Advanced Spanish II

A continuation of SPA 121. Prerequisite: SPA 121. 3 lecture hours per week. 3 credit hours.

TRN • Translating

TRN 101 Introduction to Translating

A general, introductory course that covers the theoretical and practical aspects of translating written text from one written language into another. Students learn what skills and knowledge are needed to become professional translators. They perform translations on a variety of documents. The emphasis is on translation into written English from any other written language although practice and feedback are given in the opposite direction as well. Prerequisites: Completion of all developmental English and ESL requirements of the College. This is an online course. 3 lecture hours per week. 3 credit hours.

UCC • Interdisciplinary Studies

UCC 101 First Year Seminar

This course is designed to help students adjust to college by giving them the information, support and strategies they need to feel secure in their college classes. It will help students clarify their goals, become familiar with the academic environment, and sharpen their ability to learn and think critically. Permission of program coordinator required for online sections. Prerequisite: ENG 087. 2 lecture hours per week. 2 credit hours.

UPR • Psychosocial Rehabilitation

UPR 101 Introduction to the Principles of Psychosocial Rehabilitation

Enables students to identify the methods by which individuals with severe mental illness are helped in psychosocial rehabilitation and treatment settings. Classroom lectures and seminars provide students with opportunities to explore concepts unique to psychosocial rehabilitation, including history, philosophy and values of psychosocial rehabilitation. 3 lecture hours per week. 3 credit hours.

URS • Urban Studies

URS 101 Introduction to Urban Studies

The course examines the variety of issues faced by the nation's cities. It explores the historical development of the city, the city-suburban relationship, regional patterns, and recent developments which impact on the cities, as well as those institutions and processes which particularly affect the nation's cities. Prerequisites: ENG 088, ENG 098 or permission of instructor or Department Chair. 3 lecture hours per week. 3 credit hours.

URS 201 Seminar and Field Work in Urban Affairs

The core requirement of this course is that the student undertake a first-hand study and analysis of an urban (or suburban) problem, applying the theory and knowledge gleaned from preceding courses in this discipline. Selection of the problem and establishment of the necessary community relationships are to be made by the student with the guidance of the instructor. Format for the course is tutorial, concerning the student's independent research and seminar, his periodic reports and sharing of experiences with the members of the class. The expertise of all departments of the College is to be made available to the student as needed. Prerequisites: ENG 089, ENG 099, URS 101 or permission of instructor or Department Chair. 3 class hours per week and 45 hours of field work during the semester. 4 credit hours.

WDW • Walt Disney World

WDW 297 Internship I

This course provides an internship at Walt Disney World (WDW) in Orlando, Florida for one semester. Students must submit weekly journals and a final paper electronically to the WDW instructor/coordinator at Union County College. At the time of the required interview with Disney representatives, students must have a minimum GPA of 2.0. The student is responsible for transportation to and from Florida, Students receive an hourly wage. They are housed on Disney property; housing costs are deducted from their weekly paycheck. Students must register for this course prior to the internship. Students may not register for Internship I and any UCC co-op experience class or Internship II during the same semester. Prerequisite: 2.0 GPA. 3 credit hours.

WDW 299 Internship II

This course provides an internship at Walt Disney World (WDW) in Orlando, Florida for one semester. Students must submit weekly journals and a final paper electronically to the WDW instructor/coordinator at Union County College. Students must also participate in a minimum of two Disney workshops. At the time of the required interview with Disney representatives, students must have a minimum GPA of 2.0. The student is responsible for transportation to and from Florida. Students receive an hourly wage. They are housed on Disney property; housing costs are deducted from their weekly paycheck. Students must register for this course prior to the internship. Students may not register for internship and any UCC coop experience class or Internship I during the same semester. Prerequisite: 2.0 GPA. 6 credit hours.

WMS • Women's Studies

WMS 101 (SOC 103) Gender, Culture and Society

Gender, Culture and Society is for students who are interested in the ways that society's expectations of male and female gender roles influence how people act. This course examines how popular culture, biology, history, the media, social institutions, and other factors such as race and class influence the way we experience gender. This course is required for students who plan to major in Women's and Gender Studies, or can be taken as a social science or diversity elective. Prerequisites: ENG 088, ENG 098, ENG 099, if required. 3 lecture hours per week. 3 credit hours.

WMS 118 (BIO 118) Introduction to the Biology of Women

This course will present aspects of basic human biology that are unique to the female. This course will emphasize the female lifespan including sex cell formation, menopause, and aging. Topics relevant to women's health will also be discussed. 3 lecture and 3 laboratory hours per week. 4 credit hours.

WMS 201 (SOC 204) Women and Social Change

Students will learn about women's roles and lives in different times and cultures; the history of women's movements and activism; and terminology and controversial issues concerning research in the field of women's studies. Women and Social Change is a course either for students who are majoring in Women's Studies, or for those who want a general overview of the academic study of women's issues. Prerequisites: SOC 101 or SOC 103/WMS 101. 3 lecture hours per week. 3 credit hours.

WMS 215 (GOV 215) Women and American Politics

Through an examination of our nation's history and current events, the students will come to understand the relationship between gender and politics. The course will examine the roles played by women in our democracy and how they affected the American experience. The distinction between men and women in the political context continues despite the gains women have made in this area. Prerequisite: GOV 201 or GOV 202. 3 credit hours.

WMS 216 (GOV 216) Women and the Justice System

The laws of any society are a codification of contemporary values and beliefs. The students will examine legal history and the changing roles of women in society. This includes an examination of the daily challenges women face and the treatment women receive once they have become involved in the justice system (both civil and criminal). It is designed to explore Constitutional, familial, educational, employment and criminal issues. Prerequisites: GOV 201 or GOV 202. 3 lecture hours per week. 3 credit hours.

WMS 218 (PSY 218) Psychology of Women

This course is designed to provide the student with up-to-date information on the Psychology of Women, the history of the field, and a view of the major theories of psychology from a genderfocused perspective. Instruction in research methods and critical thinking skills will enable the student to take a fresh look at issues such as women and the media, women and health (physical and mental), women and relationships and the diverse experiences of women from different backgrounds, all from a psychological viewpoint. Prerequisite: PSY 101. 3 lecture hours per week. 3 credit hours.

WMS 219 (SOC 219) Gender and Work

This course explores the processes of how gender, racial, ethnic, and class relations shape work and perpetuate inequalities. It also offers students an intellectual guide to occupational development and empowers students with strategies for dealing with diversity issues. This course applies the major sociological frameworks to the development of analytical skills that will help students think critically about work in the past, the present, and the future. Gender and Work is designed for students who plan to major in Sociology or in Women's and Gender Studies. It is also taken as a social science or diversity elective. Prerequisites: SOC 101. 3 lecutre hours per week. 3 credit hours.

WMS 230 (MAT 230) Women in Mathematics and Science

This course will focus on the contributions of women to the disciplines of mathematics and science, with both historical and contemporary references, building on students' knowledge base from other Women's/Gender Studies and General Education courses - especially Mathematics and Science. Discussions will emphasize the obstacles encountered in entering these fields as a result of gender issues, as well as the impact these women have had upon their fields and society as a whole. Current trends in education and employment for women in the fields of mathematics and science will be explored. Course structure will combine a mix of lectures, discussion, group work, films, and guest speakers. Prerequisite: MAT 119 or higher (advisement required). 3 lecture hours per week. 3 credits hours.

WMS 245 (ENG 245) Women in Literature

A study of major female characters (by both male and female authors) in literature from ancient times to the modern period. The main emphasis is on examination of the changing role of the female through the ages as reflected in literature. Consideration will be given to historical feminist articles in an effort to understand the changing roles of the woman in society. Prerequisites: ENG 102 or ENG 122. 3 lecture hours per week. 3 credits hours.

WMS 247 (ENG 247) Women Authors

A study of major female authors, emphasizing the historical and literary development of female literacy and authorship in British and American poetry (but not limited to the English-speaking world), drama, fiction, and non-fiction. Prerequisites: ENG 102 or ENG 122. 3 lecture hours per week. 3 credit hours.



About Union County College

Union County College is a public comprehensive community college and is a member of New Jersey's system of nineteen county colleges. It is the oldest continuously operated 2-year college in the State of New Jersey. The College operates major campuses in Cranford, Elizabeth, Plainfield and Scotch Plains. It enrolls almost 35,000 credit, noncredit, and continuing education students and is accredited by the Commission on Higher Education of the Middle States Association of Colleges and Schools.

Many programs lead to the Associate in Arts and the Associate in Science degrees. Students who satisfactorily complete these twoyear programs may transfer to four-year institutions for their junior and senior years. Many programs lead to the Associate in Applied Science degree, the Certificate or the Diploma, after which students may choose to conclude their formal education and seek employment in their fields of study immediately after graduation. Union County College confers the Associate in Science degree upon graduates of Trinitas School of Nursing, Elizabeth, N.J., and Muhlenberg Regional Medical Center Harold B. and Dorothy A. Snyder Schools, Plainfield, N.J.

History

Union County College (previously known as Union County Junior College, Union Junior College and Union College) traces its founding to the opening of Union County Junior College on October 16, 1933 in Abraham Clark High School, Roselle, N.J., with an enrollment of 173 evening students. It was the

first of six Emergency Relief Administration projects in New Jersey. When federal aid was terminated in 1936, the College became an independent, non-profit institution governed by a Board of Trustees composed of educational, professional, and business leaders in the community. A day session was added in 1942 and the College moved into its own building in Cranford a year later. In 1971, Union College entered into contracts with Elizabeth General Medical Center (now Trinitas Hospital) in Elizabeth and Muhlenberg Regional Medical Center in Plainfield to jointly conduct Cooperative Programs in Professional Nursing.

From 1969 to 1982, Union College, then a two-year, independently-governed college, and Union County Technical Institute in Scotch Plains, New Jersey, provided college-level programs for Union County in lieu of a county college under contracts with the Union County Coordinating Agency for Higher Education. The College's current structure as a publiclygoverned institution was established by state statute on August 17, 1982. As a result, Union College and Union County Technical Institute were consolidated and became Union County College. The College and the University of Medicine and Dentistry of New Jersey opened the Regional Health Education Center in the Health Technologies Building at the Scotch Plains Campus in 1994 to jointly offer programs in the health professions. In 1999, UMDNJ designated the jointly operated site as its fifth campus in the state.

The College moved to its current 48-acre campus in Cranford in 1959. It was enhanced in 1991 with the opening of what is now the Victor M. Richel Student Commons and with





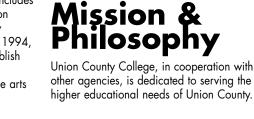
pletely renovated to become full-service campuses. Several years later, the Plainfield campus was expanded to include an annex that houses instructional space for Emergency Medical Technician/Paramedic training and a state-of-the-art laboratory for American Sign Language and Deaf Studies. Currently underway in Elizabeth is the construction of a new building, which will expand that campus by 132,500 square feet.

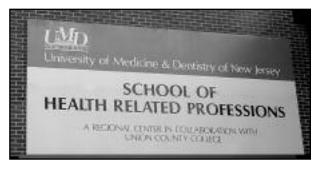
an addition to its Campus Center that includes a Fitness Center and Executive Education Center. The Kenneth Campbell MacKay Library was originally built in 1973. In 1994, its lower level was reconfigured to establish the Center for Visual Arts and Communications. The Center houses fine arts studios, a photography studio,

multi-media laboratory, radio station and a state-of-the-art television studio. In 2006, the Library itself was totally renovated and a third floor of instructional space was added

The College's presence in the major urban centers of the County was first established in 1970, when Union College opened two urban campuses in leased facilities in Elizabeth and Plainfield. In 1975 the College

opened an Institute for Intensive English in Elizabeth, providing intensive English instruction for speakers of other languages. The Institute is now one of the largest providers of English as a Second Language (ESL) instruction in the State of New Jersey. In 1992, in a continuation and expansion of its commitment to these urban centers, UCC opened major branch campuses in both cities. An eight-story office building in Elizabeth and a three-level facility in Plainfield were purchased and com-





The College has an open admissions policy for both transfer and career programs and is dedicated to the fundamental values of public higher education. The oldest two-year, continuously operating, non-profit, degree-granting institution in New Jersey (1933), Union County College provides opportunities for higher education for people of diverse ethnic, racial, cultural, educational and socioeconomic backgrounds in a multi-campus setting. The College has four campuses which are located

> in Cranford, Elizabeth, Plainfield and Scotch Plains. The Scotch Plains campus is operated in collaboration with the University of Medicine and Dentistry of New Jersey.

The College strives to promote in students a sense of responsibility for their own development and an understanding of their obligations as members of a democratic society. The College fosters in students the desire to learn, the ability to think clearly and express themselves effectively, the habit of analytical and reflective thought, and an awareness of themselves, their heritage, other cultures, and their environment.





THE COLLEGE SEEKS TO PROVIDE:

- the highest quality transfer education through comprehensive curricula and the use of the most current technology, allowing for transfer to four-year colleges and univer-
- the highest quality technical and career-oriented education through selected degree and certificate programs which use the most current technology, preparing students for immediate entry into a career;
- innovative student-centered teaching and support services to foster students' personal and social development;
- continuing and community education programs and courses in varied schedules, at varied locations, and with varied modes of instruction for credit or without;
- developmental studies, particularly in writing, reading and mathematics, to prepare students for college-level programs and courses and to increase their literacy;
- academic advising, career/employment services, transfer services, counseling services, tutoring services, and an array of extra and co-curricular activities;
- · customized training and retraining for business and industry;
- workforce education programs for persons displaced from their jobs or unemployed.

GOALS & OBJECTIVES:

Provide a series of relevant general education courses for all students.

Objectives insure that general education courses enable students to develop:

- · critical thinking and problem solving
- effective communication skills
- values and ethical standards
- the ability to use modern technology
- the ability to become self-directed learners
- an awareness of and concern about the ethical implications of institutional policies and individual practices
- an expanded awareness of their rights and responsibilities as citizens of a world community
- the ability to understand, communicate with, respect, and live harmoniously in a diverse society
- an understanding of themselves their abilities, interests, and personalities
- an awareness of the diverse forces that shape their world and themselves in order to keep pace with the changing society

Provide transfer programs and courses for students who want to continue their education at four-year institutions.

Objectives

- meet the specific needs of transfer students
- ensure the academic standards for transfer are reviewed and maintained through the offering of a range of technical and professional programs
- continue to add to the existing articulation and dual admissions agreements with four-year institutions both within and outside the state
- maintain an open avenue of communication among faculty, counselors, and administrators at the institutions involved

Provide career programs to prepare students to function in a technologically and socially changing world.

Objectives

- offer a range of technical and professional programs in the business, engineering, and health technology fields
- evaluate and update curricula, programs, and courses in response to workforce needs
- accommodate the diverse needs of students entering the workforce, seeking to advance further in their careers, or retraining for new jobs

Provide developmental courses for students who need to prepare for college-level credit courses.

Objectives

- develop necessary oral, reading, writing, and mathematical skills emphasizing process and concepts
- help students develop effective learning strategies
- facilitate the transition from developmental to regular college credit courses
- provide academic advising and placement

Goal

Provide professional development programs to ensure excellence in teaching-learning processes.

Objectives

- develop in-service programs which explore and implement new pedagogy and technology
- provide a wide variety of professional development programs supporting individual, departmental, and collegewide professional development
- provide faculty with access, support, and training in computer-mediated instruction
- train faculty in the development and implementation of distance learning courses

Goal VI

Provide support services for all students. Objectives

- provide orientation for students and their families
- provide academic, career, and personal intervention counseling
- provide activities that promote personal and social growth and development such as multi-cultural activities, wellness programs, and athletics
- explore new ways to assist students in financial need who do not qualify for established programs
- provide job placement services as required

Goal VII

Provide college services and resources to accommodate a diverse student population.

Objectives

- provide delivery systems to reach populations, including distance learning courses and non-traditional course offerings
- provide courses in the English language and American culture to students whose first language is not English
- provide scheduling patterns responsive to the needs of working students
- expand articulation with high schools through faculty collaboration, college credit in high school, summer programs, and early identification of potential college candidates
- provide appropriate accommodations and accessibility to students with physical and learning disabilities
- effectively communicate the services of the College throughout the county
- provide peer, paraprofessional and professional tutoring and computer-assisted instruction through the College's Academic Learning Centers

Goal VIII

Provide opportunities for life-long learning and personal enrichment.

Objectives

- use community-based physical, financial, and human resources available to complement those within the College
- provide educational, cultural, and recreational activities for the Union County College community
- provide technological education

Goal IX

Develop workforce development programs through alliances with hospitals, universities, business, industry, and professional and governmental groups to meet the changing workforce requirements.

Objectives

- provide courses and programs that are responsive to the needs of business, industry, and professional and governmental groups through the Center for Economic and Workforce Development (CEWD)
- provide career assessment and educational opportunities through the Center for Economic and Workforce Development (CEWD) for persons displaced from their jobs, unemployed or underemployed
- actively participate in the economic planning and development of the county
- encourage faculty and staff to take active roles in various local and national community, service, business, and professional organizations
- provide active program advisory committees for technical programs
- collaborate with hospitals, universities, business, and industry in order to provide comprehensive programs
- provide externships and work study programs when appropriate
- provide instruction in English as a Second Language (ESL), civics, literacy, and General Education Development (GED) preparation

Goal X

Serve as a cultural center for the community and surrounding areas.

Objectives

- provide an annual series of theatrical proarams
- provide an annual series of art exhibitions
- provide a program of intercultural exchange including musical performances, lectures, literary publications and readings



Goal XI

Enhance teaching and learning through the use of instructional technology.

Objectives

- incorporate whole class multi-media presentation methodologies into classroom instruction on all campuses
- integrate web-based activities into the college curricula
- provide specialized hardware and software in dedicated laboratories and classrooms to meet curricular needs
- provide the required institutional support and access to students, instructors, and staff to realize the full potential advantages of technology

Goal XII

Offer distance learning courses and programs.

Objectives

- provide courses and programs utilizing a variety of media such as telecourses, Campus Web, wireless, and webbased/online
- provide faculty support and training for the development and delivery of distance education courses and programs
- provide web-based academic and nonacademic student support services for distance learners
- foster collaborations with educational institutions and other organizations to better serve distance education students

Goal XIII

Provide the Union County College community with state-of-the-art information resources and services in facilities designed to foster intellectual, technical, and vocational growth.

Objectives

- develop library collections sensitive to and reflective of a diverse curricular and student body
- provide access to information in changing and emerging formats
- provide a program of information literacyacross-the-curriculum that teaches students how to access, evaluate and use information in the classroom and throughout their lives
- provide a comfortable library atmosphere and facilities that stimulate the learning process

- develop resources and services to support the needs of remote users
- develop in students an appreciation for the value of the library as an educational and life resource

Goal XIV

Increase the diversity of the College faculty, staff, and administration.

Objectives

- assess progress toward meeting these goals on a monthly basis
- achieve the goals contained in the affirmative action plan by the dates indicated

Goal XV

Provide sufficient resources, both public and private, to implement the preceding goals.

Objectives

- continue to seek funds from appropriate Federal, State and County agencies
- continue to seek funds from individuals and private sources
- continue to operate in a cost effective manner
- continue to seek funds for scholarship assistance to students and for faculty grants

Accreditation

Union County College is accredited by the Middle States Commission on Higher Education, 3624 Market Street, Philadelphia, PA 19104, (267) 284-5000. The Middle States Commission on Higher Education is an institutional accrediting agency recognized by the U.S. Secretary of Education and the Council on Higher Education Accreditation. The former Union College was accredited by and admitted to membership in the Association in 1957. Its accreditation was reaffirmed in 1967, 1973, 1982, 1986, 1997, and again in 2002 as Union County College.

Union County College was granted the authority by the State of New Jersey in April 1982, to confer the degree of Associate in Arts, Associate in Science, and Associate in Applied Science and to award the certificate and the diploma. Union College had held the authority to confer the Associate in Arts degree since 1953, and the Associate in Science and Associate in Applied Science degree since 1969.

Union County College is licensed by the State of New Jersey. Union College had been licensed since 1939.

The following programs hold professional accreditation:

- radiography and radiation therapy (Joint Review Committee on Education in Radiologic Technology, conducted jointly with Muhlenberg Regional Medical Center);
- physical therapist assistant (American Physical Therapy Association, Commission on Accreditation in Physical Therapy Education);
- respiratory care (Commission on Accreditation of Allied Health Programs, in collaboration with the Committee on Accreditation for Respiratory Care), conducted jointly with the University of Medicine and Dentistry of New Jersey (UMDNJ);
- professional nursing (National League for Nursing Accrediting Commission, Inc., conducted jointly with Muhlenberg Regional Medical Center and Trinitas Hospital);
- practical nursing (accredited through the New Jersey Board of Nursing and the National League for Nursing Accreditation Commission);
- dental assisting (Commission on Dental Accreditation of the American Dental Association, conducted jointly with UMDNJ);
- dental hygiene (Commission on Dental Accreditation of the American Dental Association, conducted jointly with UMDNJ); and
- nuclear medicine technology (Joint Review Committee on Educational Programs in Nuclear Medicine Technology, conducted jointly with Muhlenberg Regional Medical Center).

These organizations are specialized accrediting agencies recognized by the U.S. Secretary of Education and/or the Council on Higher Education Accreditation.

Campus Locations

Union County College operates major campuses in Cranford, Elizabeth, Plainfield, and Scotch Plains, N.J.

The College's main offices are on the 48-acre Cranford Campus at 1033 Springfield Avenue, Cranford, N.J. Cranford is located near major highways, including the Garden State Parkway, Routes 1-9, 22, 27, 28, and 78 and is accessible to a wide area of north central New Jersey. Bus Route 58, serving Elizabeth, Roselle Park and Kenilworth, and Bus Route 66, serving Hillside, Union and Springfield, terminate at the Cranford Campus. Bus and



rail transportation is available to downtown Cranford.

The Elizabeth Campus is located at 12 West Jersey Street, in the eight-story Sidney F. Lessner Building within the city's major business district. Extensive bus and rail service is available within a half block of the Campus.

The Plainfield Campus is located at 232 East Second Street, Plainfield, in a three-story building. Bus and rail transportation is available within two blocks of the Campus.

The College conducts cooperative programs in professional nursing with Trinitas School of Nursing located on UCC's Elizabeth campus and Muhlenberg Regional Medical Center Harold B. and Dorothy A. Snyder Schools on Park Avenue and Randolph Road, Plainfield, N.J.

In addition, the College operates a Regional Health Education Center at its Scotch Plains Campus jointly with the University of Medicine and Dentistry of New Jersey. The campus, located at 1776 Raritan Road, Scotch Plains, N.J., is accessible via the Garden State Parkway and Route 22.

Facilities



Cranford Campus

There are eight major buildings on the Cranford Campus: the Kenneth Campbell MacKay Library which also houses the Tomasulo Art Gallery, Academic Learning Center, and the Center for Visual Arts and Communication; the Humanities, Science and

Nomahegan Buildings with classrooms, lecture halls, seminar rooms, science and computing laboratories, counseling and faculty offices, lounges, cafeteria and student and faculty dining rooms; the Campus Center with the Roy W. Smith Theater, gymnasium, Fitness Center, Executive Education Center, other facilities for student activities, and bookstore; The Victor M. Richel Commons, a

student life/student lounge facility, featuring an atrium and multilevel floor providing a variety of lounge and meeting spaces; James R. MacDonald Hall, which contains administrative offices; and the William Miller Sperry Observatory.

Elizabeth Campus

The entire Elizabeth Campus is housed in the eight-story, 100,000 sq. ft. Sidney F. Lessner Building at 12 West Jersey Street, Elizabeth. It provides classrooms, theater, lecture hall, seminar and conference rooms, allied health, computer and science laboratories, Kellogg Library and Academic Learning Center,



faculty and administrative offices, faculty and student lounges, dining room, and bookstore. Construction of an additional 132,500 sq. ft. building is underway. It is located just west of the Lessner Building and will be named the Elizabeth I Kellogg Building

ainfield Campus



The Plainfield Campus is comprised of most of a city block between East Second and East Third Streets and Church Street and Roosevelt Avenue. The three-story, 28,000 sq. ft. building contains classrooms, lecture hall, allied health, computing and science laboratories,

seminar and conference rooms, Library and Academic Learning Center, faculty and administrative offices. An adjacent building on the site houses instructional space for Emergency Medical Technician/Paramedic training and a state-of-the-art laboratory for American Sign Language and Deaf Studies, a student lounge, faculty offices, bookstore, and cafeteria.

Scotch Plains Campus

The College shares a 40-acre campus in Scotch Plains with the Union County Vocational-Technical Schools and the John H. Stamler Police Academy. The College and the University of Medicine and Dentistry of New Jersey jointly operate the Regional Health Education Center in the College's 65,000 sq. ft. Health Technologies Building,

which has also been designated as the fifth campus of UMDNJ. It provides classrooms, lecture hall. seminar and conference rooms, allied health and science laboratories, library, faculty and administrative offices, dining room and Campus Center.



Admissions

Admission to Union County College is open to all high school graduates, those holding high school equivalency certificates, or those persons eighteen years of age or older.

Application Procedure

Applicants must complete the UCC Application for Admission. It can be obtained from the Office of Admissions at the Cranford, Elizabeth or Plainfield Campuses or through the UCC website, www.ucc.edu (online e-services). Candidates for admission to the Fall Semester are urged to apply before August 1 and candidates applying for the Spring Semester are encouraged to do so prior to January 1. Nursing and Allied Health program applicants are urged to apply as early as possible, because enrollment is limited and application deadlines may vary (check with program department). The University of Medicine and Dentistry of New Jersey (UCC/UMDNJ), joint health professions program application inquiries can be made to the UMDNI/UCC Regional Health Education Center on the Scotch Plains Campus or directly to Union County College, Cranford, Elizabeth or Plainfield campuses. Applicants seeking information and counseling may email, send an instant message (IM) or come to any campus Admissions Office to speak to a member of the admissions staff. (check www.ucc.edu for IM addresses).

Applicants with a disability are urged to seek an interview with the Coordinator of Services for Students with Disabilities. The Coordinator is located in Counseling Services, on the Cranford Campus.

Scholastic Aptitude Test (SAT)

It is recommended that applicants to all degree programs take the Scholastic Aptitude Test (SAT). While this test is not required for degree or certificate candidates, it is strongly recommended for students who plan to transfer to four-year institutions. SAT scores may be required to qualify for selected scholarships at Union County College and may exempt students from the Basic Skills Test if they meet the minimum score required. (See Placement Testing) It is the responsibility of those applicants who plan to take the SAT to register for the examination and to have scores reported directly to Union County College. Union County College CEEB Code is 2921. A student should consult his or her guidance counselor, or write directly to the College Entrance Examination Board, Box 592, Princeton, New Jersey 08540 to register for the SAT.

Bridge Program

High school juniors and seniors may apply for the Bridge Program to earn college credits with the permission of their high school counselor and guardian. Union County College requires Bridge students to have a 'B' high school average. Basic Skills Testing is required and students must be exempt from remedial courses to be eligible for the Bridge Program. Acceptable SAT scores (see Placement Testing) will exempt students from the Basic Skills Test. Bridge Program applications are available in the high school guidance offices or the Admission Office on any campus. Students will be required to file an Application for Admission with the application fee and follow the College's procedure on placement testing for admission.

Dual/Joint Admissions Agreements

Union County College students who complete their Associate degrees in designated programs and who fulfill all the necessary criteria of the dual admission program will be guaranteed admission as juniors to their choice of several undergraduate colleges/universities with which Union County College has agreements. For more detailed information on Dual Admissions and other transfer opportunities see page 211.

Placement Testing

After admission to the College and before enrolling for classes, placement testing is mandatory to evaluate certain academic skills, such as basic preparation in English and Mathematics. The results of the test will not affect admission to the College, but may indicate the need for required preparatory courses during the student's first semester. Students whose native language is not English must take an English for Speakers of Other Languages test in lieu of the College Placement Test. This service assists the student in the transition from high school to college. A major goal of this testing is the recognition and remedy of weakness in reading, writing and mathematics.

Union County College requires that the following students take the test:

- (A) Full-time and part-time freshmen entering Union County College.
- (B) Students who have not already taken the test, but who register for a course that would result in the accumulation of 12 or more credits.
- (C) Full-time and part-time transfer students who have received Union County College transfer credit for one semester of college English (for example, ENG 101) must take the reading part of the College Placement Test unless there is evidence of college level reading proficiency.
- (D) All transfer students must demonstrate proficiency in basic skills math through old approved test scores or satisfactory completion of developmental courses in arithmetic and elementary algebra to receive exemption from the math part of the College Placement Test. Students without math proficiency proof, but with transfer credit for one semester of college English, must take the math part of the College Placement Test. A student who has DECLARED a UCC program of study which requires the study of mathematics for college credit (for example, Engineering, Business, Biology), must have completed a college-level math course for exemption from the math part of the College Placement Test.
- (E) Incoming students who present SAT scores of at least 500 on the Verbal and 470 in Math will be exempt from the College Placement Test (scores required for waivers are subject to change). As the College Board recommends, the College will use the score from the writing section separately. Developmental writing will be waived for those who score 500 on the SAT Writing.

However, the College may require additional categories of students to be tested. The college will deny registration to stu-

dents who refuse to take the placement test without an appropriate waiver.

Students whose test results show a need for special course work in reading, writing and mathematics will be required to enroll in those courses. Students whose English skills are weak because English is not their native language are required to take English for Speakers of other Languages training before they can be enrolled in credit or non-credit bearing courses. When testing establishes the need for such training, students must take the prescribed work before they can be enrolled in credit work. The College reserves the right to deny registration to such students if they refuse to follow these requirements. Students who have taken an approved College Placement Test within the last two years at another New Jersey institution are required to present evidence of their scores, if they wish to be exempted from testing. A retest in reading and math only is available for students on a one-time basis if their score is close to the proficiency standard.

Basic Skills Policies

- 1. Full and part-time students who are required to take the College's institutional credit remedial/developmental or ESL courses must start these courses during their first semester of enrollment and continue in subsequent semesters until finishing the requirement. The part-time person may follow a priority policy where introductory Reading or Language Arts (ENG 087/088/089) is required before Introductory Writing (ENG 098/099) when there are two required English courses. Introductory Mathematics Concepts and/or Introductory Algebra (MAT 011/015-016/022) would be required after Introductory Writing (ENG 098-099) if mandatory courses in Mathematics are part of the multiple remedial/developmental needs of a student.
- 2. Full and part-time students who have given their program of study as undecided will change their program to a College program after completing no more than twelve degree credits or have their program changed by the College to Liberal Studies.
- 3. All students who apply for admissions to one of the affiliated hospital programs must follow the basic skills policies of the school which they will attend even when they are different from Union County College policies.
- 4. The "Description of Courses" section of this catalog details prerequisite and corequisite course requirements for students who are required to take the College's institutional credit remedial/developmental or ESL courses. Department chairpersons may waive specific pre-requisites/co-requisites in special cases.

Immunization Requirement

The State of New Jersey requires all full-time students born after December 31, 1956 to be immunized against measles, mumps, Rubella and Hepatitis B, or prove that they meet one of the exemption requirements. Students must bring a copy of a certificate from a doctor or medical center showing proof of inoculations to the Admissions Office on the Cranford, Elizabeth or Plainfield campus.

Qualifications for

Degree Programs

A student's eligibility for admission to a particular degree program is based on one or more of the following:

- 1. Official high school diploma/G.E.D.
- 2. Previous college record, if applicable.

Candidates may apply to Union County College as full-time students (12 or more credit hours per semester) or as half time (6-11 credit hours) or as less than half time or part-time students (1-5 credit hours each semester/ session) and may attend classes during the day, in the evening, on the weekend or all, as available Candidates for programs leading to an Associate degree are advised to complete 19 units of high school credit distributed as follows:

English 4 units Lab Science*** 2 units Mathematics* 3 units History 3 units Foreign Language** 2 units Electives * * * * 5 units

- *Candidates for the engineering and physical science programs must include elementary and intermediate algebra, plane geometry and trigonometry. Business majors are encouraged to present Algebra I, Geometry and Algebra II.
- **Optional for students entering programs other than liberal arts.
- ***Engineering and physical science students should include physics and chemistry; health technologies students include biology and chemistry.
- ****Chosen from foreign languages, social studies, science or mathematics. If a student does not have these high school units, non-credit prerequisite courses offered by the College may be required by the selected program of study.

Admissions requirements for health technology students in addition to the general high school units recommended for a degree program are:

- 1. Applicants will be accepted only if program requirements are met. (No students will be permitted to register for professional courses unless basic skills and core prerequisites courses have been completed).
- 2. All students are urged to have an interview with the program coordinator or designee prior to acceptance into the program.
- 3. Students admitted into the following programs must meet additional criteria for admission into the professional courses in these programs. Continuous enrollment in these programs is, therefore, not guaranteed. These programs are Practical Nursing, Health Technology, Nursing, and Cooperative Programs with the University of Medicine and Dentistry of New Jersey (UMDNJ).
- 4. Admission to the Physical Therapist Assistant Program (PHTA) is based on a competitive admissions process. All prerequisite course work is to be completed prior to admission to the PHTA Program.
- 5. Admission to joint programs with the University of Medicine and Dentistry of New Jersey (UMDNJ) are competitive and determined by a selection process based on admission prerequisites, core courses completion at UCC and grade point average. Students apply to Union County College (UCC) with a Union County College application for admission. Students accepted to UCC/UMDNJ programs must meet all requirements of the University of Medicine and Dentistry of New Jersey in addition to Union County College requirements.
- 6. Students who fail to maintain continuous enrollment from fall to spring and spring to fall semesters are not guaranteed continued enrollment in any given program.

Certificate-Diploma Programs

A student's eligibility for admission to a certificate or diploma program is determined on the basis of:

- 1. High school diploma/G.E.D.;
- 2. Previous college record and/or work experience, where appropriate. Certificate and diploma candidates in the health technology programs should have a background in biology and chemistry and, if applicable, SAT scores;
- 3. Credits transferred towards a certificate/diploma may not exceed half the total program credits.

Ability to Benefit

Students who lack a high school diploma or equivalent and are seeking federal student aid support must prove their "Ability to Benefit" from a postsecondary program of study. To determine the Ability to Benefit, students must take the Computerized Placement Test Accuplacer™ through the Union County College Assessment Center. Students must submit scores to the Financial Aid Office on the Cranford campus for review and approval.

Classification of Students

Matriculated Students - Students who wish to enroll in a specific program of study for degree credit or certificate/diploma credit on a full-time or part-time basis are matriculated students. Official high school and college transcripts may be required.

Non-Matriculated Student - Students who are not enrolled in a specific program are non-matriculated. Credits earned as a nonmatriculated student may be applied toward a degree. At the time a student applies for matriculation, all academic credentials must be submitted. Matriculation forms are available in the Admissions Offices on all campuses.

To be eligible for financial aid, students must be matriculated.

Enrollment Status

Students enrolled for 12 or more credits are considered full-time, 6 to 11 credits half-time, and 1 to 5 credits less than half time or parttime. Verification of enrollment must be requested in writing to the Registrar's Office and are done weekly on all campuses.

Class Standing

Students with fewer than 30 credits are considered in freshman standing; with 30 credits or over, students are considered to be in sophomore standing.

Special Admission Categories

Advanced Degrees/College Graduates - A copy of the applicant's official transcript may be required if the student plans to pursue a degree and/or request transfer credit at Union County College.

Students producing evidence of earning postsecondary degrees from accredited U.S. institutions and international transcripts which have been translated to English by a certified agency will be considered for advanced standing placement or transfer credit evaluation if requested. Applicants holding degrees equivalent to or at advanced levels from those offered at Union County College will be reviewed under the same criteria. However, they may not matriculate in a related program for which they currently hold an approved degree. Those with a baccalaureate degree must take all core courses in the program of interest for the Associate degree. Those without a baccalaureate degree must satisfy standard policy for transfer students regarding the total number of credits taken at Union County College to be eligible for the Associate degree.

Senior Citizens - New Jersey residents 65 years of age or over may attend Union County College on a space-available basis without payment of any tuition charges. They must register on the last day of registration. Senior citizens are required to pay registration and general fees where applicable. Senior students who register for courses prior to the designated date or who qualify for financial aid MAY NOT apply for special tuition allowances.

Veterans - Veterans are encouraged to enroll at Union County College under provisions of the federal laws which entitle veterans to educational benefits. To be certified for V.A. educational assistance, students must be matriculated (officially accepted into a specific program of study) in an eligible degree, certificate or diploma program. Veterans must contact the Office of Admissions located on the Cranford or Elizabeth campuses before registering for classes.

National Guard - Members of the National Guard are eligible to attend Union County College on a tuition waiver, once all documentation has been processed as noted under "veterans" above. National Guard students must apply for financial aid prior to using their tuition waiver.

Unemployed Workers – Unemployed workers may attend Union County College on a space-available basis, tuition free and must register on the last day of registration with the supporting documentation. All other

fees and expenses must be paid by the student. Students who register for courses prior to the designated date MAY NOT use the tuition waiver. Unemployed workers must apply for financial aid prior to using the tuition waiver.

Workforce Development - Workforce students are eligible to attend Union County College with supporting documentation, provided they have secured a signed contract on file. Workforce students must apply for financial aid prior to registration.

Cooperative Programs

Students interested in the entrance requirements for the Cooperative Program in Professional Nursing should apply to Union County College, 1033 Springfield Ave, Cranford, N.J. 07016, for Muhlenberg Regional Medical Center Harold B. and Dorothy A. Snyder Schools and for Trinitas School of Nursing. Union County College and the University of Medicine and Dentistry of New Jersey (UMDNJ) offer joint programs on the Scotch Plains campus. Information on the joint programs with UMDNJ are available from any Union County College Admissions or Recruitment Office.

Seeking Second Degrees

Students seeking second degrees in the same degree classification (i.e., a second A.A., A.S., A.A.S., CT or DP) must seek permission from the Vice President for Academic Affairs prior to pursuance of that second degree. Students seeking a second Associate degree in another degree classification (i.e., student has a A.A., wishes A.S. or A.A.S.) may do so under the following conditions: A minimum of 32 credits in residence or all major course work completed toward the second degree at Union County College, whichever is greater. Request for pursuing a second degree must be made to an academic counselor/advisor or may be made at the time a student reapplies for admission. A maximum of 32 credits of transfer work will be allowed for A.A., A.A.S. and A.S. programs. Fewer transfer credits may be allowed for certificate and diploma programs. Students who have already received a baccalaureate degree may be granted up to 40 transfer credits into Union County College. (NOTE: Check program requirements for specific transfer credit accepted.) Developmental courses cannot be used as electives. All electives in the second degree must be taken in accordance with the elective listing found in the new degree. Students will not receive transfer credit for courses taken at Union County College.

International Students

International students must obtain an International Student Packet from the Admissions Office on any campus.

Recommended deadlines for submission of all information to admissions: Fall - July 1, Spring - November 1. Contact the admissions office. Housing and Financial Aid are not provided by Union County College.

The following information must be submitted in its entirety (as detailed in the International student packet) in order for an application to be processed and reviewed for eligibility for Non-immigrant (F-1) Student Status:

- A completed Application for Admission
- The non-refundable application fee and required deposit.
- A separate letter with your home country address, names of dependents and spouse if also coming to the U.S. with you, along with their passport and I-94 card.
- An official secondary school record translated into English.
- Any post-secondary school record outside the United States translated into English with a course-by-course evaluation from the World Education Services.
- A U.S. Department of Justice Affidavit of Support.
- Evidence of finances submitted by the sponsor.
- INS forms with required fees.

Students currently in U.S., Transfer Students/Change of Visa Status:

Students currently in the United States with an F-1 Visa from another U.S. institution who wish to attend Union County College must provide the following information in addition to the above information:

- a) Official transcripts from all colleges or universities attended.
- b) International Student Advisor Report must be completed and signed by the Designated School Official of the school the student is attending. No decision will be made until this report has been submitted.

Applicants currently in the United States who wish to change their Non-immigrant Status to F-1 Status must have a Valid Visa for at least six months. Upon receipt of I-20 from Union County College, the applicant must also file with INS, Form I-539, Application to Extend/Change Non-Immigrant Status, along with the required fee and all documents required by INS.

Advanced Placement- AP

Union County College awards credit to entering students who have achieved a score of 3, 4, or 5 on the Advanced Placement (AP) Examination in course equivalents of the subject matter of the AP examination. Each department has determined the appropriate course or courses in their subject area for which such credit will be given.

College Level Examinations-CLEP

CLEP (College-Level Examination Program®) provides a method of earning college credit by taking examinations in various subject areas. Union County College recognizes CLEP scores and will allow credit in many subject areas when the scores meet the college requirements. Credit will not be given where there is evidence of previous academic work.

Assessment of Prior Learning - AP

APL provides a method of earning college credit by organizing and submitting a portfolio documenting life experiences and demonstrating the similarity to learning gained through formal college-level education. Credit is awarded only for demonstrated college-level learning, not for experience per se. This learning must be comparable and correspond to UCC courses for which previous credit has not been awarded. Students must adhere to the established College policy regarding academic honesty and integrity per the Student Handbook.

Not more than half the credits required for a degree may be earned through APL combined with other forms of credit options; e.g. CLEP, Challenge Exams, AP tests, transfer, etc. Students must consult with the Assessment of Prior Learning Coordinator for eligibility and requirements. Students must adhere to College policies and procedures.

Membership (Recommended): Council on Adult and Experiential Learning (CAEL)

Eligibility/ Restrictions

- Student must have completed a minimum of six credits toward a degree
- Student must have a minimum GPA of 2.5
- Student must be currently registered/enrolled in a credit course toward a degree
- Course(s) eligible for assessment must be specified in the student's chosen curriculum
- The combination of "outside evaluation" transfer credits CANNOT exceed 50 per-

- cent of the total credits for the degree program (CLEP, Challenge Exams, APL, etc.)
- Student must apply for assessment of prior learning before 33 credits have been
- Student must complete all developmental requirements, if applicable, before applying for APL credits
- Once a student attempts a course, the credits for that course cannot be requested for assessment of prior learning
- Some restrictions depend on program requirements; e.g. dental hygiene, nursing, engineering
- Certain courses may be ineligible for assessment of prior learning due to program requirements
- Courses assessed are limited by the expertise and availability of trained APL faculty evaluators

Transfer Credit

A student may transfer up to 32 credits for associate degrees. One-half of the program total credits for certificates and diplomas may be granted for courses which correspond in subject matter to courses offered at Union County College. Students who have previously been awarded a bachelor's degree may receive up to 40 transfer credits toward an unrelated associate degree program. Students entering Muhlenberg Regional Medical Center Harold B. and Dorothy A. Snyder Schools' Programs at Union County College may be granted up to 32 college credits of advanced standing toward the associates degree. Students entering Trinitas School of Nursing Cooperative Nursing Programs at Union County College may be granted up to 22 college credits of advanced standing toward the associate degree. Prior nursing school courses completed at UCC are evaluated by the cooperating School to which the student makes application for admission.

Graduates of the Union County Police Academy and/or Fire Academy will be granted credit of advanced standing toward an associate degree after matriculation into the Criminal Justice or Fire Science program at Union County College. Courses considered for transfer credit must have a minimum grade of "C" or its equivalent. Credits for courses accepted from another institution, institutional credits, or remedial credits will not be computed in the cumulative grade point average at Union County College. It is the student's responsibility to supply the College with official transcripts of all previous college work at the institutions attended.

Readmission with Good Standing

A student who has withdrawn from Union County College in good standing and has left for a period of at least one full semester and seeks reinstatement need only complete an UCC application form for readmission. No application fee is required of a student applying for readmission to the College. Students who withdraw and intend to re-register for the following semester need only to fill out a registration form. When a student returns to Union County College under the readmission category, the student must adhere to the curriculum requirements in effect at the time of readmission.

Admission & Readmission of Dismissed Students

A student may be readmitted to the College only twice after sitting out in accordance with the dismissal action. In special cases this requirement may be waived, but only by the written appeal to and the approval of the Academic Evaluation Committee. Students dismissed from Union County College within a three-year period are placed on continued probation for two semesters upon readmission. Any student from another institution who is on probation or has been dismissed and applies for admission within three years of attendance at the previous institution is placed on continued probation for two semesters. A student on probation must maintain a 2.0 average. This student may not hold office in any College organiza-

ALUMNI OF UNION COUNTY COLLEGE, INCLUDING STUDENTS OF ITS PREDECESSOR SCHOOLS (THE FORMER UNION COLLEGE AND UNION COUNTY TECHNICAL INSTITUTE), HAVE TRANSFERRED WITH ADVANCED STANDING TO **MORE THAN 500 COLLEGES AND** UNIVERSITIES IN THE UNITED STATES.



Today, Union County College has dual admissions and direct transfer/articulation agreements with a growing list of colleges and universities as well as transfer agreements with New Jersey state colleges. Students planning to transfer to a four-year college or university should see a counselor or program coordinator for specific information on these transfer opportunities.

Dual Admissions

RUTGERS – The State University

- The Rutgers University Dual Degree Program (DDP) provides New Jersey high school graduates with an opportunity to earn a baccalaureate degree at Rutgers University by first earning an associate's degree at Union County College. Application must be made to Rutgers University. Once admitted, students follow a Recommended Transfer Program (RTP). To determine the equivalency between UCC courses and Rutgers courses visit NJ Transfer (www.njtransfer.org). Successful completion of an Associate degree at UCC will guarantee admission to Rutgers as a third-year student, provided that an overall cumulative grade point average of at least 3.00 has been achieved in the RTP.
- Union County College students who enroll in the Dual/Joint Admissions Program with Union County College and Rutgers University should be guaranteed admission as juniors provided they have completed an Associate degree and fulfilled the necessary criteria.

Fairleigh Dickinson University

Union County College students who enroll in the joint admission program with UCC and Fairleigh Dickinson University should be guaranteed admission as juniors provided they have completed an Associate degree and fulfill all the necessary criteria of the joint admissions program.

Georgian Court University

Georgian Court University will reserve a place for Union County College students enrolled in the joint admissions program. The student will be enrolled in a parallel program of choice, and will be accepted with full junior standing. The student must complete the Associate degree under which they were accepted at UCC and fulfill the criteria of the joint admissions program.

Kean University

Union County College students who enroll in the joint admission program with UCC and Kean University should be guaranteed admission as juniors provided they have completed an Associate degree and fulfill all the necessary criteria of the joint admissions program.

Montclair State University

Union County College students who enroll in the joint admissions program with UCC and Montclair State University should be guaranteed admissions as juniors provided they have completed an Associate degree and fulfill all the necessary criteria of the dual admissions program.

New Jersey Institute of Technology

Union County College students who enroll in the joint admissions program between UCC and NJIT should be guaranteed admission as juniors into a parallel program at NJIT (Management, Architecture, Computer Science, Chemical Engineering, Civil Engineering, Computer Engineering, Electrical Engineering, Engineering Science, Industrial Engineering, Mechanical Engineering, Construction Engineering Technology, Manufacturing Engineering Technology, Mechanical Engineering Technology) provided they have completed an Associate degree and fulfill all the necessary criteria of the dual admissions program.

New Jersey City University

Union County College students who enroll in the joint admissions program with UCC and New Jersey City University should be guaranteed admissions as juniors provided they have completed an Associate degree and fulfill all the necessary criteria of the dual admissions program.

A vital part of Union County College's mission is to transfer its graduates with junior-year status to four-year colleges and universities throughout the United States and abroad. Over the years, the College has compiled an enviable record in carrying out this goal, as graduates have transferred to more than 500 colleges and universities throughout the world. Articulation agreements are designed to facilitate transfer to specific colleges and programs, but our students are not limited to transferring only to these institutions:

- Berkeley College, NY and NJ
- Bethune-Cookman College, Daytona Beach, FL
- Bloomfield College, Bloomfield, NJ
- Caldwell College, Caldwell, NJ
- California University of Pennsylvania, California, PA
- Cazenovia College, Cazenovia, NY
- Centenary College, Hackettstown, NJ
- College of Saint Elizabeth, Convent Station, NJ
- College of Mount St. Vincent, Riverdale, NY
- Delaware Valley College, Doylestown, PA
- Dickinson College, Carlisle, PA
- Fairleigh Dickinson University, College at Florham Park, Madison, NJ; Metropolitan Campus, Teaneck, NJ (See information on dual admissions)
- Georgian Court University, Lakewood, Woodbridge, NJ (See information on dual admissions)
- Howard University, Washington, DC
- John Jay College of Criminal Justice (CUNY), NY, NY

- Kean University, Union, NJ (See information on dual admissions)
- Laboratory Institute of Merchandising, NY, NY
- Lebanon Valley College, Annville, PA
- Manhattan College, Riverdale, NY
- Montclair State University Upper Montclair, NJ See information on dual admissions.
- Mount Aloysius College, Cresson, PA
- The National College of Chiropractic, Lombard, IL
- New Jersey City University Jersey City, NJ See information on dual admissions.
- New Jersey Institute of Technology, Newark, NJ (See information on dual admissions)
- New York University NY, NY
- Pace University, NY, NY
- Palmer College of Chiropractic, Davenport, IA
- Polytechnic University, Brooklyn, NY
- Richard Stockton College of New Jersey, Pomona, NJ
- Rochester Institute of Technology, School of Engineering, Rochester, NY
- Rutgers The State University of NJ (See information on dual admissions)
- Sacred Heart University, Fairfield, Connecticut
- Saint Peter's College, Jersey City, NJ
- School of Visual Arts, NY, NY
- Springfield College of Human Services, Wilmington, DE
- St. Francis College, Brooklyn Heights, NY

- St. John's University, Staten Island, NY
- St. Leo University, St. Leo, FL
- State University of New York at **Binghamton**, Binghamton, NY
- State University of New York at Syracuse, Syracuse, NY
- State University of New York, Institute of Technology at Utica/Rome, Utica/Rome, NY
- Thomas Edison State College, Trenton, NJ
- Tuskegee University, Tuskegee, AL
- University of Phoenix Phoenix, AZ
- University of Pittsburgh at Bradford, Bradford, PA
- University of Vermont, Burlington, VT
- Widener University, Chester, PA
- Wilberforce University, Wilberforce, OH
- William Paterson University, Wayne, NJ
- * Contact UCC for the most current information



TUITION AND FEES ARE SUBJECT TO CHANGE AS ARE THE POLICIES ASSOCIATED WITH THEM. STUDENTS SHOULD OBTAIN THE MOST CURRENT COPY OF THE TUITION AND FEE SCHEDULE FROM THE OFFICE OF STUDENT ACCOUNTS FOR UP TO DATE INFORMATION.

Office of Student Accounts Guidelines

The policy of Union County College is payment upon registration. Therefore, all tuition, fees, and other related costs should be paid at the Office of Student Accounts on the day registration takes place.

The College accepts Visa, MasterCard, and Discover cards in addition to cash, checks, and money orders. All checks and money orders should include the student's identification number on the face of the document. For credit card payments, where the cardholder is someone other than the student, written permission is required from the cardholder authorizing the student to use the card for payment to Union County College. The College reserves the right to request payment in cash only, when circumstances so warrant.

Eligible students can make credit card payments over the web by using the "Account Summary/Credit Card" screen on UCC's online e-services.

Students who have estimated financial aid awards on their account at the time of registration may be able to apply such aid towards their charges. If financial aid does not cover the entire cost of attending college, the remaining balance is due on the day of registration. Participants in the Federal Subsidized, Unsubsidized and Plus Stafford Loan programs should be aware that some banks charge an Origination Fee of up to 3 percent. These fees are deducted from the loan proceeds and should be taken into consideration by students when determining their balance.

All accounts with outstanding balances after the first bill due date will be assessed a \$35 monthly late fee until the balance is paid in full. Students who fail to pay their balances may be turned over to a collection agency and will be responsible for the added costs of collection, court costs and legal fees. These costs can add as much 35% to 40% to the amount already owed and will result in the disruption of your credit worthiness when the collection agency reports the account to national credit bureaus.

Tuition & Fees Schedule

(SUBJECT TO CHANGE)

TUITION

A 12-month residency in New Jersey and current residency in Union County is required by students to qualify for the in-county rate. Visa students who live in the County qualify for incounty rates. Visa students who live out of the County may apply for a special waiver.

OUT OF COUNTY RESIDENTS 174.00

SENIOR CITIZENS

A 12-month residency in New Jersey, and 65 years of age or over is required to qualify for the Senior Citizen rate.

PROCESSING FEE (NON-REFUNDABLE)......15.00

This is part of the Senior Citizen criteria only.

OFFICE OF STUDENT ACCOUNTS - HOURS OF OPERATION

CRANFORD

 Monday
 8:30 am to 4:30 pm

 Tuesday
 8:30 am to 7:30pm

 Wednesday
 8:30 am to 7:30pm

 Thursday
 8:30 am to 4:30 pm

 Friday
 8:30 am to 4:30 pm

ELIZABETH

8:30 am to 4:30 pm 11:30 am to 7:30 pm 11:30 am to 7:30 pm 8:30 am to 4:30 pm Closed

PLAINFIELD

11:30 am to 7:30 pm Closed Closed 8:30 am to 4:30 pm Closed

Additional office hours will be posted for registration periods.

Non-Refundable General and

Special 1 ces
Application Fee (one time payment)
Assessment of Prior Learning Fee (per credit hour)
County Residents
Athletic/Wellness Fee (per credit hour)
CHEL 106-300 Lab Kit Deposit100.00 (after kit return will be applied against outstanding balance or refunded)
Course Change Fee 45.00
Deferred Payment Plan Fee35.00
FDU Graduation Fee
General Fee (per credit hour) 14.50
Graduation Fee
Hospitalization Fee per semester24.00 Required for full-time students (12 or more credit hours)
I.D. Replacement Fee
Late Payment Fee (monthly)
Late Registration Fee
Muhlenberg Regional Medical Center Harold B. and Dorothy A. Snyder Schools should be contacted for the latest fee schedule
Online Tutor Fee
Parking Fee Per Year (September through August)
Practical Nursing Fees Background Check (PNU 110)
Registration Fee for International Students250.00
Replacement Diploma 30.00
Re-Registration Fee
Return Check Fee
Schedule Reinstatement Fee75.00
Technology Fee (per credit hour) 9.00
Telecourse Fee
Transcript Fee
Trinitas Clinical Fee Per Credit475.00
Trinitas Convocation Fee
Trinitas Library Fee
Trinitas NCLEX Review/Testing Fee300.00
Trinitas Student Health Fee

UMDNJ Courses Students should contact UMDNJ for their lat-

est tuition and fee schedule

Unemployed Persons Registration Fee 20.00 Video Course Rental Deposit 50.00 After tape return will be applied against out-

standing balance or refunded

THE COLLEGE RESERVES THE RIGHT TO REVISE ITS CHARGES IF CIRCUMSTANCES SO WARRANT.

Application Fee

A one time fee is charged when submitting the Application-for-Admission form to the Office of Admissions. The fee is not refundable and cannot be applied to any other charge.

Athletic/Wellness Fee

Entitles students to utilize the facilities of the Fitness Center for each semester that the fee is paid. The fee is also used to cover the cost of intercollegiate athletics.

Deferred Payment Plan Fee

Students who register for six or more credit hours during Fall and Spring semesters may be eligible to participate in the College Deferred Payment Plan. There is a \$35 fee to participate in the Plan. In most cases, students will need to pay at least 50% of their semester charges, plus the \$35 fee, at the time of registration AND sign a promissory note to pay the remaining balance no later than 30 days after the start of the semester. Students must report, in person, to the Office of Student Accounts at any campus to participate in the plan. We do not currently accept deferred payments over the Web or by mail.

Students who fail to make full payment by the date specified on the promissory note are charged a late fee of \$35 per month until the balance is paid. Once a late fee has been added to an account, students are not eligible to participant in the Plan during subsequent semesters.

The Deferred Payment Plan is not available for Winter and Summer sessions.

Hospitalization Fee

Public Law of New Jersey, 1989 Chapter 1, requires all students who are enrolled full-time in public colleges to carry health insurance that provides basic hospitalization coverage.

All full time students (12 or more credit hours) are assessed a \$24 Hospitalization Insurance Fee per semester. The College policy is offered through T. L. Groseclose Associates. A brochure explaining the benefits covered under the Group Student Accident and Sickness Insurance Program can be obtained at the Office of Student Accounts. Additional information may be obtained by calling T. L. Groseclose Associates at (609) 279-1507.

Students who are covered under another policy and do not wish to be included in the College plan, must show proof of insurance and submit an Insurance Waiver form to the Office of Student Accounts during the first 30 days of Fall and Spring semesters and during first week of Winter and Summer semesters. Thereafter, no Insurance Waivers will be accepted. Students must show proof of insurance and complete an Insurance Waiver for each semester that Hospitalization coverage is not desired.

Students withdrawing prior to the start of class will not be covered under the plan and will be refunded the premium paid. Additionally, students withdrawing within 30 days of the start of class will not be covered under the plan and will be refunded the premium paid. It is the student's responsibility to notify the Office of Student Accounts, in addition to all other appropriate areas of the College, of the student's withdrawal. (Should there be a balance due on the student's account, the refund will be applied against the outstanding balance.)

Parking Fee

An annual Parking Fee of \$45 is automatically added to each student's account. Parking permits are valid for an academic year (September 1 through the following August 31). There is no proration of the fee for partial year enrollment. Students who do not wish to purchase a parking permit, may waive the charges at the Office of Student Accounts during the first 30 days of Fall and Spring semesters and during the first week of Winter and Summer semesters. Thereafter, no Parking Waivers will be accepted. Students must request a waiver for each year that parking is not desired.

Penalty Fees

Late Payment Fee – A \$35 per month Late Payment Fee is assessed to all students who do not pay their account in full by the first bill due date of the semester. Additionally, students will not be eligible for future Deferred Payment Plan participation.

Late Registration Fee – A \$50 Late Registration Fee is assessed to all students who register on the first day of the semester and thereafter.

Re-registration fee – A \$40 Re-registration Fee is assessed to all students who re-register after being voided for non-payment.

Return Check Fee – A \$40 Return Check Fee is assessed to all students when the bank returns their check. Students will be required to pay all current and future balances in cash, certified check or money order once a Returned Check Fee has been charged to their account.

Schedule Reinstatement Fee – A \$75 Schedule Reinstatement Fee is charged to all students who seek to have their schedules reinstated after the official college withdrawal date. Students must provide the appropriate documentation for readmittance required by the Registrar and must pay all tuition, fees and related costs for the semester in addition to the Schedule Reinstatement fee.

Registration Fee International Students

A fee of \$250 is assessed to International students seeking to obtain an INS Form I-20 Certificate of Eligibility for Non-Immigrant (F1) Student Status from Union County College. This is a non-refundable registration fee but will be applied toward the first semester tuition upon successfully obtaining the INS Form I-20.

Transcript Fee

Transcripts are \$10.00 per copy and are not be released until all financial obligations to the College have been paid.

REFUNDS

Refunds are made on tuition and course fees only and take approximately four weeks to be processed and checks to be drawn. Refunds for payments made by credit card (including web payments) are credited to the card from which the payment was made.

Refund amounts are determined by the date shown on the student's official withdrawal form. A student is not eligible for a refund unless a Counselor is notified of the withdrawal and the proper forms are completed.

"Withdrawn" or "W" grades are not eligible for refunds and students are responsible for payment for these courses.

Students are financially responsible for all semester tuition and fee charges incurred despite their non-attendance. Students should adhere to the college policy regarding dropping or withdrawing.

Balances in excess of charges, including deposits, held at the time of withdrawal will be applied to outstanding charges. Any overpayment of tuition or fees will be refunded. Financial aid program payments applied to charges are subject to recalculation in accordance with Federal and State regulations. Refunds will be made in accordance with the Federal refund allocation schedule.

Withdrawals Prior to the Start of Class

Students who officially withdraw prior to the first day of a semester are credited for 100% of Tuition and Course fees only. Students remain responsible for payment of the General, Athletic/Wellness, Technology and any other applicable fees.

Withdrawals After the Start of Class

Fall/Spring - Regular and Late Start Semesters

For official withdrawals after the start of the semester, credit is issued as follows:

Withdrawal from the first day of the semester through the fifth day will result in a 50% credit of Tuition and Course Fees only. Students are still responsible for payment of the General, Athletic/Wellness, Technology and any other applicable fees in addition to 50% of the Tuition and Course Fee.

No refund of tuition or any fees will be available for withdrawals after the fifth day of the semester.

Winter and Summer Semesters

For official withdrawals after the start of the semester, credit will be issued as follows:

Withdrawal from the first day of the semester through the third day will result in a 50% credit of Tuition and Course Fees only. Students are still responsible for payment of the General, Athletic/Wellness, Technology and any other applicable fees in addition to 50% of the Tuition and Course Fee.

No refund of tuition or any fees will be available for withdrawals after the third day of the semester.

Withdrawals By Federal Financial Aid Recipients

Federal Regulations require that Federal financial aid recipients be subject to a reduction of their financial aid if they withdraw or stop attending all classes before completing 60 percent of any given semester.

All financial aid recipients are responsible for the costs incurred for tuition, fees, books, and related costs should their financial aid be revised or cancelled for any reason.

Students who have an outstanding balance as a result of a financial aid reduction will be charged a \$35 monthly late fee until such balance is paid.

Students who do not pay an outstanding balance resulting from a change in their financial aid may be turned over to a collection agency and will be responsible for the added cost of collection, court costs, and legal fees. The cost of Collection can add as much as 35% to 40% to the amount already owed and will result in the disruption of your credit worthiness when the collection agency reports the delinquent account to national credit bureaus.

BOOK ALLOWANCES

Available for the first four weeks of Fall/Spring semesters, and for the first two weeks of Summer semesters.

The Book Allowance Program is offered as an aid to assist students with the cost of textbooks and essential course related supplies. Students should be financially prepared for out of pocket expenditures when their maximum Book Allowance has been reached.

If your Financial Aid award (exclusive of any loan programs, college work study or federal work study) is greater than the tuition and fee charges for the semester, you may be eligible for a Book Allowance.

Book Allowance purchases are charged against the student's financial aid. Purchases over the amount of the Book Allowance are the responsibility of the student.

In the event Financial Aid is reduced or cancelled, all Book Allowance purchases are the responsibility of the student.

The following are not eligible to participate in the Book Allowance program but may be covered under a Book Voucher program.

- Women's Basketball team members.
- Kellogg Nursing Program Scholarship Recipients.
- Trade Act and Workforce Development participants.

Freeholder Scholarship recipients are not eligible for the Book Allowance program or Book Vouchers.

CHARGEBACKS

New Jersey residents who reside outside of Union County have 30 days from the first day of the semester to submit chargeback papers from their county of residence. Upon receipt, students will be charged the in-county rate.

Under provisions of the "Chargeback Assistance Law" (Chapter 179, Public Laws of New Jersey, 1968; N.J.S.A. 18A:64A-23), a person who is a legal resident of a county in New Jersey other than Union County may be eligible if: A) A county college is not operating in the student's county of residence. B) A county college is operating in the student's county of residence, but the person is not accepted for admission for one of the following reasons:

- 1. The course/curriculum (program) is not offered: or
- 2. Enrollment in the course/curriculum (program) was filled; or
- 3. The applicant did not meet the general admissions requirements of the college (disciplinary or academic suspension or academic probation excepted); or
- 4. The applicant did not meet the admissions requirements of the specific course/curriculum (program).

Persons who are accepted for admission to Union County College and who believe they may qualify under the above provision(s) may obtain procedural information by writing or visiting the Admissions Office and asking for Chargeback Application forms.

Prior to registering, students should have the specifics of their Employer Tuition Assistance Plan reviewed by the Office of Student Accounts to insure that the plan meets Union County College guidelines. The College cannot accept any Employer Tuition Assistance Plan where payment to the College is contingent upon the student achieving a specific grade or maintaining a specific average. Additionally, the College cannot accept any Employer Tuition Assistance Plan where payment will be delayed until student grades are submitted.

Students are required to complete and sign a Statement of Responsibility for Financial Obligations at the Office of Student Accounts.

All balances should be paid in full prior to registering for subsequent semesters.

Should the employer or other outside agency, organization or scholarship fail to pay in a timely fashion, the student will be responsible for the cost of attending Union County

If the student's bill continues to go unpaid, a hold will be placed on the student's account preventing registration as well as the issuance of transcripts, Letters of Recommendation, and grade reports.

If the account is sent to collection, the student will be responsible for the principal as well as the cost of collection. The cost of Collection can add as much as 35% to 40% to the amount already owed and will result in the disruption of your credit worthiness when the collection agency reports the delinquent account to national credit bureaus.

SPECIAL TUITION CATEGORIES

Abbott Scholars – New Jersey **Professional Development**

Students whose tuition and fees will be covered under the Abbott Scholarship from New Jersey Professional Development must have the appropriate authorization at time of registration.

National Guard Waivers

Students desiring to utilize the National Guard Waiver are required to complete the appropriate application for Financial Aid. (Contact the Financial Aid Department for additional details.) Students who are eligible for aid must exhaust all such aid prior to utilizing a National Guard Waiver.

All students must submit the appropriate forms at the time of registration including verification that they have filed for Financial Aid.

The National Guard Waiver covers the cost of Tuition only up to a maximum of 16 credits per semester. Students are responsible for the payment of all other applicable charges at time of registration.

Senior Citizens

New Jersey residents 65 years of age or older, may enroll at Union County College without the payment of any Tuition charges in regularly scheduled courses provided that classroom space is available.

A Registration Fee of \$15 is charged per semester in addition to a \$45 annual Parking Fee, if a Parking Permit is purchased.

Students may register on the last day of the registration period for the semester. Students who register prior to the designated date CANNOT apply the Senior Citizens Waiver towards the cost of such courses.

Trade Act Program

Attendance at Union County College under the Trade Act Program requires that the student present at time of registration a Letter of Introduction and Enrollment Agreement from the State of New Jersey Department of Labor.

In addition, a completed contract (NAFTA-7 (R-9-96)) must be on file in the Union County College Grants Department.

Students participating in this program may register at any time. The program may cover Tuition, Course, General, Athletic/Wellness, Technology, and Parking Fees.

Unemployed Persons Waivers

Students desiring to utilize the Unemployed Persons Waiver must:

- submit an original "Unemployed Person Job Training Form" issued by the New Jersey Department of Labor dated no earlier than 30 days prior to the date of registration
- complete the appropriate application for Financial Aid. (Contact the Financial Aid Department for additional details.) Students who are eligible for aid must exhaust all such aid prior to utilizing an Unemployment Waiver.

Students will be allowed to register on a space available basis on the last day of the Add/Drop period for the session/semester. Students who register prior to the designated date CANNOT APPLY the Unemployment Waiver towards the cost of such courses.

The Unemployment Waiver covers tuition as well as general, technology and athletic/wellness fees. Students are responsible for payment of all other costs at time of registration.

If eligible for financial aid, it will first be applied against tuition, general fees, technology fees and athletic/wellness fees. Remaining aid, if any, will be applied against remaining charges.

Volunteer Tuition Waiver Program (Chapter 145)

The Volunteer Tuition Waiver Program requires that the student provide verification of service performed such as a completed Municipal Certification for Active Members of volunteer Fire Company, First Aid or Rescue Squad.

Students desiring to utilize the Chapter 145 Waiver shall complete the appropriate application for Financial Aid and, if eligible, such aid must be exhausted before applying the Chapter 145 waiver.

Students will be allowed to register for classes on a space available basis on the last day of the Add/Drop period for the session/semester.

Students who register for courses prior to the designated date CAN NOT APPLY the

Chapter 145 waiver towards the cost of such courses.

This program covers the cost of Tuition only and is available for active members of a volunteer Fire Company or Rescue Squad and their dependent children and spouse. Individuals will receive a tuition credit of up to \$600, not to exceed a maximum of \$2,400 over 4-year period per family.

The student is responsible for the payment of all other costs at time of registration.

Workforce NJ Development Program

Students utilizing this program should plan on registering well in advance of the start of the semester to insure that their contract is in place.

Students must have the appropriate forms and a fully executed contract at time of registration.

The program may cover Tuition, Course Fee, General Fee, Athletic/Wellness Fee, Technology Fee, and Parking Fee. The cost to complete the program of study may not be fully covered under this program and students should be aware of program limitations

OUTSTANDING OBLIGATIONS

Delinquent students are those who fail to return College materials on loan or assignment to them or fail to make payment on parking tickets, library fines, or other College fees and fines.

Transcripts, grades, and letters of recommendation will not be released, and registration for subsequent semesters will not be permitted until all financial obligations to the College have been cleared.

In the case of those academically eligible to graduate, conferment of the degree will be withheld.

Students are liable for the full retail-price replacement of any materials, which cannot be returned because of loss or damage.

Students who do not pay their outstanding balance may be turned over to a collection agency and will be responsible for the added cost of collection, court costs, and legal fees. The cost of Collection can add as much as 35% to 40% to the amount that the student already owes and will result in the disruption of your credit worthiness when the collection agency reports the delinquent account to national credit bureaus.

WEB REGISTRATION

Students who select their courses over the Web (UCC online e-services) are expected to make immediate credit card payment (VISA, MasterCard or Discover) using the "Account Summary/Credit Card Payment" screen. For classes to be held, payment must be received by 4:30 pm the following day. There is a \$40 fee for re-registering after being voided for non-payment. Deferred payments are not available over the web and must be made, in person, at the Office of Student Accounts.

Students who change their courses over the web will be charged the \$45 course adjustment fee.

Students who paid over the web and are due a refund will receive a credit to the card from which the payment was made.

1098-T FORMS

For each calendar tax year the College issues Internal Revenue Service Form 1098-T to qualified students. The forms are mailed to students prior to January 31 of the following year.

The 1098-T contains information to assist you in determining if you qualify for the Federal Life Time Learning Credit, Hope Tax Credit or other educational credits/deductions, if available. (For details on these tax credits, or how to use the amounts listed on your statement, consult either a qualified tax preparer or IRS publication 970 titled "Tax Benefits for Education".)

The 1098-T is not a statement of wages or a bill for tuition due. It reflects the total amount of qualified tuition/fee expenses incurred during the tax year, as well as any scholarships/grants awarded to you during that year.

The information on the form complies with IRS regulations. Charges are reported in the year in which they were incurred, which is not necessarily the same as the year that the courses were taken. For example, if you registered in November or December of 2007 for courses in the Spring 2008 semester, the qualified charges will be reflected on the 2007 Form 1098-T.

For information on how to use this statement when filing your federal tax return, please consult a qualified tax preparer.

Night Depository Drop Boxes for payments can be used when the Office of Student Accounts is closed or to expedite the payment process. The Drop Boxes are found on all three of our campuses.

- Cranford Located in MacDonald Hall lobby
- Elizabeth Located in the Student Services area room #116
- Plainfield Located in the hallway outside of the Student Services area

Instructions for use and pertinent forms are located in the adjacent racks. Do not deposit cash. All payments will be processed on the next business day, and receipts will be mailed to students.

Course Fees

AS OF JULY, 2007

100	001 010 000
ACC	021, 212, 290 25.00
ACC	103, 104, 203, 205, 211 15.00
ACC	210 50.00
ADM	140 20.00
ADM	101, 103, 104, 116, 119, 121, 122, 123, 131, 132, 204, 213,
	214, 220, 250, 290, 293 25.00
ADM	203 50.00
ARC	101, 102,105, 201, 202 50.00
ARC	205, 206, 210,214, 215, 216, 217,
	224, 225, 295 25.00
ASL	101, 102, 103, 104, 108, 201, 202, 210 15.00
AST	101, 102 30.00
BIO	001, 091 15.00
BIO	002, 100, 113 20.00
BIO	117, 143, 154, 157 35.00
BIO	102, 104, 105, 106, 108, 133, 140, 204, 207, 208, 241 40.00
BIO	101, 103, 111, 112, 114, 115,
	116, 118, 151, 152, 153,
DIO	155
BIO	290
BUS	101, 105 10.00
BUS	137, 200, 201, 202, 208 50.00
BUS	290 25.00
CHE	104 30.00
CHE	005, 101, 102, 105, 111,
	112

CHE	108, 204 25.00
CHE	106, 113, 114, 290 30.00
CHE	201, 202, 203, 211, 212 50.00
CHE	103
CHN	101, 102 10.00
CIM	103, 218, 228 50.00
CIS	100, 101, 102, 103, 113, 115,116,
	120,124, 126, 130, 132, 201, 202, 211
CIS	106, 140 10.00
	111, 204, 205, 207, 210 20.00
CIS	
CIT	011, 108, 201, 202, 203, 212, 290, 295
CO11	
COM	105 20.00
COM	107, 109, 206, 214, 215,
OD 1	216
CRJ	103 25.00
CSC	021, 100, 101, 102, 111, 121,
	124,126, 165, 213, 215, 217, 221, 223, 225, 231, 285, 290 25.00
DDI	
DBI	201, 210
DBI	205 20.00
EET	011, 022, 101, 102, 111, 211,
	213 50.00
EGG	005, 106, 111, 112, 201 25.00
EGG	203, 205, 206, 207 50.00
EHS	200, 201, 202, 203, 204,
	205, 206 20.00
ELG	101 25.00
ELT	103, 117, 165, 211, 212, 214,
	215, 217, 220, 221, 250, 251, 264, 266, 287 50.00
CIT.	
ELT	290
EMT	105, 290 25.00
EMT	103, 104, 201, 202, 204,
	213 50.00
EMTA	101 40.00
ENG	087, 088, 089, 098, 099 10.00
ENG	025 15.00
ENG	101, 102, 111, 112, 122 25.00
ENG	284 section 300 35.00
ESL	(per semester) 20.00
ESL	082, 083, 084 15.00
FHR	101, 102, 103, 104 138.50
FIA	101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 115, 116,
	121, 202, 203, 204, 209,
	210 20.00
FIA	223
FMG	100, 101, 102 415.50
FRF	
FRE	101, 102, 105, 106, 111, 112, 121, 122 10.00

GDP	101, 110, 115, 201, 210, 215 20.00
GER	101, 102, 105, 106, 111, 112,
	121, 122 10.00
GEY	101, 102, 121 35.00
GOV	105 10.00
HIS	101, 102 10.00
HUD	102, 103, 104, 105, 106,
HUD	108 10.00 215 15.00
HUD	216 20.00
IDH	140 10.00
IDH	100, 101, 102, 103, 104 20.00
IDH	203, 212 25.00
IDH	261
INT	101, 102 30.00
ITA	101, 102, 105, 106, 111,
117 (112, 121, 122 10.00
LGL	101 25.00
LGL	110, 111 10.00
LGL	215 20.00
MAT	001, 002, 012, 025, 026, 055, 066, 100, 129, 133, 141, 142,
	066, 100, 129, 133, 141, 142, 145, 155, 161, 162, 241,
	261 10.00
MAT	011, 015, 016, 022, 113, 117,
	119, 125, 126, 127, 146, 171, 172, 246, 265, 271, 272 15.00
MAT	128 50.00
MAT	228
MAT	267
MDA	113, 114, 214, 215 20.00
MET	011, 265, 290 25.00
MET	106, 203, 208 50.00
MET	103, 109, 113, 207, 209, 212,
	213, 219
MRT	116, 117, 205 25.00
MRT	113
MST	101, 105, 106 20.00
MST	102
MST	103 10.00
MST	104, 108
MST	107
NURE	131,132, 231 3,800.00
NURE	232 4,750.00
NURE	250 2,850.00
NURE	260, 270, 280, 290 1,425.00
OTA	116, 210 45.00
OTA	120
OTA	121
OTA	195, 222 70.00

OTA	221, 291, 292 120.00
OTA	293, 294 60.00
PED	101 5.00
PHY	005 10.00
PHY	001, 125 25.00
PHY	105, 111, 112, 202 50.00
PHY	201 20.00
PHYL	101 30.00
PHY	102, 121, 122 30.00
PMD	106, 107, 108, 109 225.00
PNU	120, 130 300.00
PNU	140, 150, 160 150.00
PNU	170 450.00
PSY	101, 102, 205, 206, 207,
	208, 211 10.00
PSY	271 50.00
PTA	115, 140, 221 45.00
PTA	130 101.00
PTA	218, 220 70.00
PTA	224 159.00
RTT	105, 206, 210 50.00
RTT	114, 214, 215 151.00
RTT	320 45.00
SOC	101, 102 10.00
SOC	271, 27350.00
SPA	101, 102, 105, 106, 111, 112, 121, 122 10.00
TRN	
	101 30.00
UCC	101
ALL IEL	ECOURSES (Sections 077, 078, 177, 277)

THE COLLEGE RESERVES THE RIGHT TO REVISE ITS POLICIES AND **CHARGES AT ANYTIME IF CIRCUMSTANCES SO WARRANT**

Finding Aid

Union County College encourages all students to apply for all forms of student financial assistance that may be available. Financial Aid Offices are located on the Cranford, Plainfield and Elizabeth campuses.

The basic premise of financial aid is that the primary responsibility for meeting the cost of attending a postsecondary institution rests with the family. The primary purpose of student financial aid is to provide economic resources to students who have demonstrated financial need and who would otherwise be unable to pursue a postsecondary education.

The information reported by a student when applying for financial aid is used to calculate an Expected Family Contribution (EFC), the amount the student and his/her family can be expected to pay toward his/her education. Union County College Financial Aid Office determines a student's cost of education, considering charges for tuition and fees, estimated costs for supplies, living and traveling expenses, and other miscellaneous education expenses. The student's demonstrated financial need is the difference between the student's cost of attendance and EFC.

Application Procedures

To apply for financial aid, students must complete a Free Application for Federal Student Aid (FAFSA), making certain to authorize release of the information to Union County College, code 002643. Returning students may complete the Renewal FAFSA, which is mailed directly to students from the U.S. Department of Education, confirming Union County College, 1033 Springfield Avenue, Cranford, New Jersey, as the college choice.

Students may submit the completed FAFSA themselves electronically over the Internet at www.fafsa.ed.gov. If you don't have a Personal Identification Number (PIN) for the FAFSA, apply for one early in the application process at www.pin.ed.gov. You will need your PIN to electrically sign your FAFSA. If you are a dependent student, one parent must also apply for a PIN. You will receive a Student Aid Report (SAR) in the mail from the US Department of Education several weeks after submission of the FAFSA. The SAR must be reviewed for accuracy. If corrections are necessary or if the college choice must be corrected to Union County College, the student must make all appropriate revisions by accessing www.fafsa.ed.gov and click on "Make Corrections to a processed FAFSA" using the required PIN to sign the electronic application, or sign and return the SAR to the US Department of Education, or submit it to the UCC Financial Aid Office. Documentation to verify the accuracy of the corrections must be submitted with the SAR. For questions regarding the status of the FAFSA or to request a duplicate SAR, call Pell Grant Programs at 319-337-5665. Muhlenberg students should submit the SAR to the Muhlenberg Director of Financial Aid.

If the student's application is selected for verification and or quality assurance, the student will have to complete a Federal Verification Worksheet, must attach his/her and spouse's signed Federal Income Tax Return (Form 1040, Form 1040A, or Form 1040EZ), along with all W2s and bring these forms to the Financial Aid Office. If the student is a dependent student for financial aid purposes, the student must attach a signed copy of his/her parents' entire Federal Income Tax Return (Form 1040, Form 1040A, or Form 1040EZ), along with all W2s and bring these forms to the Financial Aid Office. Copies of all documents submitted to the Financial Aid Office become the property of Union County College.

Once all application materials are reviewed by the Financial Aid Office, the student will be

notified if the Financial Aid Office needs additional information, or the student will receive a Financial Aid Award Notification Letter. The student will receive a Student Eligibility Notice (SEN) from the New Jersey Higher Education Student Assistance Authority. This is a notification of state aid eligibility. This award is not finalized until the student's file has been reviewed and approved by the Financial Aid Office. Union County College must be indicated on the SEN as the college the student is attending. The student must make the correction if necessary. If the student has any questions regarding New Jersey State Aid eligibility, he/she should call 1-800-792-8670.

Both full-time and part-time students are eligible and encouraged to apply for financial aid. For financial aid purposes, a full-time student is one who is registered for at least 12 credits per semester and a part-time student is one who is registered for less than 12 credits per semester. Financial aid awards may be adjusted based on the actual enrollment.

Students may call or visit any one of the three campuses to receive additional information on Financial Aid Information Sessions, the application process, or student aid eligibility.

Cranford Campus

1033 Springfield Avenue Cranford, NJ 07016 (908) 709-7137

Elizabeth Campus

12 W. Jersey Street Elizabeth, NJ 07202 (908) 965-6063

Plainfield Campus

232 East Second Street Plainfield, NJ 07060 (908) 412-3571

Application Deadline Dates

To insure full consideration for all sources of funds available, students should adhere to the preferred filing deadlines:

Fall Semester - May 1

Spring Semester - September 1

Certain funds are available on a limited basis; therefore, it is important to apply as early as possible. Union County College recognizes that students make late applications due to circumstances beyond their control. The College will give full consideration to all applications received after the dates indicated previously in accordance with availability of financial aid funds and the student's eligibility for

Eliaibility

To be eligible for Federal and State financial aid programs, students must meet the following minimum requirements:

- Submit a FAFSA and demonstrate financial need for most programs;
- Have a High School diploma or a General Education Development (GED) certificate, or if not, the student must pass an independently-administered test approved by the U.S. Department of Education;
- Be a U.S. citizen or eligible non-citizen;
- Be enrolled as a degree/certificate student in an eligible academic program;
- Have a valid Social Security Number;
- Make satisfactory academic progress, according to Union County College stan-
- Must not be in default on a student loan or owe a refund on a previously awarded
- Register with Selective Service (if required).

FEDERAL

Federal Pell Grant: The actual amount of the grant is determined by a formula established by Congress and on data provided on the student's FAFSA and the student's enrollment status. All students who meet the eligibility requirements for the Pell Grant program will have the award applied directly to his/her account when a determination of the accuracy of the data on the Student Aid Report (SAR) has been completed by the Financial Aid Office staff. Annual awards may range from \$200 to \$4,050, depending on the applicant's eligibility.

Federal Supplemental Educational Opportunity Grant (FSEOG): Federal Pell Grant eligibility applicants with the highest financial need are awarded Federal SEOG on a funds-available basis. The award will be applied directly to the student's account. Awards may range from \$100 to \$4,000.

Federal Academic Competitiveness Grant (FACG): US citizens who meet all eligibility requirements for the Pell Grant program and completed a rigorous academic program in high school as defined by the US Department of Education may qualify for an Academic Competitiveness Grant. These awards

WWW.UCC.EDU

are in the annual amount of \$750 for First Year students and \$1,300 for Second Year students, pending allocation of Federal funding. Second year students must have a cumulative grade point average of at least 3.0 and at least 24 earned college level credits in order to qualify.

Federal College Work-Study
Program (FCWSP): Institutional workstudy applications are distributed to all
students who meet the eligibility requirements and indicate an interest in oncampus or off-campus community service jobs. Applications are reviewed on
an as-received basis for available positions, and every effort is made to match
the student's skill level with the skills
required for each position. Job placement is not guaranteed since placement
is dependent on skills, student schedule,
student initiative, job availability and
federal funding.

The dollar amount of the work-study award indicated on the Financial Aid Notice represents the maximum amount the student can earn for the enrollment period. The hourly rate for work performed is determined based on the skill level required and the student's length of service in a particular job.

Earnings are paid directly to the student through the College payroll system. It is the student's responsibility to submit time sheets according to the published schedule to ensure timely processing of paychecks. The paycheck is routinely mailed to the student's home address unless the student makes other arrangements with the Payroll Department.

Prior to the start of employment, students who meet all eligibility requirements must:

- Contact the Student Employment Coordinator to complete W-2, 1-9 Verification and Institutional Oaths of Allegiance/Office Forms.
- Attend an interview with the prospective supervisor.
- If hired, arrange a work schedule.
 Students cannot work more than 20 hours per week while classes are in session or 40 hours per week when classes are not in session.
- Complete, along with the supervisor, a Work-Study Referral form which indicates the work schedule, hourly rate, and maximum allowable earnings

The student is required to contact the supervisor when the student cannot

report to work as scheduled. All student employees are subject to an annual performance evaluation completed by the supervisor and maintained in the student's financial aid file.

Federal Stafford Loan (Subsidized and Unsubsidized): This loan is made to students by a lender such as a bank, credit union, or savings and loan association and approved by a guarantee agency. Repeat borrowers must continue to borrow through the same lender. Students must complete a separate application for the Stafford loan. The amount listed on the Financial Aid Award Notice is the anticipated amount of the loan approval, but the guarantee agency determines final approval.

After the loan is approved by the guarantee agency, the lender sends the loan proceeds each semester to Union County College Student Accounts Office based on the disbursement dates indicated on the loan application. Funds from this loan program will be credited directly to the student's account after the student has had entrance counseling, confirmed at least half-time enrollment (minimum 6 credits per semester), and has endorsed the loan check (unless funds are disbursed electronically).

Repayment on this loan begins 6 months after the student ceases to be enrolled in college at least half-time or completes his/her program of study. Exit counseling is required for all borrowers before the borrower ceases at least half-time enrollment. The Federal Government pays interest on the Subsidized Stafford loan while the student is enrolled on at least a half-time basis and during the six-month grace period prior to repayment. If the student only qualifies for an Unsubsidized Stafford loan, he or she is responsible for the interest while in school and during the six-month grace period. The interest rate on this loan is variable, and it is established and adjusted annually by Congress.

Federal PLUS Loan: This loan is for parents of undergraduate dependent students. The PLUS loan is made to the parent by a participating lender. A separate application is required.

The parent may apply for a PLUS loan for the total cost of education minus any financial aid assistance received. The lender, as well as the guarantee agency, must approve this loan before it is disbursed. The Union County College Student Accounts Office will contact the

parent for endorsement. Unless disbursed electronically, checks are made co-payable to the parent and Union County College. The PLUS loan will be applied directly to the student's account.

Complete information regarding loan repayment is available in the Financial Aid Office. UCC urges students to borrow cautiously and remember that they are responsible for repayment of all loans, whether they graduate from UCC or not.

STATE

New Jersey Tuition Assistance Grant (TAG): The eligibility for Tuition Aid Grants is determined by the NJ Higher Education Student Assistance Authority and is indicated on the official Student Eligibility Notice (SEN) sent to students by that agency. These grants range from approximately \$366 to \$2,210 annually and are available to both full and parttime students who meet all financial and state residency requirements.

For information about TAG and other grant and scholarship programs available to New Jersey residents, such as the Edward J. Bloustein Distinguished and Urban Scholars Awards or the Student Tuition Assistance Reward Scholarship (NJSTARS), please visit www.hesaa.org.

NJ CLASS LOAN PROGRAM: A loan program through the NJ Higher Education Student Assistance Authority, whereby students and/or parents of dependent students may apply for loans up to the cost of attendance minus other assistance. Students must file a FAFSA to be considered for NJCLASS. Credit approval and proof of ability to repay is required. Co-signers are allowed. Three payment options allow for repayment of interest and principle, interest only or capitalization of interest. For more information on this loan program or to apply, please go to www.hesaa.org or call 1(800)792-8670.

NJ STARS: New Jersey residents who graduate in the top 20% of their high school class may qualify for the NJS-TARS program, which provides free tuition for two years (minus any other state or Federal grants for which the student qualifies; applicants must complete the FAFSA). NJSTARS is available to qualified students who, within two years of high school graduation enroll for a full-time course load each semester (at least 12 college level credits), and renewal for the sophomore year

requires a 3.0 grade point average. NJSTARS recipients who graduate from a New Jersey Community College and transfer to a public 4-year college in New Jersey may qualify for continuation of their NJSTARS Scholarship for their junior and senior years.

EDUCATIONAL OPPORTUNITY FUND

PROGRAM The Educational Opportunity Fund Program (EOF) is a state funded program that provides educationally disadvantaged students, who demonstrate a potential for academic success, an opportunity to attend college. The primary goals of the program are recruitment, retention, graduation, and transfer to a four-year college or university. Program services include specialized counseling, structured academic support, additional grant funding, leadership development, and career planning. These services help the students to bridge the gap between their high school preparation and their college educational needs and goals. EOF counselors work closely with program participants to develop an educational and career plan that is individualized. The plan enables students to achieve realistic academic and career goals.

Students interested in the program should file the Free Application for Federal Student Aid (FAFSA) to determine financial eligibility for the program. Students identified for this program are expected to attend a special six-week program in the summer before the entry year to Union County College. The summer program offers instruction and preparation for regular college course work as well as an introduction to college and campus life. Prospective students should contact the EOF office at 908-709-7088 for information and an application.

PUBLIC AND PRIVATE SCHOLARSHIPS

See page 227.

STUDENT RIGHTS WITH REGARD TO FINANCIAL AID

- 1. To have complete information regarding fees, payment and refund policies available to you.
- 2. To have all personal and family financial information treated with confidentiality.
- 3. To appeal to the Financial Aid Office if the student's situation warrants reconsideration of their financial aid eligibility.

STUDENT RESPONSIBILITIES WITH **REGARD TO FINANCIAL AID**

- 1. Advise the Financial Aid Office if the student changes his/her enrollment status from full-time to part-time.
- 2. All address changes are to be submitted in writing to the College.
- 3. Advise the Financial Aid Office of any additional aid received not indicated on your financial aid award notice.
- 4. If student expects to withdraw or take a leave of absence from the college, the student is expected to inform the Financial Aid Office. Please refer to Repayment Policy.
- 5. Submit to the Financial Aid Office any required documentation for verification of financial aid and other relevant information pertaining to student's application.
- 6. Give permission to the Financial Aid Office to provide pertinent information, including but not necessarily limited to financial and academic information, to donors of aid as requested.
- 7. Maintain satisfactory academic progress for financial aid eligibility.

All students must be making satisfactory academic progress at UCC to establish and retain eligibility for student financial aid. UCC monitors satisfactory academic progress once a year, after the spring semester. The student's entire academic history must be considered when determining the academic progress status. The following standards explain the components to the Financial Aid Satisfactory **Academic Progress Policy.**

Quantitative Measure

Students must complete a minimum number of credits toward graduation requirements each academic year in which they are enrolled at UCC. The quantitative measurement for academic progress compares the credits attempted to credits passed. To calculate credits completed, all courses taken by the student will be counted. Below is the minimum academic progress chart that full-time students must adhere to:

End of Full- Time Semester enrolled	Credits Completed
1	0
2	12
3	24
4	36
5	48
4	6.1

For semesters of less than full-time enrollment, the progression is based on the below proportions applied to the full-time chart:

Full-time

(12 or more credits) = 1.0 semester

Three quarter time

(9-11 credits) = .75 semester

Half-time

(6-8 credits) = .50 semester

Less than half-time

(1-5 credits) = .25 semester

Students taking remedial and/or English as a Second Language (ESL) courses must follow the progression of the quantitative chart indicated above. Even though students do not earn college credit toward graduation for remedial and/or ESL courses, students receive passing or failing grades for these courses.

Maximum Time Frame for Completion

The maximum time frame a student may attend and continue aid eligibility cannot exceed 150 percent of the published length of the student's academic program measured in academic years. For example, the published length of a two-year program is four semesters. Therefore, the full-time student has a maximum of six semesters to complete the program. When the student's enrollment exceeds the 150 percent point, the student is no longer eligible for financial aid. Readmitted students must meet the same requirements as students who have remained enrolled based on the total number of semesters attended at UCC.

All credits the student attempts count toward the 150 percent time frame requirement, even if the student changes major. If a student is pursuing two programs simultaneously, the program requiring the most credits to complete will be used to measure the maximum time frame for completion. If the student has earned a degree at UCC and pursues a subsequent degree, all courses taken toward both degrees will be calculated to measure maximum time frame.

Qualitative Measure

The satisfactory academic progress policy requires students to maintain a minimum cumulative GPA as follows:

Students who have attempted 12 College level credits are considered to be Regular students. These students must have a minimum of 2.0 cumulative GPA after attending two full-time semesters and thereafter.

Effect of Withdrawals, Incomplete Courses, Repeated Courses on Financial Aid

If a student withdraws from course(s) after the first week of classes during a given semester, the course credits are included in the count of courses attempted. An incomplete course counts as credits attempted, but is not included in the GPA and credits completed until the incomplete grade changes to a passing or failing grade. A repeated course is counted toward progression even if it replaces a previous course for which the student received no credit.

Procedures for Appealing

Students not meeting the minimum standards for Satisfactory Academic Progress are ineligible for federal, state aid and certain sources of institutional financial aid (this includes grants, scholarships, work and loans). However, students may request reinstatement of their financial aid eligibility for the academic year by submitting a written appeal to the Financial Aid Appeals Committee. Appeal requests must provide an explanation of the circumstances that contributed to the student's failure to meet the minimum academic progress standards and a realistic academic plan for improvement. It is recommended that students meet with an academic counselor to develop an academic plan of action prior to submitting an appeal.

Within an academic year, students may appeal for the both fall and spring or one semester only. If fall semester appeal is denied, students may re-appeal for the following spring semester based on factors related to academic improvement or personal development during the prior semester.

If the Financial Aid Appeals Committee approves the appeal, the student's financial aid eligibility is reinstated for the applicable payment periods. For example, if the appeal is approved in the fall semester, the student regains eligibility for both fall and spring semesters. Approval in the spring semester, however, restricts eligibility to that semester only. Students receive their appeal results in writing. The decision of the Financial Aid Appeals Committee is final.

Students have an opportunity to take summer courses to obtain credits not earned during the academic year or to raise their GPAs. Even though summer credits attempted and earned are included in the calculation of satisfactory academic progress (quantitative, maximum time frame for completion, and qualitative), there is no appeal process for summer financial aid. With the exception of NJ EOF Summer Grant, students who are not meeting the minimum standards for Satisfactory Academic Progress may not receive financial aid for summer terms.

Deadlines to Appeal

The deadline to appeal for the fall and spring semesters combined is November 1 and the deadline to appeal for the spring semester is April 1 each year.

EOF Academic Progress

EOF students enrolled full-time at Union County College may be eligible to receive 8 semesters of payment to complete an associate degree as long as they are making satisfactory academic progress. (N.J.A.C. 9A:11-2.8e) Satisfactory Academic Progress (SAP) requires the student to successfully complete institution designated remedial/developmental courses within the first two semesters of enrollment. Beginning with the third semester and with each subsequent semester students must earn a minimum of 12 college credits. Parttime Pilot students eligibility will be pro-rated accordingly.

Repayment Policy

Students receiving federal financial aid who completely terminate enrollment or stop attending all classes during a term for which payment has been received before completing more than 60 percent of the enrollment period are subject to specific Federal regulations for reduction or repayment of aid that was received.

The amount of Federal Title IV aid that a student must repay is determined via Federal Formula for Return of Title IV funds as specified in Section 484B of the Higher Education Act. This law also specifies the order of return of the Title IV funds to the programs from which they were awarded.

A repayment may be required when cash has been disbursed to a student from financial aid funds in excess of the amount of aid the student earned during the term using the percentage of time during the term that the student

The responsibility for returning unearned aid is shared between the College and the student according to Federal guidelines. Union County College will distribute the unearned aid back to the Title IV programs as specified by law. The student will be billed for the amount owed to Title IV programs and any amount due to the College resulting from the reduction in aid.

3cholorship

A scholarship is a sum of money awarded to a student to be used for educational expenses while attending Union County College. Scholarships are available from a variety of sources including:

State of New Jersey

New Jersey Student Tuition Assistance Reward Scholarship (NJ STARS)

High school graduates who finish within the top 20 percent of their class and meet all other criteria are eligible for this award within two years of the year of graduation. Applicants must first apply for all need-based federal and merit based-state financial aid grants first, such as the Pell Grant, the Tuition Aid Grant (TAG), Edward J. Bloustein Distinguished Scholars and the Urban Scholars Program. After that, NJ STARS will cover the remaining balance of tuition and qualified fees. Those who qualify will have up to two years from the date of high school graduation to enroll and begin using the NJ STARS scholarship at Union County College.

New Jersey Tuition Assistance Grant (TAG), Educational Opportunity Fund (EOF) Grant, E.J. Bloustein Distinguished Scholarship, and Urban Scholarship:

The actual amount of these state awards is determined by the NJ Higher Education Student Assistance Authority and is indicated on the official Student Eligibility Notice (SEN) sent to students by that agency.

County of Union

Freeholder Scholars Program

The Union County Board of Chosen Freeholders has established a "Freeholder Scholars Program" for Union County residents. The scholarship covers the cost of Union County College (UCC) tuition and fees for entering or returning students who meet the following criteria.

- Full time enrollment status at UCC (12 or more credits per semester)
- A minimum of 3.0 or B average achieved in high school
- Union County resident (per existing UCC residency policy)
- Annual family income of \$75,000 or less

Students applying for the Freeholder Scholars Program must file for federal and state financial aid; the Freeholder Scholars Program award will cover the difference between UCC tuition and fees and financial aid received. Students are eligible to receive the scholarship for four consecutive fall/spring semesters providing they maintain a 3.0 grade point average at the College.

Freeholder scholarships are subject to appropriation of funds by the County of Union.

Union County College Foundation Scholarships

All Union County College credit students are invited to apply. Some scholarships require full-time enrollment, while others are designed for part-time or returning students or students who meet certain criteria or have specific needs. Many scholarships require a minimum Grade Point Average (GPA) unless otherwise stated.

Application forms and information on how and when to file these forms are available from the Financial Aid Offices on the Cranford, Elizabeth, and Plainfield campuses. Students are urged to complete the necessary application form and recommendations well ahead of the specified deadline. In order to be considered for the scholarships that specify financial need, scholarship applicants must also complete the Free Application for Federal Student Aid (FAFSA).

Scholarship applications and the required recommendations must be submitted to the Financial Aid Office by the specified deadline. The applications are reviewed and award decisions are made by the Faculty Scholarship Committee.

Scholarship recipients must attend the annual Scholarship Reception, submit a thank you letter to the UCC Foundation, maintain a current mailing address and telephone number with the UCC Admissions Office, and declare a major. (International students must be accepted in a UCC degree program that issues an Associate in Arts, Associate in Science, or Associate in Applied Science.)

The following is a list of Union County College Foundation scholarships available to UCC students as of March 15, 2007: These scholarships have been made available through generous donations made by private and institutional sources. Individuals interested in establishing additional scholarships for the benefit of UCC students should contact the Union County College Foundation, 1033 Springfield Avenue, Cranford, NJ 07016, (908) 709-7505, uccfound@ucc.edu.

African-American Male Initiative Scholarship

Awarded to a full or part-time African-American male recent graduate of Westfield High School with a "C" average or better, who has participated on a varsity team in his junior and senior years. If no candidate satisfies these requirements from Westfield, then a student meeting the same requirements from Cranford High School will qualify to receive the scholarship.

Alumni Association Scholarship

Awarded to a part-time student with a minimum 2.0 GPA who has demonstrated financial need and commitment to Union County College.

Amateur Astronomers, Inc./E.T. Pearson Scholarship

Awarded to a full-time student enrolled as a Physical Science or Engineering major who has completed a minimum of 24 credits with a 3.0 GPA and applied for financial aid. Preference shall be given to students enrolled in or having taken Astronomy 101 or 102. Nominees from this group shall be selected by the instructor of these courses and submitted in writing to Union County College.

American Association of University Professors Scholarship (#1)

Awarded to a full or part-time student who has completed at least 18 credits with a minimum GPA of 2.5. Recipient must have involvement in community activities and demonstrate financial need.

American Association of University Professors Scholarship (#2)

Awarded to a full or part-time student who has completed at least 18 credits with a minimum GPA of 2.5. Recipient must have involvement in community activities and demonstrate financial need.

American Association of University Professors Scholarship (#3)

Awarded to a full or part-time student who has completed at least 18 credits with a minimum GPA of 2.5. Recipient must have involvement in community activities and demonstrate financial need.

American Way Scholarship

Awarded to a full or part-time student enrolled in the ESL Program who has completed a minimum of 6 credit hours and demonstrates financial need.

Virginia & Henry Apelian Scholarship

Two scholarships awarded annually. The first must be of Armenian descent with priority given to financial need and academic achievement. This recipient must have a minimum cumulative GPA of 2.8 and must have completed at least 15 credits. The second scholarship will be awarded based upon academic achievement and financial need. This recipient must have a minimum GPA of 3.0 and must have completed at least 15 credits.

The Atrion Corporation Scholarship

Awarded to a full-time student enrolled in the Computer Science field, who has completed a minimum of 15 credits with a 2.5 GPA and demonstrates financial need.

Kathy Attalla Memorial Scholarship

Awarded to a full or part-time student with a "C" average or better, from New Jersey, New York, Pennsylvania, or who is a nationally registered EMT. Applicant must satisfy the membership criteria of the WOFÁS (West Orange First Aid Squad) - 18 years of age, valid NJ driver's license, and criminal background investigation. Recipient is required to serve as an EMT for a minimum of six (6) hours per week, on a weekday shift, for the duration of the semester for which the award was issued.

Kenneth Pierre Barnes Memorial **Scholarship**

Awarded to a full-time student over the age of 25 who has completed a minimum of 24 credits with a 2.5 GPA and applied for financial aid.

Alan R. Barwiolek Memorial **Scholarship**

Awarded to a student in ASL or Deaf Studies Certificate or Interpreters for Deaf Degree Program who has completed 12 credits (Certificate Program) or 30 credits (Degree Program) with a minimum 3.5 GPA. Recipient must have declared interpreting as a career track, demonstrate financial need, and be a U.S. citizen.

James C. Bashe Memorial Scholarship

Awarded to a student in the Allied Health Program, with priority given to a Physical Therapy student.

Eugene H. Bauer Family Scholarship

Awarded to a full-time student who has completed 30 credits towards an Associate Degree Program. Recipient must be a resident of Union County or adjacent counties (Essex, Middlesex, Morris and Somerset).

Ernest & Georgia Bell Scholarship

Awarded to a full or part-time student pursuing a degree in Business Administration or Business Management. Recipient must have a "B-" average and be a Union County resident. Scholarship will be awarded on the basis of financial need.

Ceinwen Bergen Memorial Scholarship

Awarded to a full or part-time student in his/her sophomore year from a Union County city (Elizabeth, Plainfield, Rahway, Linden, Roselle). Recipient must be a Humanities major in the Liberal Arts Program and demonstrate financial need. Recipient must have a minimum 3.0 or better cumulative GPA at the time of application for the scholarship.

Elizabeth J. Bielefeld Memorial Scholarship

Awarded to full or part-time students who are residents of Union County and who plan to transfer to a four-year institution upon graduation. Preference will be given to residents of Summit, NJ. Recipients must have a minimum 3.0 cumulative GPA at the time of application and have completed a minimum of 12 credits. Scholarship will be awarded on the basis of financial need.

Donald E. Billiar Memorial Scholarship

Awarded to the applicant with the highest cumulative GPA (minimum 3.0) after having completed a minimum of 20 credits.

Joan & Pete Blatz Scholarship

Awarded to a full-time student with preference given to a student athlete. Recipient must demonstrate financial need, have completed at least 12 credits, and have earned a minimum cumulative GPA of 3.0.

Martha Bracher & Marguerite Hesseman Scholarship

Awarded to a student who has completed 12 credits with a minimum GPA of 2.5. Recipient must be a U.S. citizen and demonstrate financial need. Priority will be given to applicants from Hillside and Hillside High School graduates.

The Nadine Brechner Scholarship

Awarded to a full or part-time student who has passed Institute for Intensive English courses and is enrolled in credit

Bristol Myers Scholarship

Awarded to a current or transfer full time, matriculated student. A minimum 3.0 GPA is required to renew scholarship.

Drs. Thomas & Tressa Brown Scholarship

Awarded to an entering Plainfield High School graduate who is a full-time matriculated student majoring in Elementary or Secondary Education. Recipient must maintain a 2.75 GPA to continue receiving this scholarship. Scholarship will be awarded on the basis of financial need.

Dr. Tressa & Dr. Thomas Brown Scholarship

Awarded to a current full time, matriculated student in Liberal Arts (Early Childhood Elementary Education Option Pre K-3) or Liberal Arts (Education Option Grades 4-12). The student must demonstrate financial need and a commitment to Union County College.

Bruckner Family Scholarship

Awarded to a full-time male student, born in the USA, 25 years of age or younger, who has completed a minimum of 24 credits with a minimum 3.0 cumulative GPA at time of application. Recipient must be majoring in engineering and planning to pursue a bachelor's degree after graduating from UCC.

James A. Burns Memorial Scholarship

Awarded to a full or part-time student in the LPN curriculum, with a minimum "C" average overall, but a "B" in the "core" curriculum. Recipient must have worked in the home health care field (2 years recommended), have demonstrated compassion and love for his/her work, and not have the means to pursue further certification in nursing such as an LPN degree. Letter of recommendation or references from patient families, supervisor or colleagues is required for consideration. Letter or statement from candidate about his/her career goals and how he/she would work to ensure quality care also is required. The scholarship will be awarded on the basis of financial need.

Rosemary & Eugene Carmody Scholarship

Awarded to a student majoring in either Business or Liberal Arts with an Education option. Priority will be given to a full-time student. Recipient must have a minimum 3.0 cumulative GPA and have completed at least 24 credits. Recipient must have active participation in Union County College and/or community programs. This scholarship will be awarded on the basis of academic achievement, College or community participation, and financial need.

Loretta Gleason Castaldo, RN Nursing Scholarship

Awarded to a full or part-time nursing student with a cumulative GPA of 2.5 or better who has completed 24 credits. The scholarship will be awarded on the basis of financial need.

Cento Amici Scholarship

Awarded to a student of Italian-American descent who has completed a minimum of 24 credits with a 3.0 GPA and documents financial need.

Central Jersey Road Runners Club Scholarship

Awarded to a deserving Union County College athlete/scholar.

Colonna/Cormier Scholarship

Awarded a full-time student coming immediately out of high school with a "B+" average. The scholarship will be awarded on the basis of academic achievement and financial need.

Camille & Robert Cormier Scholarship

Awarded to a full-time student. The scholarship will be awarded on the basis of financial need.

Corporate Chefs Scholarship

Awarded to a student enrolled in a program at the Plainfield Campus who demonstrates financial need.

Daniel G. Covine Memorial Scholarship

Awarded to a full-time student who has completed 12 credits with a 3.0 GPA, and is a resident of Union County. Preference will be given to students in the Paralegal Studies Program; if no appropriate student is eligible, then to students studying History. The scholarship will be awarded on the basis of financial need.

Cranford Chamber of Commerce Scholarship

Awarded to a full or part-time first-year student entering Union County College and a resident of Cranford who has a minimum high school GPA of 2.5 and demonstrates financial need.

Judge Cuddie E. Davidson, Jr. Memorial Scholarship

Awarded to a full or part-time Union County College student with a minimum 2.5 cumulative GPA at the time of application. The scholarship will be awarded on the basis of financial need.

Charles T. Davis, Sr. Scholarship

Awarded to students entering the Liberal Arts Program. Must rank in top quarter of their high school graduating class or score 1100 or more on their SAT or possess unusual intellectual or artistic talent, a cumulative GPA of 3.5, or membership in Phi Theta Kappa. Students must first apply for and accept financial aid prior to receiving scholarship. Continuing recipient(s) must maintain a minimum cumulative GPA of 3.2.

Developmental English Scholarship

Awarded to a student enrolled in a degree program who has demonstrated a commitment to college work by having successfully completed his/her developmental English requirements in reading and writing. Recipient must write a brief statement (250 words) discussing his/her educational goals at Union County College.

Rachel Ann Drinkwater Scholarship

Awarded to a female Business major who is in the top quarter of her high school class or has maintained a "B" average the last two years in high school. Must maintain a 3.0 GPA while at Union County College and plan to pursue a bachelor's degree after graduating from Union County College. Recipient must be a United States citizen and no more than 21 years of age.

Faculty Scholarship

Awarded to a matriculated student who has completed 24 credits with a minimum GPA of 3.2. Recipient must demonstrate financial need.

Firemen's Mutual Benevolent Association, Local 37, Cranford Scholarship

Awarded to full-time students who have completed a minimum of 12 credits with a minimum GPA of 3.0. Recipients must be residents of Cranford. The scholarship will be awarded on the basis of financial need to one male and one female student per year.

T.C. Flynn & Megan Ryan Morris Scholarship

Awarded to a full-time female student, a resident of Union County and a graduate of a Union County high school with a "C" average or better.

The Barbara H. Foley Scholarship

Awarded to a Union County College ESL student who has not failed the previous ESL course. Recipient must demonstrate financial need.

The Fox Family Scholarship (#1)

Awarded to a matriculated full or parttime student and a resident of Union County who has successfully completed at least one English-as-a-Second-Language class and a minimum of 12 credits with a "C+" GPA. Recipient must be of immigrant background and demonstrate financial need.

The Fox Family Scholarship (#2)

Awarded to a matriculated full or parttime student and a resident of Union County who has successfully completed level 6 in English-as-a-Second-Language class and a minimum of 12 credits with a "C+" GPA. The recipient must be of immigrant background and be planning to become a teacher.

Harriet Fox Memorial Scholarship

Awarded to a full or part-time student. Recipient must have a minimum 2.6 cumulative GPA at the time of application and have completed a minimum of 24 credits. The scholarship will be awarded on the basis of academic achievement and financial need. Recipient must have served as a volunteer in one of Union County College's service organizations or as a volunteer in community activities.

Thomas Gallagher Scholarship

Awarded to a full time second year student who is majoring in a mathematics related field and demonstrates financial need.

Dorothy Gasorek Memorial Scholarship

Awarded to a full or part-time student who is a resident of Union County. Recipient must demonstrate financial need.

The Arthur Geilfuss Memorial Scholarship

Awarded to a full or part-time student who has successfully completed a minimum of 24 credits with a minimum GPA of 3.0 and who intends to complete an associate's degree. Preference shall be given to a Union Township resident. Recipient must demonstrate financial need. There shall be only one scholarship recipient annually.

The Emma Geilfuss Memorial Scholarship

Awarded to a full or part-time student who has successfully completed a minimum of 24 credits with a minimum GPA of 3.0 and who intends to complete an associate's degree. Preference shall be given to a Union Township resident. Recipient must demonstrate financial need. There shall be only one scholarship recipient annually.

General Endowment Scholarship

The purpose of this scholarship is to prevent and deter student need for loans. Students may be full or part-time, must have and maintain a 2.0 or higher GPA, and must have applied for financial aid and found to be either ineligible or only partially eligible for grants-in-aid.

Gibson Family Foundation **Scholarship**

Awarded to a full time student with a minimum GPA of 2.5. Recipient must demonstrate financial need.

Dr. Edward Golda Scholarship

Awarded to a student of Polish descent and/or from Poland, enrolled in either the Institute for Intensive English or regular course offerings with a minimum GPA of 3.0. Recipient must demonstrate financial need. Preference will be given to a student with interest in foreign language as a field of study.

Robert M. Gray Memorial Scholarship

Awarded to a student in the Nursing program who has completed a minimum of 12 credits with a 2.5 GPA and demonstrates financial need.

The Gray Family Foundation Scholarship

Awarded to a matriculated student who has completed at least 12 credits with a minimum GPA of 2.5 who is committed to success in his/her field and demonstrates financial need. Professor recommendation required. Attendance at annual Scholarship Reception is mandatory.

Dr. Toby Grodner Scholarship

Awarded to a full or part-time Business major, with emphasis on Marketing, who has completed a minimum of 30 credits with at least a "B" average. The scholar-ship is awarded based upon academic achievement and financial need.

Elizabeth R. Gruen Memorial Scholarship

Awarded to a student who has completed at least two plant science courses at UCC and must have a minimum GPA of 3.0 in the plant science courses at the time of application. Recipient must demonstrate a strong interest in horticulture and should be planning a career in horticulture. If more than one candidate for the scholarship meets these standards, special criteria will be utilized to determine the recipient for that year.

Lavinia & Michael Hand Scholarship

Awarded to a full or part-time student pursuing a professional level career in the medical field. The scholarship will be awarded on the basis of financial need.

Robert F. Hand Scholarship

Awarded to a Cranford resident who demonstrates good academic scholarship and financial need.

Thomas H. Hannen, Sr. Scholarship

Awarded to a full time student with a minimum 2.0 GPA who demonstrates financial need. Priority will be given to applicants from Winfield.

Margaret B. Hanson Memorial Scholarship

Awarded to a full or part-time Liberal Arts major who has completed a minimum of 9 credit hours with a 3.0 GPA in English courses. Recipient must plan to pursue a bachelor's degree and demonstrate both active involvement in community activities and financial need.

Professor Donald Hedeen Scholarship

Awarded to a full time student who has completed at least 24 credits and is majoring in Engineering.

Ethel M. Heim - A Friend of the College Scholarship

Awarded to a full or part-time student who has completed at least 15 credits with a minimum 3.0 cumulative GPA who demonstrates financial need.

Everett A. Heim Memorial Scholarship

Awarded to a full or part-time student who demonstrates financial need.

Herran-delValle Scholarship

Awarded to a full-time female Hispanic student. Recipient must have a "C" average or better and be a Union County resident. The scholarship will be awarded on the basis of financial need.

Institute for Intensive English Scholarship

Awarded to a student who has successfully completed 12 hours of English as a Second Language (ESL) and demonstrates financial need.

Kenneth W. & Mildred F. Iversen Scholarship

Awarded to a full or part-time female student who is a single mother and a resident of Union County. The scholarship will be awarded on the basis of financial need.

Jacobson Family Scholarship

Awarded to a full-time student who is a graduate of Elizabeth High School or is currently living in Elizabeth and demonstrates financial need.

Sharon Johnson Educational **Excellence Scholarship**

Awarded to a full-time EOF student who has completed a minimum of 12 credits with a minimum cumulative GPA of 3.0. This scholarship is awarded based upon financial need and academic achievement.

Jocelyn W. Jones Memorial Scholarship

Awarded to a student from Plainfield who demonstrates financial need.

Alfred & Caryl Kaercher Scholarship

Awarded to a full time second year student who is pursuing an Associate in Arts degree in Liberal Arts with a Fine Arts Option in Graphic Arts, Illustration or Visual Arts.

Bonnie Sue Kaplan Memorial Scholarship

Awarded to a nursing, Emergency Medical Technology or Paramedic student with the highest grade point average. Must have completed a minimum of 24 credits and applied for financial aid.

The Karma Foundation Scholarship

Awarded to a full or part-time female student returning to school following hardship or child rearing. The scholarship will be awarded on the basis of financial need.

J.C. Kellogg Foundation Scholarship

Awarded to 4th or 5th semester students in the UCC/Trinitas School of Nursing Program or LPN to RN students in the last two semesters of the UCC/Trinitas School of Nursing Program. Recipients must have a cumulative GPA of 3.0 or better and must maintain this GPA or better to receive the scholarship for successive semesters.

Jean Kellogg Scholarship

Awarded to a full or part-time student residing in Union County. Preference will be given to an older student (30+) who is working and going to school. Recipient must have a "B" average and must have completed 12 credits. The scholarship will be awarded on the basis of financial need.

Khym Foundation Scholarship

Awarded to a full or part-time student with a GPA of 3.0 or better. The scholarship will be awarded on the basis of academic standing and financial need.

Kiwanis Luerich Scholarship

Awarded to a student who is an Elizabeth resident and demonstrates financial need and a commitment to the College or Elizabeth community. Good citizenship must be demonstrated by volunteer, charitable or public service. Recipient must have a minimum 2.0 GPA.

The Barbara Ann Kloss Scholarship

Awarded to a full or part-time matriculated female student, preferably of Polish descent, in a Liberal Arts or Business Program. Recipient must have a "B" average and must have completed a minimum of 12 credits. The scholarship will be awarded on the basis of financial need.

Ferdinand Klumpp Scholarship

Awarded to an entering or continuing student majoring in a Business or Engineering curriculum who demonstrates financial need.

Raymond B. & Lillian B. Krov Scholarship

Awarded to a full-time student who is majoring in Business. Recipient must have completed at least 12 credits with a minimum GPA of 3.0. Preference will be given to students residing in Clark.

Esther & Jerome Krueger Scholarship

Awarded to a full-time student who has completed 12 credits with a minimum GPA of 3.0 and who is majoring in an Allied Health Profession or Biology. Recipient must demonstrate financial need.

Harry Lampel Scholarship

Awarded to a student who has completed at least 12 credits and is pursuing a degree with a major in Computers or Business. Recipient must demonstrate financial need. Preference will be given to a Plainfield resident or a student attending the Plainfield Campus.

Dolores M. Lanzner Memorial Scholarship

Awarded to a student majoring in Gerontology, who is a Union County resident and demonstrates financial need. Recipient must also demonstrate a commitment to the program and must write a letter stating goals and objectives while in the Gerontology program.

Mr. & Mrs. James Lappino Scholarship

Awarded to a full-time Liberal Arts major with an Education option who has completed a minimum of 12 credits with a 3.0 GPA and demonstrates financial need. Priority will be given to students interested in Special Education.

Lawrence-Collins Scholarship

Awarded to a full or part-time student having completed 12 credits. Recipient must demonstrate active involvement in community activities (for example, a religious or social organization). Recipient must have a minimum 3.0 cumulative GPA and demonstrate financial need. Preference will be given to a Plainfield resident.

Lessner Family Scholarship

Awarded to a full-time student with a cumulative GPA of 3.0 and a minimum of 24 completed credits. Financial need and academic achievement are considered in awarding this scholarship.

Leigh & Julian Levitt Scholarship

Awarded to a full or part-time student in the Biology or Chemistry Program. Recipient must have a GPA of 3.0 or better and have completed 12 credits or more (not including remedial or "101"). The scholarship will be awarded on the basis of financial need.

Linden Lions Club Scholarship

Awarded to a full-time student who has completed one year of college. Recipient must be a Linden resident with a disability. First preference will be given to a blind or hearing impaired student.

L'OREAL USA Scholarship

Awarded to minorities and women who are not currently in the work force.

Richard O. Luster Memorial Scholarship

Awarded to a second-year student who is majoring in Engineering. Recipient must demonstrate financial need.

Rebecca Lydon Memorial Scholarship

Awarded to a full or part-time student who has completed a minimum of 12 credits with a "C+" average at the time of application. Recipient must demonstrate financial need.

MacDonald/McMinn/Whitaker Scholarship

Awarded to a full or part-time female student over the age of 25. Recipient must have a "B" average at the time of application and have completed a minimum of 12 credits. Recipient must submit an application to the College's Financial Aid

Dr. Kenneth C. MacKay Memorial **Scholarship**

Awarded to a full-time student who has completed a minimum of 12 credits with a 3.0 GPA in History/Government and demonstrates financial need.

Ian MacRitchie Memorial Scholarship

Awarded to a student who is majoring in Business or Communications and who has completed 24 credits with a minimum GPA of 2.5. Recipient must demonstrate financial need.

The John A. & Ruth Davis Manger **Scholarships**

Three scholarships awarded annually. One scholarship will be awarded to a full-time student enrolled in the American Sign Language and Deaf Studies Program with a "B+" or better average who has completed at least 12 credits. Two scholarships will be awarded to part-time students enrolled in the American Sign Language and Deaf Studies Program with a "B" or better average who have completed at least 12 credits. For all scholarships, first preference will be given to Cranford residents. If there are no appropriate candidates from Cranford, then students from Union County who meet the requirements will qualify to receive the scholarships. All scholarships will be awarded on the basis of financial need or outstanding scholarship and related achievement.

Manley-Winser Foundation Scholarship

Awarded to a graduating high school senior, between the ages of 17-19, from a Summit high school and who is a resident of Summit, NJ. Recipient must have a "C+" or better average with a history of community and school service. The scholarship will be awarded on the basis of financial need.

Harry B. Martin Memorial Scholarship

Awarded to a full-time student whose major area of study is devoted to the protection of our environment. Recipient must have completed a minimum of 12 credits with a 3.0 GPA and demonstrate financial need.

Judy Danetz Mayer Scholarship

Awarded to a matriculated female student who is a single, widowed or divorced mother over 30 years of age. Recipient must have successfully completed English 089 with a "B" or better average and a minimum of 9 credit hours. Applicants must write a 250-word essay explaining how her self-concept has changed since starting at Union County College.

John H. & Serena M. McCoy Scholarship

Awarded to a student who demonstrates financial need.

Dr. William H. McLean Memorial **Scholarship**

Awarded to a full or part-time student who plans on enrolling in the Engineering Program. The scholarship will be awarded based on financial need.

Barbara Neblett Memorial Scholarship

Awarded to a current Institute for Intensive English student who has successfully completed one year and is currently enrolled in level 3 or 4.

Dr. Richard F. Neblett Memorial **Engineering Scholarship**

Awarded to a full or part-time minority student who is an Engineering major (Chemistry or other science major as alternate if no qualified Engineering major). Recipient must have a "B+" average or better ("B" average if no others qualify), have completed 15 credits and be a Union County resident. Preference will be given to a Plainfield High School graduate. The scholarship will be awarded on the basis of financial need.

Christine S. Nelson Scholarship

Awarded to a full or part-time Union County College student age 35 or older with a minimum 3.0 cumulative GPA at the time of application. The scholarship will be awarded on the basis of financial need.

Newark Beth Israel Hospital School of Nursing Alumnae Association Scholarship

Awarded to a full or part-time student who resides in Union or Essex County. Recipient must be a second semester student in the Nursing Program and have a "B-" or better average. The scholarship will be awarded on the basis of financial need.

New Jersey Computer Club Founders' Memorial Award Scholarship

Awarded to a full or part-time student with a minimum 2.5 average or better and who is a resident of New Jersey. Recipient must be enrolled in a computerrelated training program and have a willingness to share computer knowledge with others. Recipient will attend meeting with a New Jersey Computer Club representative to accept the check at the Club.

Sue Novak, RN, CHPN Nursing Scholarship

Awarded to a full or part-time student who plans on enrolling in the Nursing Program. Preference will be given to a Plainfield resident or an entering student from Plainfield High School.

Paul J. O'Keeffe Memorial Scholarship

Awarded to a full or part-time student pursuing a degree in the Nursing Program and who shows involvement in community activities. Priority will be given to a student who plans to attend a four-year institution. Recipient must have a 3.0 (B) average, have completed 24 credits and be a Union County resident. The scholarship will be awarded on the basis of financial need.

Dr. Saul Orkin & Maria Lydia Orkin Memorial Scholarship

Awarded to a Liberal Arts student who has completed at least 24 credits with a minimum GPA of 3.5.

Susan Pancurak Memorial Scholarship

Awarded to a student entering the second year of the Physical Therapy Assistant Program. Must demonstrate a sense of maturity and responsibility and keen interest in the profession.

Pepsi Scholarship

Awarded to a full or part-time student who demonstrates financial need.

Frank J. Peterpaul Scholarship

Awarded to a full-time student enrolled as a Liberal Arts major with a minimum 2.5 cumulative GPA and must have completed a minimum of 12 credits. The scholarship is awarded based upon academic achievement and financial need. Applicants must apply and be eligible for financial aid.

Vincent C. Piro Memorial Scholarship

Awarded to a full or part-time art student of very limited means. Recipient must maintain a "C" average or better. Recipient must attend annual Scholarship Reception. The scholarship will be awarded on the basis of financial need.

PNC "Grow Up Great" Scholarship

Awarded to a full or part-time student majoring in Early Childhood Education.

Practical Nursing Free Loan Fund

This fund is intended to help needy students enrolled in the Union County College Practical Nursing program to purchase uniforms, pay for a physical exam, or meet other requirements of the program. It is not intended to cover tuition. The funds are disbursed according to need only, without regard to immigration status, skin color, religious belief, sexual orientation, or any other criterion, so long as the recipient is a UCC practical nursing student in good standing. If the need exceeds funds available, the Director of the practical nursing program has sole discretion to decide to whom to disburse the funds, and in what amount(s), consistent with the aforestated criteria.

Emil Prazak Memorial Scholarship

Awarded to a second year student majoring in Business or Engineering and who is preferably attending classes in the evening.

Raudelunas Family Scholarship

Awarded to a full or part-time student who resides in Union County. Recipient must be someone who values education and whose life will be changed by this scholarship. The scholarship will be awarded on the basis of financial need.

The "Reed's" Read Scholarship

Awarded to a full or part-time student with a passing grade. Recipient must be a Plainfield resident and a single parent (female) with a child who is trying to attend college and needs financial help with books, etc. The scholarship will be awarded on the basis of financial need.

Eleanor B. Reiner Foundation ASL/Deaf Studies Scholarship

Awarded to a student in the ASL or Deaf Studies Certificate or Interpreters for Deaf Degree Program.

The Ann Richards Memorial Scholarship

Awarded to a full or part-time student who is maintaining a "B" or better average. The scholarship will be awarded on the basis of financial need.

Victor M. Richel Family Foundation Scholarship

Awarded to a full or part-time student. Recipient must be a graduate of Governor Livingston High School, Berkeley Heights, NJ. Scholarship will be awarded on the basis of financial need.

Richel-Lepree Family Scholarship

Awarded to a student majoring in Liberal Arts with an Education option. Priority will be given to a student who has completed ESL classes. Recipient must have a minimum 3.0 cumulative GPA and have completed at least 24 credits. Scholarship will be awarded on the basis of academic achievement and financial need. Recipient must document plans to become a teacher.

Susan Bashe Robertson Memorial Scholarship

Awarded to a full or part-time student who is planning to study Library Science or who is an English Major. The scholarship will be awarded on the basis of financial need.

The Sabatino Family Scholarship

Awarded to a full or part-time student who has completed a minimum of 18 credits with a 3.0 GPA.

Schering-Plough Foundation Allied Health Scholarship

Awarded to a student in Allied Health who attends the Elizabeth Campus and who resides in Elizabeth, NJ or Union County.

Ben A. Sciarrillo Memorial **Scholarship**

Awarded to a full-time student who resides in Union County. Recipient must have a minimum GPA of 3.0 and enrolled in the Physical Sciences or Engineering Program. Preference given to American born student.

SCORE Scholarship (Service Corps of Retired Executives)

Awarded to a full-time second-year student in the Business program who demonstrates financial need. Recipient must be a New Jersey resident and have a minimum GPA of 3.5.

September 11th Memorial Scholarship

The primary criteria are to provide assistance to individuals and their immediate families who were impacted by the events of September 11, 2001 and who do not have adequate relief from other sources. In the event there are no candidates who meet the primary criteria, the scholarship will be awarded to students pursuing a degree in one of the emergency serving professions. There are no academic criteria and the scholarship may be awarded to an entering full or part-time student.

C.W. Sharp & T.L. Murphy Scholarship

Awarded to a matriculated full or parttime student entering with a "C" average or better and an Elizabeth High School or St. Mary's High School graduate. Special consideration will be given to a first generation college student. Prospective recipients must get a letter of recommendation from high school guidance counselor, write an essay and interview with the donors. Recipient must maintain a 2.5 or better GPA in order to continue receiving the scholarship. Recipient must demonstrate compassion toward others and a history of community service. Recipient must visit his/her former high school to serve as a role model to those who come after. The scholarship will be awarded on the basis of financial need.

Taras Shevchenko Scholarship

Awarded to a full or part-time matriculated student of Ukrainian descent with a minimum cumulative GPA of 3.0 and a minimum of 12 credits. The applicant must submit a 300-word essay (word processed) on some aspect of Ukrainian life (e.g., culture, history, economy, education, technology), past or present. The scholarship will be awarded on the basis of academic achievement, financial need and evaluation of the essay.

Dr. Wallace Smith & Lisa Chambers Smith Scholarship

Awarded to a full or part-time student majoring in Liberal Arts (Psychology option). Recipient must have a 3.0 or better GPA at the time of application for the scholarship and have completed a minimum of 30 credits. The scholarship will be awarded on the basis of academic achievement.

Rosa Bello Spina Memorial **Scholarship**

Awarded to a female student majoring in the sciences who has successfully completed a minimum of three science courses and has a minimum GPA of 3.0.

Sophie & Nicholas Stefiuk Scholarship

Awarded to a full-time student having completed a minimum of 12 credits and earned at least a 3.0 cumulative GPA. The scholarship will be awarded based upon academic achievement and financial need. Recipient must write a letter documenting a keen desire to achieve higher education.

Student Government Association Participation Scholarship

Awarded to a matriculated student with a minimum GPA of 2.5 who is involved in student clubs and activities.

Student Government Association Part-Time Scholarship

Awarded to a part-time student enrolled for 11 credits or less per semester who demonstrates financial need.

Student Government Association Scholarship

Awarded to part time students who demonstrate financial need.

Vito Todaro & Joseph Bent **Scholarship**

Awarded to a full-time student who is an Irvington or Plainfield High School graduate. Recipient must have at least a "C" average and have completed 24 credits.

The Truth Scholarship

Awarded to a full-time minority student from Elizabeth, Cranford or Plainfield who demonstrates financial need, has a GPA of 2.75 or higher and continues full time until graduation or transfer to a fouryear school. Recipient may choose any major and must type a 5-7 paragraph essay about why his or her major was chosen. Student must apply each semester for this scholarship.

UBS Westfield Scholarship

Awarded to a full or part-time student who is a resident of Union County. Recipient must be a Business major with a "B-" or better average. The scholarship will be awarded on the basis of financial need

Union County College Foundation

A two-year scholarship for entering firstyear students who rank in the top quarter of their high school graduating class or score 900 or more on their SAT or possess unusual intellectual or artistic talent and are residents of Union County. Students must maintain a minimum 3.0 GPA to renew their scholarships.

Union County College Foundation Scholarship for Part-Time Students

Awarded to part-time needy students.

Dean S. Van der Clute Scholarship

Awarded to a full-time student who is entering the second year and is an Architecture major. Recipient must be a U.S. citizen.

Donald & Leona Van Gordon Nursing Scholarship

Awarded to a full or part-time nursing student who is a resident of Union County. Preference will be given to students in LPN to RN Completion Program. Recipient must have completed 12 credits and have a "B" or better grade point average. The scholarship will be awarded on the basis of financial need.

Verizon Scholarship

Awarded to a full-time matriculated student who has completed his/her first year at Union County College, is a New Jersey resident, and demonstrates financial need.

Madeline M. & Anthony A. Vertelis Scholarship

Awarded to a full or part-time student who is a Linden High School graduate and resides in Linden or Union. The scholarship will be awarded on the basis of financial need.

Wachovia Scholarship

Awarded to a full or part-time student who is a business major. Recipient must have completed 24 credits with a minimum GPA of 3.0. Scholarship will be awarded on the basis of academic ability and financial need.

Wakefern/ShopRite LPGA Classic Scholarship

Awarded to a full or part-time Business major who has completed 12 credits with a 2.8 GPA and who demonstrates both active involvement in community activities and financial need. Preference will be given to a student enrolled in Food Industry Marketing and Management courses.

John Allison Ward Memorial Scholarship

Awarded to a full or part-time student with a minimum 3.0 cumulative GPA at the time of application. The scholarship will be awarded on the basis of financial need.

Judge Chester and Emily Weidenburner Scholarship

Awarded to a full-time student who is a Linden High School graduate. Recipient must have a minimum cumulative GPA of 2.0 and have completed at least 12 credits. This scholarship is awarded based upon academic achievement and financial need.

Weidenburner Family Scholarship

Awarded to a full-time student who is a Linden High School graduate. Recipient must have a minimum cumulative GPA of 2.0 and have completed at least 12 credits. This scholarship is awarded based upon academic achievement and financial need.

Harry A. Weinberger Paramedic Scholarship

Awarded to a Union County College student in the Paramedic program. Recipient must have a minimum 3.0 GPA on pre-requisite general education course work, and a 3.0 or better in the fall semester of the Paramedic program. The scholarship will be awarded on the basis of academic achievement and exceptional EMS skills.

William West Scholarship

Awarded to a student who demonstrates financial need.

Westfield Foundation Scholarship

Awarded to one or more Westfield residents attending Union County College who have financial needs.

Westfield Rescue Squad Scholarship

Awarded to students who are enrolled in the Paramedics program and who have a strong academic background. This scholarship will be awarded based upon academic achievement and the commitment to volunteer.

Westfield Rescue Squad EMT Opportunity Scholarship

Awarded to a full or part-time student and a certified EMT. Each recipient must commit to one (1) year of volunteer service at the Westfield Rescue Squad, as defined by Westfield Rescue Squad policy. The scholarship may be applied to any field of study or degree program in return for this commitment.

Frederick R. Wiehl Memorial Scholarship

Awarded to a full-time student enrolled in the Allied Health field, who has completed a minimum of 12 credits with a 3.0 GPA and demonstrates financial need.

Doris Kiefer Wolf Memorial Scholarship

Awarded to a full-time matriculated female student in the Biology, Chemistry or Pre-Med program who has completed her first year and is a resident of Union County. Recipient must have a minimum 2.0 GPA.

Professor Elmer Wolf Scholarship

Awarded to a full or part-time student who is an Engineering or Science major. Recipient must have a minimum "B" average. Recipient must be planning to transfer to a four-year institution to pursue a bachelor's degree.

C.J. Yao Scholarship

Awarded to a full or part-time art student who has a "B-" or better GPA. The scholarship will be awarded on the basis of academic achievement and financial need.

Louise Yohalem Scholarship

Awarded to a full or part-time student who has completed 12 credits and has a "B" or better average. Recipient must be a first-generation female student either born in a foreign country or whose parents were born in a foreign country. The scholarship will be awarded on the basis of financial need.

Cynthia Ziolkowski-Angus Memorial Scholarship

Awarded to a full-time female student majoring in Nursing. Priority is given to a student who plans to transfer to a fouryear institution. A minimum of 12 credits must be completed with a minimum GPA of 3.0. The scholarship will be awarded based upon academic achievement and financial need.

Jack Zissel Memorial Scholarship

Two scholarships, one awarded to a student with a disability who has a minimum GPA of 2.0; second scholarship awarded to a second-year female basketball player with a minimum GPA of 2.0.

Policie

A faculty member is entitled to freedom in the classroom in discussing his or her subject, but should be careful not to introduce into his or her teaching controversial matter which has no relation to his or her subject.

Academic Integrity

It is expected that students will present as their own work only that which they have done themselves. The College will not condone academic dishonesty at any time, whether it be plagiarizing (the act of passing off someone else's ideas as your own), or cheating by any means during a test, an examination, or in any work intended to be done independently.

Any student who is found guilty in violation of academic integrity by a faculty member is subject to any or all of the following actions:

A grade of F for the work in question.

- 1. Any other action deemed appropriate by the faculty member, including lowering of the final grade for the course and/or make-
- 2. Immediate and complete failure for the
- 3. A Censure or Probation initiated by the faculty member and enacted by the Vice President of Student Services Office. This includes the creation of a file in the student's name with full documentation of the act of academic dishonesty.
- 4. Upon the recommendation of the Academic Vice President, immediate dismissal from the College. This decision may be appealed to the Judicial Committee.

Academic integrity includes the following:

- a) Honest inquiry in the search for truth and understanding is the common purpose of faculty and students; it entails the courage to present and the tolerance to entertain divergent views where intellectual differences exist.
- b) Provision of an environment conducive to learning is the primary function of all administrators, faculty, and staff members and the responsibility of trustees.
- c) Responsible teaching demands faithful attendance at assigned classes and accessibility to students outside classes; respect for the personal dignity and worth of each individual student without prejudice; the determination to uphold rigorous curricular standards; the practice of honesty in defining and

- impartiality in applying grading standards that reward excellence, identify failure as distinct from mediocrity, and assure the integrity of academic credits; the willingness to undertake measures to prevent student cheating and to impose penalties whenever cheating occurs; and adherence to high standards of personal behavior as a contribution to the ethical tone of the campus.
- d) Honest pursuit of research and scholarship by faculty and students demands attribution of credit to all individuals who participated in the conduct or contributed to the completion of a project, paper, publication, or experiment; citation of the specific source of all information, ideas, and quotations not original to the author; and respect for truth in reporting experimental findings or the results of scholarly inquiry.
- e) The proper fulfillment of academic requirements demands the presentation of such homework assignments, term papers, examination papers, or other evidences of effort as are solely the fruits of a student's own work; the practice of fairness in competing with peers through recognition of others' equal right to gain access to information and materials, through respect for common facilities and equipment, and through adherence to rules governing their use.
- f) Responsible administrative oversight requires equity in recruitment, hiring and admissions practices; attention to the educational needs of all students admitted, including provision of remedial programs where necessary; fairness in procedures governing promotion and tenure decisions; supervision of faculty members' outside employment to prevent conflicts of interest or responsibility; insistence on accuracy and truthfulness in all materials and presentations describing the institution; formulation and periodic dissemination of an institutional code of academic ethics; encouragement of adherence to the principles of the code by frequent publication of penalties for violations and their firm application when infractions occur; and creation of a campus climate of ethical behavior through the exemplary conduct of administrative functions in dealing with students, faculty, staff, and the public.
- g) The exercise of trusteeship demands the governing boards resist all attempts by external agencies or persons to exert inappropriate pressure on colleges and universities, and that they publicly embrace the principles of academic integrity, carefully monitor institutional efforts to nurture ethical conduct, and strongly support the enforcement of institutional codes governing matters of academic ethics.
- h) Compliance with any of the foregoing statements is a joint responsibility of the faculty and administration.

Counseling Services offers a comprehensive program for academic advising to assist students from the onset of their college experience. Advisors are available to guide students in selection of courses, choice of major, and to assist the student in general orientation to college life. Advisors are also available to help students with curriculum changes, resolution of scholastic difficulties, transfer advisement, and career direction. In addition to individual advising, workshops for the above are periodically offered by Counseling Services on all campuses.

Some dissection of animal specimens is required of students enrolled in the laboratory portion of the following courses: BIO 102, 105, 106, 110, and 111.

Students who are pregnant or expect to become pregnant should consult with their doctors before taking any science laboratory course at Union County College.

A two-and-one-half-hour final examination is given at the conclusion of most courses unless there is notice to the contrary. Students are required to take all tests or examinations on the days scheduled when such tests or examinations are announced in advance by the instructor. Make-up tests or examinations shall be given at the discretion of the instructor. Unannounced quizzes may be given at the instructor's discretion.

In some courses, department examinations (challenge examinations) may serve as the basis for getting credits. A student must receive permission from the department chairperson in order to qualify for credit; students who pass the examination will be awarded full credit. A grade of "C" or better must be achieved in order to pass a departmental examination for course credit. The student's transcript will list the course and semester hours, but in lieu of a grade, there will be a notation "credit by examination". Should the student fail the examination, a copy of the notice indicating failure will be filed with his/her personal file. A student may attempt to challenge only the maximum number of transfer credits allowed by the College minus the number of transfer credits he/she has already received.

Challenge examinations may be used to validate successful knowledge about a course that was taken more than ten years ago. On the other hand, no student who has taken and failed a course shall be permitted to retake the course via the challenge examination.

A student who wishes to obtain advanced standing through an approved department examination must obtain a form/application from the appropriate department chairperson. If, after a discussion with the appropriate chairperson, the student is deemed eligible, he/she completes the Request for Advanced Standing by Challenge Examination form to initiate the process.

After payment of the required fee, the completed form and payment receipt are then brought to the department chairperson so that the time and date of the examination can be determined. Examinations should be scheduled at a mutually convenient time for the student and faculty member.

The required fees for challenge examinations will be based upon 50 percent of the current course tuition. Students will be furnished orally or in writing general statements about what course materials will be covered in the challenge examination.

CLEP (College-Level Examination Program®) provides a method of earning college credit by taking examinations in various subject areas. Union County College recognizes CLEP scores and will allow credit in many subject areas when the scores meet the college requirements. Credit will not be given where there is evidence of previous academic work. In addition, Union County College will give ADVANCED PLACEMENT credit to students achieving a grade of '3' or higher on Advanced Placement (AP) Tests from the College Board. Each of the College's academic departments will decide which Union County College courses are comparable to the specific Advanced Placement Test. For further information, contact the Admissions Offices' transfer credit evaluation professionals.

APL provides a method of earning college credit by organizing and submitting a portfolio documenting life experiences and demonstrating the similarity to learning gained through formal college-level education. Credit is awarded only for demonstrated college-level learning, not for experience per se. This learning must be comparable and correspond to UCC courses for which previous credit has not been awarded. Students must adhere to the established College policy regarding academic honesty and integrity per the Student Handbook.

Not more than half the credits required for a degree may be earned through APL combined with other forms of credit options; e.g. CLEP, Challenge Exams, AP tests, transfer, etc. Students must consult with the Assessment of Prior Learning Coordinator for eligibility and requirements. Students must adhere to College policies and procedures.

Membership (Recommended)

Council on Adult and Experiential Learning (CAEL)

Eligibility/Restrictions

- Student must have completed a minimum of six credits toward a degree
- Student must have a minimum GPA of 2.5
- Student must be currently registered/ enrolled in a credit course toward a degree
- Course(s) eligible for assessment must be specified in the student's chosen curriculum
- The combination of "outside evaluation" transfer credits CANNOT exceed 50 percent of the total credits for the degree pro-

- gram (CLEP, Challenge Exams, APL, etc.)
- Student must apply for assessment of prior learning before 33 credits have been earned
- Student must complete all developmental requirements, if applicable, before applying for APL credits
- Once a student attempts a course, the credits for that course cannot be requested for assessment of prior learning
- Some restrictions depend on program requirements; e.g. dental hygiene, nursing, engineering
- Certain courses may be ineligible for assessment of prior learning due to program requirements
- Courses assessed are limited by the expertise and availability of trained APL faculty evaluators

Registration

Registration, the process by which an admitted student enrolls and completes payment for their tuition and fees, must be done each semester/session. There is an additional charge for late registration. The registered student receives or may acquire a class schedule which is a permit to enter class. An identification card is mailed to new students after the last day of registration for each semester/session for new students. The identification card, which must be validated each continuous semester, also serves as a Library card.

Freshmen and other new students who enroll have access to a member of the counseling staff or advisor to assist in the completion of the registration form. The counselor/advisor will provide the requirements of their program/curriculum of study and guide students in the choice of electives. (Placement testing is mandatory to evaluate certain academic skills.)

Each term thereafter, students submit their schedules for the next semester in accordance with registration instructions. Students are encouraged to seek the assistance of the College counselors, program coordinator, or faculty advisor in planning their schedules. It is, however, the student's responsibility to be aware at all times of the graduation requirements of his or her curriculum, to select the correct courses, to accumulate the required number of credits, and to avoid duplication of subjects. A full-time student may carry 12 to 18 semester hours. Written permission from the Vice President for Academic Affairs or Registrar is required to register for more than 18 semester hours. Such permission will not be given unless the student's overall Grade Point Average (GPA) indicates that the student

is capable of carrying the additional load.

A current student who wishes to change his/her curriculum must complete a curriculum change form with a counselor prior to registration. All new students wanting to matriculate must complete a matriculation form available in the Admissions Office on any campus.

Students who, after having registered, decide not to attend before the beginning of the ensuing semester must meet with a member of the counseling staff to complete a drop form which is processed through the Registration Office. Students dropping all courses, with no intentions of returning the following semester, should return the registration materials, such as student's validated schedule and identification card, to the Registration Office. Tuition refunds are made through the Student Accounts Office.

Muhlenberg Schools' students must consult with their School's Advisor for registration and schedule changes. Registration for all courses must take place through the Faculty Advisor assigned to each student according to the procedures outlined by the Muhlenberg Schools' Registrar's office. Trinitas School of Nursing students must consult with a counselor from Union County College unless registering for nursing courses only. Trinitas students taking only nursing courses must schedule their courses with their School of Nursing Advisor. Union County College/University of Medicine and Dentistry of New Jersey (UCC/UMDNJ) students must register with a UCC counselor or advisor for all core courses.

Registration for students who enroll in the Institute for Intensive English (ESL) is held before the start of each semester. At this time, students are assigned to the appropriate level course on the basis of placement testing. Enrollment is limited; therefore continuing students are registered before new students are accepted.

Before new ESL students can register, they must file an application for admission as early as possible, appear in person for a pretest interview appointment, and take an ESL placement test on their scheduled date.

Students who have not settled financial obligations incurred at the College for a previous semester will be prohibited from registering for the next semester until such outstanding debts are satisfied. There may be a fee incurred for switching sections.

The college reserves the right to cancel any course where there is insufficient enrollment.

Curriculum

Students may apply for a change of their curriculum or program only after consultation with a member of the professional counseling staff. The required form must be completed and signed by the counselor and student and then forwarded to the Admissions Office for processing. Students requesting a change to an Allied Health major may be required to complete a new application.

A fee may be charged for the second and subsequent curriculum changes.

Limitations on section size make it impossible for every student to arrange a schedule which will meet his/her personal convenience in every instance. The student's academic obligations must take precedence over his/her personal commitments, including employment. Students may drop/add a scheduled class(es) prior to the 5th day of the regular and Late Start semester or 3rd day for Summer and 1st day of the Winter Session, by meeting with a counselor to complete the appropriate drop/add form. There may be a charge for schedule changes other than those due to an error in computer input, overlapping in course hour conflicts or class cancellations.

EOF, Health Technology, Muhlenberg Regional Medical Center Harold B. and Dorthy A. Snyder Schools and Union County College/University of Medicine and Dentistry of New Jersey students must have schedule changes completed by the Program Advisor. Trinitas students must do all nursing course changes with the Trinitas advisor.

Withdrawal from all courses in which a student is enrolled in a given semester/session constitutes a withdrawal from College.

To withdraw from College a student must see a counselor/advisor to complete a drop/add withdrawal form. Student's are recommended to consult with a counselor/advisor, however. withdrawal requests can be made in writing via mail, or by fax to the registrar's office with a brief statement including the reason for withdrawal, student ID number and the signature of the registered student. Unless this request has been completed by the student and or the counselor/advisor prior to leaving the College, the withdrawal is considered "unapproved" and will result in a final grade of "F" or "UF" in all classes.

The official withdrawal date is that on which the counselor/advisor signs the drop/add, withdrawal form or the date listed on the letter or fax received by the registrar's office from the student.

Official withdrawal from classes or college cannot be completed by telephone.

Refund and withdrawal eligibility will be based upon the date the drop/add or withdrawal is processed. Correspondence should be addressed to the Registrar's Office (See Tuition and Fees p.214).

Withdrawal from Developmental English or Developmental Math courses also requires the instructor's signature if the student is requesting to remain enrolled in other non-remedial courses.

thdrawal

A student who withdraws from class up to the fifth day of the regular semesters, third day of Summer Session and first day of Winter Session will not have those courses recorded on his/her permanent

A student who withdraws from classes after those dates, providing there is no violation of academic integrity, will have that withdrawal recorded as a "W" as long as all appropriate forms have been filed.

In order to assist students, the College policy suggests that students withdrawing from class any time before the end of eight weeks must have a counselor/advisor signature on the drop/add withdrawal slip. Special Session withdrawal dates may differ.

Late Withdrawa

Students withdrawing after the eighth week of the regular semester and before the sixteenth week will have a grade of "F" or "UF" recorded on their permanent record unless a late withdrawal form is submitted and approved by the instructor.

The late withdrawal form must be picked up from the counseling office on any campus, completed by the student and brought to the appropriate instructor(s) for approval or disapproval along with his or her written statement of special appeal based on extraordinary circumstances and with supporting documentation from a physician, employer, attorney, etc. These materials must be returned to the office of the Vice President of Student Services. Cranford campus. Please be reminded that the statement of personal reasons for appeal will be treated confidentially.

Requesting late withdrawals after the final grades have been assigned by the instructor will be treated under the Grade Change Policy (see p. 243).

Note that some courses do not run for the traditional 15 or 16-week semester. In all such cases withdrawal without penalty can only be accomplished prior to the dates listed for that semester. (Summer and Winter session dates of withdrawal may differ, check the course schedule book or web page for exact dates).

Withdrawal may constitute a failure to fulfill the requirements established by the Academic Evaluation Committee and may result in dismissal from any other courses being taken concurrently.

Students receiving Financial Aid or EOF funding must clear all changes with those offices.

Attendence

Students are required to attend classes, laboratories, and clinical sessions for which they are registered. Students are graded according to course objectives and requirements established and distributed by the instructor. While attendance alone cannot be used as a criterion for academic evaluation in any course, the instructor has the prerogative to give or decline opportunities for making up work missed due to absences.

Excessive absence may result in lowering a student's grade. Excessive absence is defined as, with the exception of medically excused absence and religious holidays, more than three cuts in a class that meets three times a week or more than two cuts in a class that meets twice per week. The instructor should be notified of extra-curricular absences prior to missing of class. The application of this policy is left to the individual instructor who, at the beginning of each semester, will announce the specific requirements of his/her course.

The instructor may use the quality of class participation in determining student grades if it has been specified as a requirement of the course. If you are subject to an extended absence (3 or more consecutive days) due to illness, death in the family or legal commitment, contact the academic department secretary.

Auditing a Course

Students may audit courses. These students must meet all admissions and course pre-requisites to register for the course, pay the regular course tuition and fees, and may participate in all course activities, except that they may not be permitted to take examinations in the course, unless approved by instructor.

In no case will the student receive a grade for an audited course. Auditors must secure written permission from the instructor within the first five days of the start of the course they decide to audit. No student may change from audit to credit without written approval from the Vice President for Academic Affairs. Audit is a non-credit grade which will not effect the student's grade point average and an "AU" is printed on the student's academic record upon completion of the course.

Course Repeats

When a student repeats a course, only the higher grade will be averaged in the cumulative average. A student may not repeat a course more than once, including a "W" grade, to improve the grade received initially without special permission from the department chairperson or coordinator.

Repeating a course when a "D" or better grade was previously recorded will not earn additional credits for the course. Only the grade-point average may be improved.

This policy was revised June 1995 and originally took effect in September 1973 and does not apply to courses taken prior to that date.

Course Waivers

Requests for course waivers must be approved, in advance, by the departments involved. Courses waived do not appear on the student's transcript. If the waiver involves more than one department, the waiver form requires the signature of both departmental

chairpersons/coordinators. After both departments have approved, the request is then sent to the Vice President for Academic Affairs for approval. All waivers are kept on file in the Registrar's Office

Grading Policy

The faculty has adopted a college-wide grading policy which requires each instructor to give students a written statement regarding his/her grading policy at the beginning of each academic term. Students who have failed to receive such information prior to the end of the second week of classes should approach the instructor with a special request for a statement outlining the grading policy to be followed.

Grades

The College uses the following system of grading to indicate on its records the quality of a student's work:

A Excellent
B+ . . . Very Good

B Good

C+ . . . Above Average

C Satisfactory

D+ Below Average

D Below Average (lowest passing grade)

F. Failing

I Incomplete*

XF. . . . Incomplete changed to failing*

S. Satisfactory

(for non-credit courses)**

U Unsatisfactory

(for non-credit courses)**

J.... "Continuing" Satisfactory
Progress

..... (Equivalent to "C" grade)

UF Unofficial withdrawal (student ceased to attend; calculated as a failing grade)

W.... Official withdrawal

P Pass (for non-credit courses)**

AU Audit

* An "Incomplete" grade may be given in cases of illness or extenuating circumstances acceptable to the Instructor only if the student had informed the instructor of the circumstances. A grade reported as "Incomplete" at the end of a semester will be permanently recorded as "XF" if the Incomplete is not removed within the first six weeks of the next regular semester. It is the student's responsibility to make acceptable arrangements with the instructor to complete the course requirements within the period. If the student is unable to contact the instruc-

tor, timely notice should then be given to the Department Chairperson.

For those students attending Muhlenberg and Trinitas Schools, please refer to that School's Nursing handbook.

** By Departmental Arrangement.

It is the student's responsibility to report an error on his/her grade report to the Instructor or Registrar's Office within two weeks of receipt of the grade. Otherwise, it is assumed that the grade report is accurate and is recorded permanently on the student's report card.

A student's academic standing is based upon his/her performance in all courses expressed in terms of the "academic average" he/she achieves. In computing this average, the following numerical values are assigned to each letter grade.

Grade	Grade Numerical Value
Α	4
В+	3.5
В.,	3
C+	2.5
С	2
D+	1.5
D	1
F	0

Numerical quality points are then determined by multiplying the above values by the number of credit hours which the course carries. For example, a three-credit hour course in which the student receives a B represents 9 quality points earned.

Academic average is determined by dividing the total number of quality points earned by the total number of credits taken, whether passed or failed. The following table is an illustration of this computation:

		Grade &	Quality	
			Points	
Course	Credits	Value F	Per Course	
HIS 101	3	C(2) .	6	
PSY 101.	3	B(3) .	9	
BIO 111 .	4	. D(1) .	4	
FRE 101 .	3	A(4) .	12	
ENG 101.	3	B+(3.5)	10.5	
CIS 101	3	. F (O) .	0	
	19		41.5	
Total credits taken: 19				
Total quality points earned 41.5				
41.5 divided by 19 results in a 2.18				

Grades received in the non-credit preparatory or developmental courses are not included in the computation of averages, but are considered in the calculation for dismissals or assigning probation by the Academic Evaluation Committee (AEC).

grade point average.

Grade Changes

Students seeking grade changes must present their initial appeal to the classroom instructor who awarded the grade. Thereafter, it is the instructor's prerogative to determine whether there is justification for a grade change. If a change is approved, the instructor must complete the required grade change forms, and forward them to the appropriate administrative offices or directly to the Registrar's Office in order for the grade change to be officially recorded on the student's record.

AT NO TIME SHOULD A GRADE CHANGE FORM BE GIVEN TO A STUDENT.

Probation & Dismissal

Students must have a minimum cumulative Grade Point Average of 2.0 in order to obtain a degree, diploma, certificate, or receive a favorable recommendation from the College. The College realizes, however, the transition to college is difficult for some students. For this reason, a minimum cumulative average which a student must maintain each semester in order to continue at Union County College has been established. Students who fail to maintain the minimum cumulative average will be placed on probation for one semester or will be requested to withdraw if, in the opinion of the Academic Evaluation Committee, they are not benefiting from their college studies.

Students on probation may not carry over 13 semester hours without written approval from the Vice President for Academic Affairs and they may not hold office in any student organizations. Unless such a student shows improvement at the end of the probationary period, he or she will be asked to withdraw from the College. Decisions regarding probation, dismissal, and conditions of re-entrance are made by the Academic Evaluation Committee. The Committee and other College authorities reserve the right to dismiss or request the resignation of a student at any time for poor scholarship, unsatisfactory conduct, or failure to abide by College regulations. The student receives written notification when he or she is placed on probation or is asked to withdraw.

A student who voluntarily withdraws during the semester with a poor scholastic record may be disqualified from reentering the ensuing term. The student receives written notification when the Academic Evaluation Committee disqualifies him or her from reentering. Students placed on probation are expected to maintain a 2.0 average in subsequent semesters and are denied the privilege of holding

office in any organization or extracurricular activity. EOF, Institute for Intensive English, Muhlenberg and Trinitas Schools, the University of Medicine and Dentistry of New Jersey have their own Academic Evaluation Committees that make decisions on students. These decisions are provided to the College's Academic Evaluation Committee.

Access to Student Records

The academic records of students are kept in the Registrar's Office under the jurisdiction of the Director of Admissions/ Records/Registration apart from any disciplinary records, the latter being retained in the office of the Vice President of Student Services. Transcripts of academic records contain only information about academic status. The FAMILY EDUCATION-AL RIGHTS AND PRIVACY ACT OF 1974 sets forth requirements designed to protect the privacy of students. The act speaks directly to statutes governing (1) access to student records and (2) the release of such records. Union County College has drafted policies and procedures which comply with the intent of this legislation. Students are therefore assured of access to those educational records described under the law and their individual rights of privacy are equally protected by limitation of transferability of such records without their consent.

If you desire information on the established policy and procedures relative to this act you may direct your inquiries to the Record's Office or the Vice President of Student Services. A copy of the policy statement is posted on the official bulletin board located at each campus.

UCC Transcripts

All requests for Union County College transcripts of record must be made in writing to the Record's Office of the College. Upon receipt of the paid request for transcripts the process may take 3-5 business days. Dates of attendance, social security number/student ID number, and present address must be included in the request. A fee is charged for each transcript. Students are not entitled to transcripts unless all obligations to the College have been met. Electronic transcripts are received and transmitted when possible.

Students in Business, Computer Science, Liberal Arts, Science, Engineering, Criminal Justice, Human Services, Health Technologies, and their options become eligible for graduation and for the Associate in Arts or Associate in Applied Science degree when they have completed a minimum of 64 semester hours of credit and have met all course requirements of their particular programs of study. The student must also have a minimum cumulative average of 2.00 to be eligible for graduation.

Students in the cooperative programs offered in affiliation with Muhlenberg Regional Medical Center Harold B. and Dorothy A. Schools and Trinitas School of Nursing become eligible for the Associate in Science in Nursing Degree upon completion of the program with a cumulative average of 2.00 (GPA subject to change by Schools of Nursing). The course requirements for each program are listed under Cooperative Programs with the Schools of Nursing.

Students in the cooperative programs offered in affiliation with the University of Medicine and Dentistry of New Jersey (UMDNJ) School of Health Related Professions, become eligible for Associate Degrees and Certificates, upon completion of the program. The Course Requirements are listed under the Cooperative Programs with UMDNJ.

It is the responsibility of students in all programs to ascertain that they have taken all subjects required in their curriculum and that they have sufficient credits each semester to meet the requirements for graduation. Students should meet with an Academic Counselor to review their curriculum prior to completing a graduation application. For the full-time student, the average load is 15 credit hours per semester. The student must submit the application for the degree three months prior to the expected completion date and pay a nonrefundable graduation fee.

Degrees, diplomas and certificates will be officially issued following the conclusion of the Summer Sessions (October), the Fall Semester (January) and the Spring Semester (May). All degree, diploma or certificate recipients are eligible to participate in commencement exercises for the academic year. There is one commencement held in May. October and January graduates are invited to participate in this annual commencement ceremony.

Students leaving the College before they complete their program who intend to transfer back credits from another institution must make sure that they have secured prior written approval from the Admissions office for the courses that they intend to take.

Until the Registrar's Office has cleared the student for graduation, no degree, diploma or certificate will be issued.

Degrees, diplomas or certificates issued will carry the graduation date closest to the date of final clearance.

Graduating students may apply to the Vice President for Academic Affairs to have course credits and grades which were taken before matriculating into their graduation major omitted from the computation of the final GPA. Such an adjustment is not automatic and each situation will be judged on its individual merits. This adjustment is not available to students who have been granted academic forgiveness. This policy may not be honored by other Institutions.

<u>Academic</u>

Students who have been absent from the College for two (2) full years, have been readmitted and earned at least twelve (12) credit hours with a 2.0 average or higher on the hours earned after readmission, and who wish to have former grades and credits omitted from the calculation of the grade point average may apply for academic forgiveness to the Vice President for Academic Affairs through an Academic Counselor. The granting of academic forgiveness is not automatic. Each case is judged on its individual merits. Academic forgiveness may be granted only once and is irrevocable. Students interested in academic forgiveness must see a counselor about the ramifications of making such a request. Where military veterans enrolled under federal laws entitling them to educational benefits must repeat courses taken prior to receiving academic forgiveness, those veterans may not receive benefits for retaking those courses. This policy may not be honored by other Institutions.

Union County College will cooperate fully to facilitate transfer credit of deserving students. The acceptability of transfer credit depends largely upon the institution involved and the type of program to which the student seeks admission. In accepting transfer students, colleges are guided by such factors as academic ability and their own particular standards. Transfer evaluation forms are available on all campuses in the Admissions Office (see transfer credit in Admissions section p. 209).

Honors

Only matriculated students will be considered for honors. Matriculated students carrying 15 credit hours during one semester are eligible for the Vice President for Academic Affairs List if they attain an average of 3.00 with no grade lower than "C", and for the President's List if they achieve an average of 3.50, with no grade lower than "B". Matriculated students carrying 12 credit hours during one semester are eligible for the Vice President for Academic Affairs List if they attain an average of 3.25 with no grade lower than "C", and for the President's List if they achieve an average of 3.75 with no grade lower than "B".

Matriculated part-time students will be considered for the Vice President for Academic Affairs List if they have earned at least 12 credit hours and have attained a minimum cumulative average of 3.00. Once this minimum is met, part-time students must carry no less than 6 credit hours and attain a semester average of 3.25 with no grade lower than "C" for the Vice President for Academic Affairs List and 3.75 with no grade lower than "B" for the President's List. Students who maintain the above averages throughout the twoyear period of their attendance and who meet all other requirements are highly recommended for transfer to four-year institutions to complete requirements for a bachelor's degree.

Honor Societies

Chi Alpha Epsilon

The Psi Chapter of the Chi Alpha Epsilon Academic Honor Society is a national honor society for students in the Educational Opportunity Fund Program. EOF students who hold a 3.0 cumulative GPA for two consecutive full-time semesters are eligible to be members. Its purpose is to promote continued high academic standards, foster increased communication among its members, and honor the academic excellence of those students admitted to college via developmental program pathways.

Mu Alpha Theta

Students with an interest and ability in mathematics are recognized through admission to Mu Alpha Theta. Mu Alpha Theta is a national honor society which promotes scholarship in mathematics at two-year colleges. Requirements for admission are 3.5 average of any mathematics course at the MAT-145 or higher level and an overall 3.0 cumulative average, (Students are eligible after one semester).

Phi Theta Kappa

Students who achieve outstanding scholastic records and demonstrate qualities of good citizenship receive recognition through admission into Phi Theta Kappa. Phi Theta Kappa is the national honor fraternity which aims to promote scholarship, develop character, and cultivate fellowship among men and women students of two-year colleges. Iota Xi is the chapter of Phi Theta Kappa at Union County College. Full-time students who have earned 12-24 credits at Union County College with a cumulative average of 3.50 or have earned 24 or more credits at Union County College with a 3.40 average are eligible for admittance into lota Xi Chapter.

Psi Beta is a national honor society in psychology associated with the American Psychological Association. It was founded expressly for community and junior colleges. The purpose of Psi Beta is to promote, encourage, and recognize scholarship for students in psychology. The local chapter encourages member participation in workshops, seminars, conferences, and other educational experiences, as well as service to the community. Membership requirements are, at minimum, an overall average of 3.0 and at least one course in psychology with an overall grade of "B" or better in each psychology course.

Tau Alpha Pi

The Omicron Beta Chapter of the Tau Alpha Pi National Honor Society is a national honor society for students in the engineering and engineering technology programs. Students are eligible for membership if they are in the top four percent of their class.



Libraries

The Union County College Libraries serve as the major learning resource of the College. Library holdings total more than 130,000 volumes, over 400 periodical subscriptions, and over 2,000 videos and DVDs. In addition, the Libraries subscription databases provide access to nearly 30,000 full-text journals, newspapers and reference sources via the Library Web site. Over half of the databases can be accessed remotely. The Library Web site also includes virtual tours, instruction modules, library hours and policies, research guides and selected subject resources that can be accessed on campus or remotely.

The Kenneth Campbell MacKay Library on the Cranford Campus contains the major reference and research collections of the college. The libraries on the Elizabeth and Plainfield Campuses serve as the learning resource centers on those campuses with collections and services geared toward those specific programs offered at those campuses.

Renovated and refurbished in 2006, the MacKay Library is now a four-story 50,000 sq. ft. facility. The building also houses the Tomasulo Art Gallery, the Cranford Campus Academic Learning Center, and the Center for Visual arts and Communications, which includes a Television Studio, Radio Station, Photography Laboratory and Studio, Graphic Arts Laboratory, Painting and Drawing Studio, classrooms and faculty offices. The new third floor has 13 classrooms, an architecture laborartory along with meeting rooms. The MacKay Library has a 38-computer Information Commons and a 28-computer hands-on library instruction lab for information literacy instruction. In addition, it houses a media room, eight group study rooms, an archive of faculty publications and the Ely Stock Memorial Children's collection. The library also has comfortable seating and study tables for student use.

The Kellogg Library at Elizabeth is located in the lower level of the eight-story building. The Plainfield Campus Library is located on the lower level of the three-story building on that campus. Each library provides complete library services and houses over 10,000 volumes.

The Libraries on all campuses are connected through an online catalog and circulation system that indicates location and availability. Students have access to the total holdings of the College Libraries. Materials can be borrowed from or returned to any campus by intercampus delivery on one-day notice. Interlibrary loan service is available for materials not owned by the Libraries.

Information Literacy is a major goal of the Library. Library Instruction is carefully geared to specific course assignments. Instruction is designed to provide an overview of information resources and accessibility and to develop in students the ability to locate, evaluate, and use information sources as life-long learners.

For more information see the UCC Libraries Web Site:

http://www.ucc.edu/library

Academic Learning Centers

The Academic Learning Centers (ALC) offer tutoring to all UCC students. Through the use of peer, paraprofessional, professional and faculty tutors, help is available in almost every credit-bearing course taught at UCC, with special emphasis placed on high-risk courses. The Learning Centers' computer labs contain state-of-the-art computers and software and computer room tutors are available to assist students.

The ALCs offer many additional resources to UCC students, including biology slides, microscopes, bones and models as well as study materials, solutions manuals and answer books. Various help sheets developed by the tutors to answer frequently asked questions are available at the ALCs and online, some of which are interactive.

Academic Learning Centers are located on the Cranford, Elizabeth and Plainfield campuses of UCC. Check with any of the campuses for hours of operation and available tutoring hours for specific courses, or visit the ALC website for additional information at

www.ucc.edu/academics/alc.

The Department of Information Technologies (IT) provides reliable access to many resources throughout the College for both academic support and administrative office applications. A high-speed fiber-optic backbone is in place on all UCC campuses, and interconnects the Cranford, Elizabeth and Plainfield campuses. This connectivity ensures a high level of availability of technology resources throughout the College.

The computer center, located at the Cranford Campus, is equipped with high-speed server technology to support the needs of students, faculty, and staff members. Microsoft Windows Server has been chosen as the primary server operating system due to its dominance in the academic and administrative application software industry.

Windows XP is available at the desktop in all 50 computing labs, offices, libraries, and Academic Learning Centers. These labs are all supplied with Internet connectivity through the College's Wide Area Network (WAN) infrastructure, and links with the New Jersey Higher Education Network (NJEDge). Specialty applications include multimedia and Web development, Computer Aided Drafting/Computer Aided Manufacturing (CAD/CAM), and desktop publishing using industry standard tools. High capacity CD-R/W DVD-ROM drives are available at all workstations in the labs for saving and transporting important computer files.

Library applications include Web-based databases such as New York Times and Business and Health Reference. The electronic card catalog is available from any networked desktop computer.

Each student is provided with a network e-mail account. This allows the student to communicate with others, including his/her instructor, electronically. Each network account comes with secure network disk space that is accessible from any networked PC throughout the College. Access to over 100 course-related applications, as well as networked laser printers throughout the College, enable the student to use technology as an effective tool in his/her program of study.

Utilizing an electronic system of problem tracking and resolution, the IT Department's professional Helpdesk staff provides knowledgeable and timely assistance.

The I.T. Department's Faculty/Staff Computer Resource Center is a technology workplace for faculty and staff. This Resource Center stays abreast of current and new technologies. Training sessions developed specifically for faculty/staff computer needs are offered throughout the year.

Union County College is currently among the leaders in the state in web-based course offerings. Web-based Student "E-Services" is available for online course registration and credit card payment. The College is active in both the New Jersey Virtual Community College Consortium (NJVCCC) and the New Jersey Virtual University.

Student Services

The mission of the Division of Student Services is to provide programs and services to foster a student's personal and social development and to provide services that support a student's transitions to college, success in college, and into a career. The Division of Student Services includes student recruitment, student activities, athletics, student government, The Educational Opportunity Fund, student financial aid, counseling, services for students with disabilities, transfer services, career services, academic assessment, academic advisement, admissions, records, registration, and the Center for Student Success.

Student services staff and a wide range of services are offered on the Cranford, Elizabeth and Plainfield campuses. Services begin prior to enrollment with admissions, recruitment, EOF and financial aid services. Services continue through the enrollment process with academic assessment, academic advisement, and registration. Placement tests are administered to identify the level of skill performance in English and mathematics in order that appropriate initial course assignments can be made. Counseling, student activities, student government, athletics, the Center for Student Success, and the EOF promote student development throughout enrollment. Career services, transfer services, EOF, and student records assist students in their transitions after completion of UCC programs of study.

A vital part of student life is embodied in the student activities programs open to both full and part-time students at all campuses. Opportunities for participation include recreational, club, cultural, social and intercollegiate athletic activities.

Students are encouraged to familiarize themselves with the services and activities offered by the College. The Student Handbook and other special publications should be consulted for more detailed information on activities and on policies and procedures for which students will be held accountable while enrolled at Union County College. The College provides the following information upon request: Counseling Services Guide, Student Handbook, Public Safety Guide, Motor Vehicle Regulations, Faculty Guide, Assisting Students with Disabilities Brochure, Scholarship Brochure, Transfer Articulation and Dual Admissions Brochure, Harassment Brochure, Crisis Intervention Brochure, Educational Opportunity Fund Brochure, Alcohol and Other Drug Abuse Prevention Program Brochure, Sexual Assault Brochure, Catalog, Student Government Association Club/Organization Information.

College Regulations

It is the student's responsibility to read bulletin boards in order to be informed on posted notices and announcements. Students are also expected to review and abide by the rules and regulations set forth in the College Catalog and the Student Handbook, Both of these publications are available online.

Student Conduct: There are expectations of personal responsibility that are necessary for the College to fulfill its' higher education mission. These expectations are stated in the form of required behavior that protects the rights of individuals and the rights of groups within the mission, goals, and objectives of the College. The enrollment of a student at the College is a voluntary entrance into the academic community and with such entrance the student voluntarily assumes obligations of performance and behavior imposed by the College relevant to its lawful mission, processes, and functions. These obligations may be much higher than those imposed on all citizens by civil and criminal law. The College also grants certain rights to students to insure that every student may pursue his/her educational goals in an environment free from unreasonable constraints. Please refer to the current Student Handbook for a complete listing of student rights and College regulations.

Identification Card

Students are responsible for securing and maintaining in their possession while on campus a currently validated identification card. The identification card must be presented as authorization for campus presence when requested by College officials. The identification card also serves as the student activity card and the College's library card. New students will be mailed an identification card following the close of registration. Continuing students must have their identification cards validated upon registration for all subsequent semesters. There is no fee for the initial identification card.

Counseling Services

Counseling Services offers academic, career, and personal counseling services to Union County College students. Workshops are held during the semester on various topics of interest or importance to students. Counselors are available on all Union County College campuses.

Services include a computerized approach to occupational information and exploration, a personalized vocational testing and assessment program designed for those who are uncertain about their educational or career direction, and individual follow-up career counseling sessions. Employment Placement Services are available to assist students in finding employment while attending school or after graduation.

Academic advisors and professional counselors are available to assist with the comprehensive planning and decision making essential to academic success. Managing a college education requires access to information regarding academic policies and procedures including course and curriculum prerequisites, graduation requirements, Basic Skills Testing, computation of grade-point averages relating to honors or probation, and other support services.

Students interested in transferring are assisted with their selection process. A comprehensive computerized college file, 4 year college catalogs and a transfer resource guide are available to students during the transfer process.

The Student Assistance Counselor offers information, short-term counseling, and referral regarding substance-abuse issues and other personal concerns.

Athletic advising is provided to students involved in intercollegiate sports.

The Coordinator of Services for Students with Disabilities is available to assist students who have documented physical and learning disabilities. These services need to be arranged before the beginning of each semester.

Students with Disabilities

UCC offers students with disabilities programmatic access and appropriate academic adjustments for programs, activities, and services. Special parking decals are available through the Office of Public Safety. The Coordinator of Services for Students with Disabilities is available to assist students with these services.

If special assistance is needed, students must complete the accommodation eligibility questionnaire, obtained from the Admissions Office, at the time of application or as soon as possible thereafter. Current documentation regarding the disability is required whenever specific accommodations are requested. The Coordinator offers students the opportunity to ensure effective participation in campus life. However, it is the responsibility of the student to self-identify to make his/her needs known. Individuals with concerns regarding accommodation should contact the Coordinator of Services for Students with Disabilities.

Student Activities

The Student Activities Office, in partnership with the Student Government Association (SGA), develops a co-curricular program that offers a wide range of diverse activities on all Union County College campuses. These include entertainment programs, educational trips, international cultural festivals, lectures, films, and musical programs. The Student Government Association offers a variety of clubs and organizations at Union County College. These clubs and organizations include the student newspaper (The Scroll), the radio station (UCR), the literary journal (SHEAF), a literary magazine (The Foreign Student Voice), and academic, cultural, and social clubs organized by students based on their interests. All students are invited to participate in the programs offered on the Elizabeth, Plainfield, and Cranford campuses of Union County College. A valid Union County College identification card may be necessary for access.

The Office of the Director of Student Activities is located in the Campus Center Building on the Cranford campus. SGA Advisors are located on the Elizabeth and Plainfield campuses.

If you or someone attending a program or an event with you requires special services, please contact 709-7164 for Cranford campus events, 412-3573 for Plainfield campus events, or 965-6033 for Elizabeth campus events at least two weeks prior to the activity in which participation is desired.

Intercollegiate Activities

The College's athletic program offers men's soccer, men's basketball and baseball, women's basketball, women's volleyball, and co-ed golf. The College is a member of the competitive Garden State Athletic Conference (GSAC) and Region XIX of the National Junior College Athletic Association (NJCAA). Participation is based on academic standing and athletic ability. The Office of the Director of Athletics is located in the Campus Center Building, Cranford campus. Union County College's intercollegiate athletic colors are red, white and black. The College mascot is the owl. Admission to home contests is free.

Fitness Center

The Fitness Center is located on the second floor of the Campus Center. Students may use the Fitness Center after presenting a photo I.D. and a current class schedule. Hours are Monday through Friday, 8:30 am - 10:00 pm, and Saturday, 9:00 am - 7:00 pm. Students may also qualify for access to the YMCA in Elizabeth and the YWCA in Plainfield. Students should contact the Student Activities office for more details.

Public Safety

The Public Safety Department has the following responsibilities:

- 1. Protect the lives and safety of all individuals within the College property.
- 2. Safeguard College and personal property from theft, damage, vandalism, or misuse.
- 3. Prevent and control crime on campus.
- 4. Investigate crime on campus, apprehending offenders when possible and recovering stolen property.
- 5. Preserve peace and resolve conflicts on campus.
- 6. Provide an immediate response to emergencies and to all persons requiring aid on
- 7. Enforce College policies, rules, and proce-
- 8. Advance cooperative relationships within the College community and contribute to its public relations program.

Illness or injuries due to accidents, which are incurred on-campus, or during a College-connected activity are to be reported immediately to the Public Safety Office on the campus where they occur. If it is not possible to make an immediate report, one should be made before 48 hours have elapsed. All students are covered under the College's student accident insurance plan.

Safety on Campus

All students are urged not to linger in lightlytraveled areas of the buildings or campus grounds after regular closing hours. If you must complete assignments in remote areas where the campus is in minimum use, you should exercise the following safety precautions: (1) find at least one other person whom you know well to work with - group work would be even wiser; (2) leave the area in pairs or as a group; (3) alert Public Safety in advance that you will be using the area and ask Public Safety to spot-check during your work period and escort you to your car if necessary; (4) leave the building by a common exit that may be closest to the area where you parked your car; (5) if you are waiting for a ride after dark, agree upon a well-lighted pick-up spot; and (6) if you are subjected to harassment or observe someone behaving in a suspicious manner that may jeopardize your safety, report the situation immediately to a Public Safety Officer or your instructor.

These are a few simple rules that may prevent the occurrence of an unfortunate situation.

Most importantly, you should make yourself familiar with the campus buildings, exits, and general location of the Public Safety force. Please be reminded that you should carry your identification card with you at all times. ÚCC is an "open" campus. Śtay alert and exercise prudence to insure your personal safety at all times. Should any student, faculty/staff member, or any visitor on the campus become the victim of any crime, report the incident to the Public Safety Department immediately.

The following crimes which are reported to the Public Safety Department will immediately be reported to the local Police so that they can conduct the investigation: Murder, Rape, Robbery, Aggravated Assault, Burglary, Motor Vehicle Theft, Liquor Law Violations, Drug Abuse Violations, Weapons Possession. CAM-PUS CRIME STATISTICS WILL BE FURNISHED UPON REQUEST AND ARE DISTRIBUTED TO ALL APPLICANTS. In compliance with the Federal Campus Sex Crimes Prevention Act, and relevant New Jersey Law, information regarding the enrollment or employment of convicted sex offenders is available from the Union County College Department of Public Safety. Additionally, in compliance with the Student Right to Know and Campus Security Act, crime statistics are reported to the U.S. Department of Education and are available online at http://ope.ed.gov/security/

Parking & Automobile Régistration

Students currently enrolled who intend to use designated parking facilities at Union County College campuses must have their automobiles registered through the Public Safety Office. There is a charge for a parking hang-tag permit to be displayed by the registered vehicles. Automobiles parked on campus illegally or without proper, valid, hang-tags will be ticketed and/or towed at the owner's expense. Parking fines are assessed for parking and traffic violations. Speed zones on Campus are generally set at a maximum of 10 miles per hour. However, students are expected to exercise prudence at all times and heed all posted traffic signs. A complete listing of parking regulations and map of student parking areas can be found in the Student Handbook and the Public Safety Guide.

Union County College Foundation

The Union County College Foundation was founded in 1977 to raise funds to benefit Union County College students and to support innovative programs. The Foundation provides scholarships, and underwrites lecture series, graduation awards, faculty and staff development, and special College programs.

The Foundation, a non-profit organization, raises funds through special events and contributions from alumni, board members, employees, parents, foundation, business, industry, and friends. Very special friends who demonstrate their commitment by including the Foundation in their wills or estate plans are recognized in perpetuity as members of the UCC Heritage Society.

An elected Board of Trustees manages the Foundation and its endowment. For more information about the Foundation, call (908) 709-7505 or visit the Foundation website at www.uccfoundation.org. The Foundation's Annual Report is available upon request.



UCC Alumni Association

The purpose of the Union County College Alumni Association, a non-profit organization, is to assist in advancing the mission of Union County College, to maintain a continuing relationship between alumni and the College and to strengthen the relationship between the College and the community. The Association hosts social, cultural and educational events and supports Union County College Foundation programs. Any graduate or student with 30 credits or more is eligible to join; dues is \$15 for 3 years, a lifetime membership is \$125.00. Members can borrow materials from all College libraries. Benefits include a discount in the College bookstores and, for a three-year membership, a special alumni rate at the UCC Fitness Center. "About Union," a newsletter for alumni and friends published three times a year, has a section where alumni can "stay in touch". Meetings are held September through June.

For more information, call (908) 709-7505 or visit the Foundation House at 995 Springfield Ave., Cranford. For the calendar of events and more information, visit www.uccfoundation.org.

The Institute to Intensive

The Institute for Intensive English is a fulltime program of intensive instruction in English for speakers of other languages. The students' objective is to enhance their English language abilities in order to further their academic, career, and/or personal goals.

After placement testing, students enter one of six levels of instruction commensurate with their abilities. In the first through fourth levels all instruction is covered in integrated courses. In the fifth and sixth levels, students are required to register for four courses: two core courses covering structure, listening, conversation and study skills; a reading course; and an academic writing course.

In addition, students may enroll in a pronunciation or conversation elective. An ESL Mathematics course is also offered. Students in level six are eligible to enroll in special sections of Business 101 or Psychology 101 with ESL 083-Advanced Reading in Business for ESL or ESL 084-Advanced Reading in Psychology for ESL. Beginning at level 3 students may also enroll in Keyboarding (ADM 101) or an ESL Mathematics course.

At the termination of each course, there is an exit test where, a student's proficiency is assessed. Levels 1 to 4 receive a grade of Pass/Fail while Levels 5 and higher receive a letter grade. Upon successful completion of the sixth level of instruction, a student is presented an award of completion. The student may then apply to enter a full-time or part-time degree program of study to include ENG 111-112, a two-semester sequence of college composition for ESL students.

Emergency Medical Services (EMS) consists of a team of medical professionals who provide emergency pre-hospital care and transportation of sick or injured individuals. In New Jersey, there are two levels of training for EMS personnel. The first Level is the Emergency Medical Technician-Basic (EMT-B). The EMT-B receives training in basic emergency care including: patient assessment, airway management, bandaging and splinting of injuries, management of medical emergencies, and emergency childbirth.

EMT training is a minimum of 110 hours in duration, and combines classroom lectures with small-group skill stations to reinforce the program's content. There is also an additional 10-hour clinical rotation that is scheduled at one of the local hospital Emergency Departments. This provides the EMT student with the ability to practice some of the skills learned during their EMT class. New Jersey's EMT training program is based upon a national model titled the National Standard Curriculum. Professional level CPR is a prerequisite in order to take an EMT program. CPR training can be taken through any local hospital, or Red Cross Chapter, or through the college.

Upon successful completion of the EMT-B training program, the candidate must successfully complete a written certification exam offered through the NJ Office of EMS, in order to obtain EMT certification. The EMT certification is renewed every three years by completing a minimum of 48 hours of approved continuing education.

Honors Studies

Designed to be selective but not elitist or exclusionary, the unique set of courses and options that comprise Honors Studies is open to all interested students with a GPA of 3.0 or higher. Honors Studies provides an intellectually challenging and personally enriching experience—one that prepares students for future academic and professional success by encouraging them to take greater control over the direction of their learning and by enabling them to work more closely with individual faculty and with one another. Informed by a central belief in the importance of self-directed learning and research, and committed to helping students develop skills in critical thinking, problem-solving, information literacy, and interdisciplinary and cross-cultural perspectives, Honors Studies offers students a range of opportunities for independent and collaborative work.

Set in a dynamic learning environment and designed to address issues of vital importance in the world today, the core seminars are the centerpiece of Honors Studies. HRS 103 explores an issue from multiple cultural perspectives and HRS 104 explores an issue from the perspectives of different academic disciplines. The topics for these courses change from one semester to the next, but, consistent with the philosophy of Honors Studies, both courses are conducted in a seminar format and based on a student-centered learning model that gives students considerable control over the course content as well as how they earn their grade. Both courses can be used to satisfy general elective requirements.

Students also have the opportunity to do independent studies with faculty members of their choice (HRS 203 and HRS 204). An independent study allows students to pursue an interest of their own in greater depth, such as a project in the arts, investigative research in the sciences, or field work in the community. Other Honors Studies options include honors sections of existing courses and special honors projects completed in conjunction with regular course work. Students who complete four honors courses and graduate with a GPA of 3.0 or higher receive a Distinguished Honors Studies Scholar designation on their transcript, but Honors Studies is aimed at all interested and qualified students, even those who only wish to take a single course.

The John H. Stamler Police Academy, Union County's chartered police training institution, is operated by the Union County Prosecutor's Office in cooperation with Union County College and the Union County Police Chief's Association. The Academy's police training facility is located in Scotch Plains.

The Academy provides basic training for law enforcement recruits from Union County's municipal police departments and for other law enforcement agencies, under the aegis of the New Jersey Police Training Commission, and in-service training for Union County law enforcement personnel. All students in the Police Academy are registered as students of Union County College with College faculty members designated as Faculty Advisor to the Academy and as coordinators to provide academic oversight. All of the Academy's instructional personnel serve as lecturers of the College. Union County College will award up to 12 college credits to graduates of the Academy's Recruit Training Program, provided they apply to the College and matriculate as Criminal Justice majors, request advanced standing based on their studies at the Police Academy, and submit a transcript for any work taken at any other institution of higher education.

Fire Science Training Academy

In conjunction with its Fire Science Technology Program, Union County College works cooperatively with the Union County Fire Science Training Academy, in Linden, N.J. The Academy, which is a cooperative effort of the Union County Fire Chief's Association and the Union County Firemen's Association, is dedicated to providing training for the firefighting forces of all 21 municipalities in Union County, including both paid and volunteer departments, and assisting in the training of commercial and industrial fire brigades.

The Academy provides a blend of theoretical, practical, and hands-on training and education through a highly-competent, part-time, instructional staff. It is open 52 weeks a year and may be used by all Union County fire brigades. The facility (burn building) is used for all types of simulated firefighting.

Union County College will award up to six college credits to graduates of the Union County Fire Science Training Academy, providing they apply to Union County College and matriculate as fire science technology majors, request advanced standing based on their studies in the Fire Academy, and submit a transcript for any work taken at any other institution of higher education.

The International Institute

The International Institute of Union County College seeks to prepare students for life and work in an increasingly global society. The Institute, recognizing the impact of global issues on today's economy, supports the curriculum at UCC with initiatives that provide an international and intercultural focus to learning. Participants develop an understanding of the interconnections among political, social, economic, and cultural forces in our world. The International Institute fosters a sense of global citizenship and promotes projects that globalize the collegiate experience.

The International Institute serves students and faculty through the following initiatives:

- Educating students about global issues through speakers, discussions, and lectures;
- Promoting travel opportunities for cultural enrichment and academic credit;
- Promoting study abroad opportunities for students;
- Encouraging faculty exchange and study abroad programs for professional development;
- Promoting the International Studies option in the Liberal Arts curriculum;
- Encouraging inter-departmental cooperation on global and cultural issues;
- Promoting service learning and internships with international business, inter-governmental organizations (IGO's), and non-governmental organizations (NGO's) serving the world community;
- Supporting activities that connect international students to one another and to the UCC community; and
- Serving as a clearinghouse for programs and events concerning international education.

L.I.F.E. Center

Learning Is For Ever

The L.I.F.E. Center, established in the Fall of 1984, brings college-level academic classes off-campus to senior citizen students at locations and times convenient to them. The classes are free and courses may be taken for college credit, leading to an Associate degree. The instructors are Union County College full-time or adjunct professors and the courses they teach are taken directly from the UCC catalog. This program is unique in the State of New Jersey and was the first of its kind in the United States. Since its inception, thousands of Union County senior citizens have taken advantage of the program.

NJ Marine Science Consortium

Union County College is a member of the New Jersey Marine Science Consortium, which affords students the opportunity to become acquainted with the marine environment through summer credit course offerings. The offerings supplement the science curricula at the College and increase the course options available for students. Students interested in Marine Science Consortium offerings should consult with the Registrar's Office.

Air Force/Army

Union County College, Rutgers – The State University, and Seton Hall University have an agreement permitting male and female students of Union County College to cross-enroll in the Air Force ROTC program. Qualified students may complete the first two years of the four-year program on a cross-enrollment basis and the final two years by attending an institution sponsoring Air Force ROTC. Students who successfully complete the four-year program earn commissions as second lieutenants. For further information, contact the Admissions Office of Rutgers - The State University or Seton Hall University.

Division of Economic Development & Continuing Education

The Division of Economic Development and Continuing Education consists of the Continuing Education Department, Center for Economic and Workforce Development, and Industry-Business Institute. In 2005-2006, the Division had 28,000 non-credit enrollments, establishing it as the largest non-credit program among the nineteen New Jersey Community Colleges.

Continuing Education Department

The Department provides professional development and personal enrichment opportunities for individuals who live or work in Union County and beyond. Special programs are available in the Department for youngsters and senior citizens. These include College for Kids, College for Teens, and the Union County Freeholders' Senior Scholars program. A Continuing Education brochure is mailed to every Union County household and contains over 700 course offerings each semester.

Committed to the concept of lifelong learning, the Department schedules these non-credit courses in the evenings, on weekends, and during daytime hours that are convenient for adults. Programs are offered at all four campuses and at various extension center locations. In addition, the Division offers courses online via the Internet.

Currently, among the Continuing Education Department offerings are non-credit certificate programs in Cisco Networking CCNA/CCNP, Management (AMA), Business Computer Applications, Microsoft Office Professional 2000 or XP, Wireless Networking, LAN Architecture, Six Sigma, Print and Graphics Design, Real Estate Sales, Real Estate Brokerage, Real Estate Appraisal, Certified Patient Care Technician (CPCT), American Sign Language, Pharmacy Certified Technician, Medical Office Coding Specialist, Children's Care-Giver Program, Travel and Tourism, Substitute Teacher Specialist, Practical Accounting, Marketing Certificate (AMA) Human Resource Management (AMA), Office Management, How to be a Top-Notch Administrative Assistant, Electronics Technician, Automobile Electrical and Electronic System Technician, Restaurant Management/Culinary Arts, Floral Design, and Interior Design. Certificate programs are also available in Homeland Security Emergency Management and Planning, Hospitality/Hotel Management, Marketing, Microsoft Office Project 2003,

Project Management and Advanced Project Management, A+: PC Hardware Troubleshooting, E-Commerce, Microsoft Office Professional 2003, Bartending, Certified Bookkeeper, U.S. Customs Broker Test Preparation, Personal Trainer National Certification, Excel for Business, Access for Business, Web Design PC Based, Structured Query Language, Certified Phlebotomy Technician and Certified EKG Technician, and Management.

College for Kids offers non-credit programs for youth ages 4 through 18. During the fall and spring semesters, College for Kids schedules Saturday courses and workshops on a variety of topics such as standardized test preparation for NJASK, GEPA, Pre-SAT, SAT and HSPA; reading and math enhancement, astronomy, and martial arts, as well as creative and visual arts. In the summer months, Continuing Education offers an extensive College for Kids program that serves over 2,300 young students. It includes a full-day camp and before and after-care, from 7:30 a.m. to 5:45 p.m. The Summer Sports Spectacular program is also a full-day program that includes intensive instruction in baseball, soccer, basketball, golf, tennis, hockey, and volleyball.

College for Teens is a career-oriented program that provides academic enrichment, career exploration, and leadership training for teens. This is offered as an intensive threeweek program in the summer or as an afterschool enrichment program during the fall and spring semesters. This program focuses on careers in four key areas: computer and graphic arts, engineering, business, and science (the last focusing especially on the pharmaceutical industry, which is the backbone of New Jersey).

Continuing Education operates as a Regional Cisco Networking Academy. It provides extensive preparation for the Certified Cisco Networking Associate (CCNA) and Certified Cisco Networking Professional (CCNP) designation(s). As a Regional Academy it provides technical and instructional support to local school systems that wish to offer CCNA preparation to their students.

Continuing Education also offers the **New** Pathways to Teaching in New Jersey (NPTNJ) program in conjunction with the New Jersey City University. NPTNJ is an alternate route New Jersey teacher certification program. Students are able to obtain 15 graduate credits and New Jersey teacher certification upon completion of the program.

For further information, write or call the Continuing Education Department at Union County College, 1033 Springfield Avenue, Cranford, NJ 07016, (908) 709-7600.

Center for Economic and Workforce Development

The Center for Economic and Workforce Development (CEWD) provides training and support services to help unemployed and underemployed to be better positioned in the workforce, and to develop lifelong learning skills. The Center offers a wide variety of programs and courses to over 4000 adults each year. The Center model includes universal assessment, counseling, occupation-related instruction, and job placement.

In keeping with the CEWD commitment to access for all, instruction is scheduled in the evenings, on weekends, and during daytime hours that are convenient for adults. CEWD classes are headquartered at the Bayway Center in Elizabeth which is equipped with state of the art computer labs and a full service operation. Classes are also held on the Elizabeth and Plainfield campuses, the Elizabeth Public Library, and other community sites.

CEWD offers the following programs and courses:

- Computer Basics: This introduces students to basic computer operations, thereby equipping them for career advancement and further education.
- **Project ABLE Plus:** This program provides ESL, literacy, and GED preparation.
- Project LEARN: This distance learning program helps unemployed persons learn computer and employment skills and continue their education.
- Occupational Programs: These courses teach computer, language, literacy, and technical skills needed by software specialists, accounting clerks, customer service personnel, and computer repair technicians.
- Job Search Workshops: Students set career goals, prepare resumes, and develop job interview skills.
- Retail Skills Center: This program trains jobseekers for customer service jobs in retail and other industries.

The Center has an active job placement team, which operates regular career days and comprehensive job fairs at the Bayway location and other sites. As a One-Stop partner with the County of Union, CEWD regularly partners with County Social Services on activities geared to increasing productivity and employability for residents of the County.

For further information, contact the Center for Economic and Workforce Development 12-24 West Jersey Street, Elizabeth, New Jersey 07202-2314, (908) 659-5114.

Industry-Business Institute

Union County College's Industry-Business Institute (IBI) works with Union County employers to build a skilled workforce. IBI provides workplace-specific, customized education and training programs to develop employees working in local businesses, non-profits, and government agencies. Programs are designed for maximum effectiveness and to help organizations improve productivity, quality, cost effectiveness, and morale. Professional instructors with relevant industry experience deliver the programs. Training is delivered on-site and scheduled at times that will not interrupt production schedules.

Companies fund this training with their own budgets, and also may receive funding through the New Jersey Department of Labor and Workforce Development Customized Training Grant Program. IBI provides companies with comprehensive assistance in securing and administering the State training grants. This service is offered at no cost to the company.

IBI can provide virtually any type of workforce development program because of its wide network of industry professionals and faculty, which includes the entire New Jersey Community College system. IBI provides customized training programs in the following areas:

- Computer Skills
- Management and Supervision Skills
- Communication and Personal Effectiveness Skills
- Industrial Maintenance and Manufacturing Skills
- Workplace Literacy/Basic Skills
- Quality Practices
- Safety Procedures

For more information, contact the Industry-Business Institute at Union County College, 1033 Springfield Avenue, Cranford, NJ 07016, (908) 709-7678.

The Theater Project

Begun in 1994, the Theater Project is Union County College's professional theater company. It is one of only two professional theater companies in Union County. It has been singled out for excellence by, among others, The Newark Star Ledger, the Suburban News and the Worrall Press. The Theater Project has been accepted as an affiliate member of the New Jersey Theater Alliance. The company uses Equity actors as well as nonunion professionals.

The mission of The Theater Project is to expose audiences to new or lesser-known plays on challenging themes. Frequently, performances are followed by guest panel discussions and meetings with the performers. In addition, The Theater Project has developed a comprehensive program that includes:

- a playwrights development workshop
- a staged reading series of original plays
- a Young Playwrights competition that recognizes the achievements of teenage authors in Union County
- a bilingual children's theater program that playfully introduces kids to a second language and reminds them of the need for cross-cultural communication and respect
- presentations for UCC's annual Overcoming Hatred/Creating Community program, including Clara's Diary, an original staged reading of the diary of Holocaust survivor Clara Kramer
- classes for adults and children offered through the Department of Continuing Education

The Theater Project strives to remind audiences that live theater and the arts have a vital role to play in our communities. To this end, Theater Project staff are frequent guest speakers at PTA, Rotary, senior centers and garden clubs.

The program is also supported by grants from: New Jersey State Arts Council, Department of State, a Partner Agency of the National Endowment for the Arts; The Geraldine R. Dodge Foundation; the Union County College Foundation; a HEART Grant from the Union County Board of Chosen Freeholders; and the generosity of individual donors.

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- 1. www.wmtram.com
- 2. New Jersey 101.5 FM
- 3. www.1010wins.com/schoolclosings/

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CRANFORD CAMPUS MAP

MacDonald Hall

- Admissions Financial Aid Recruitment
 - Student Accounts
 Executive Offices

L. MacKay Library

- Admiral Stanley Room/Academic Learning Center
- Classrooms/Faculty Offices Media Center/ITV
 - Tomasulo Art Gallery

H. **Humanities Building**

• Information Technologies • Classrooms/Faculty Offices

S. Science Building

• North & South Lecture Halls • Classrooms/Faculty Offices

Nomehegan Building

- Assessment Center Computer Labs Continuing Education Counseling • Public Safety Office • Alumni Conference Room • Classrooms/Faculty Offices • Main Lecture Hall
- C. Campus Center & The Commons
 - Cafeteria Seminar Rooms A, B & C Bookstore
 - Roy Smith Theater Classrooms/Faculty Offices
 - Executive Education Center Facilities Department
 - Fitness Center Gymnasium Student Activities
 - Print Shop
 Receiving

0. **Sperry Observatory**

T. **Tennis Courts**

CR-MAP

F. **UCC Foundation House**

- Alumni Association Developmental Office
 - Industry Business Institute



UCC Cranford Campus 1033 Springfield Avenue • Cranford, NJ 07016-1599

From the Garden State Parkway: Exit 137 turn right onto North Ave. which becomes Westfield Ave. (Rt. 28). Proceed (West) to Springfield Ave. and turn right. The College is 3/4 of a mile on the left.

From Rt. 22 (East or West): Exit at Springfield Ave., and proceed east towards Westfield. Pass through four traffic lights. Just before the fifth traffic light turn right onto Springfield Ave. (County Road 615). Proceed to the traffic light where the College is on the right.



UCC Elizabeth Campus 12 West Jersey Street • Elizabeth, NJ 07201

From the Garden State Parkway: Exit 137 to Westfield Ave. (Rt. 28) east to Elmora Ave. Make a right onto Elmora Ave. and go three blocks and make a left onto West Jersey Street. The College is four blocks on the right.

From the NJ Turnpike: Exit at 13A. Take Route 1& 9 South to East Jersey Street. Make a right on East Jersey Street. Cross Broad Street. The College is one block ahead on the left.



UCC Plainfield Campus 232 East Second Street • Plainfield, NJ 07060-1308

From the Garden State Parkway, NJ Turnpike and Rt. 22: Take Rt. 22 to the Somerset St. Exit in North Plainfield. Take Somerset St. towards Plainfield where it becomes Park Ave. Take Park Ave., and turn left onto Second St. The College is on the right, three blocks from Park Ave.

OR: Exit Rt. 22 at the Terrill Road exit in Scotch Plains. Proceed two lights south of Rt.22 to 2nd Street, turn right and follow 2nd Street to the College.



UCC Scotch Plains Campus 1700 Raritan Road • Scotch Plains, NJ 07076

From the Garden State Parkway: Exit 135 onto Central Ave.towards Westfield. At the first light, make a left onto Raritan Rd. and go to Lake Ave. Make a right onto Lake Ave. and go to the second light and make a left onto "another" Raritan Rd. The College is located in the Union County Vocational Technical School, 1/2 mile on the left.

From Rt. 22 Exit at Terrill Rd.: Continue for about 3 miles, where it will turn into Raritan Rd. Stay on Raritan Rd. 1/2 mile. The College is located in the Union County Vocational Technical School, 1/2 mile on the left.

FOR CUSTOMIZED DIRECTIONS

DIRECTLY FROM YOUR HOME,

VISIT OUR WEBSITE AT

WWW.UCC.EDU

STUDENT SERVICES ONLINE

HOW TO REGISTER ONLINE USING e-services for students: https://e-services.ucc.edu/

- e-services registration is not available for all students or all majors; see a Counselor if you have any questions; however, all students may use most e-services features.
- e-services is available Monday through Thursday from 8:30 am to 10:00 pm; Friday from 8:30 am to 8:00 pm; Saturday from 8:30 am to 12:00 pm.
- Have a credit card ready to complete payment. If you have Financial Aid it will be shown as a credit. You can also register for courses online but pay in person if you choose to do so.
- If there is no activity after 15 minutes, your session will end automatically and your selections will not be saved.
- Questions can be directed to REGISTRAR@UCC.EDU or the appropriate office.

From the UCC WEB Site (www.ucc.edu), click "Online e-services". The e-services Home Page will appear with various options.

To register for courses:

- Click on "Enter Student Services."
- Student login will require you to enter your Campus Wide ID (CWID) or Social Security number in the Student ID box. Enter your birth date for your PIN number in mmddyy format. You may change your PIN at anytime on the Student Services Home Page (please record your change).
- From the "Courses" menu, choose either "Course Sections" or "Course Sections Search."
- Write down the call numbers of the courses you are requesting for reference. These are not the same as course numbers. If you are registering for a course that has a lab, the lab must be added separately.
- From the "Registration" menu, choose "Add and Drop Classes." Add the sections you wish to register for using the call numbers, then click the "Submit" button. You do not have to submit all courses at once; you may add courses after you have submitted others.
- Once you have selected and registered for all of your courses, you must click on "Account Summary" to make payment with a credit card, or pay in person at the Office of Student Accounts.

FAILURE TO COMPLETE THE PAYMENT PROCESS WILL RESULT IN COURSES BEING VOIDED

- After payment is submitted, you can click on Student Schedule to print a copy of your schedule.
- e-services can also provide UCC students and applicants with an online application for admission, access to information about your financial aid package, documentation required by the Financial Aid Office, your course schedule, grades, student account information, allows for credit card payments, shows a fully searchable course schedule with instructors, classrooms and pre-requisites, and it even allows you to print an unofficial copy of your UCC transcript.

All UCC students can use e-services...
so don't stand in line, go online!

The Union County College catalog is published covering two academic years and presents announcement of general information, general academic regulations and the College's academic program as it exists at the time of publication. The College reserves the right to change the regulations, tuition, fees, and other information, and delete any courses described in this catalog for any reason without prior notice, although such changes will be announced. The College cannot guarantee enrollment into specific sections of desired courses contained in this publication at any time. Failure to read this publication does not excuse students from the requirements and regulations described herein.

Union County College does not discriminate on the basis of race, color, national origin, sex, marital status, religion, age, disability, handicap, or other legally protected status in its provision of employment, education and activities, or other services.

Inquiries related to Affirmative Action may be directed to Affirmative Action Officer, Union County College, 1033 Springfield Ave., Cranford, NJ 07016.

Union County College is an Equal Opportunity Employer.

Errors and Omissions with regard to:

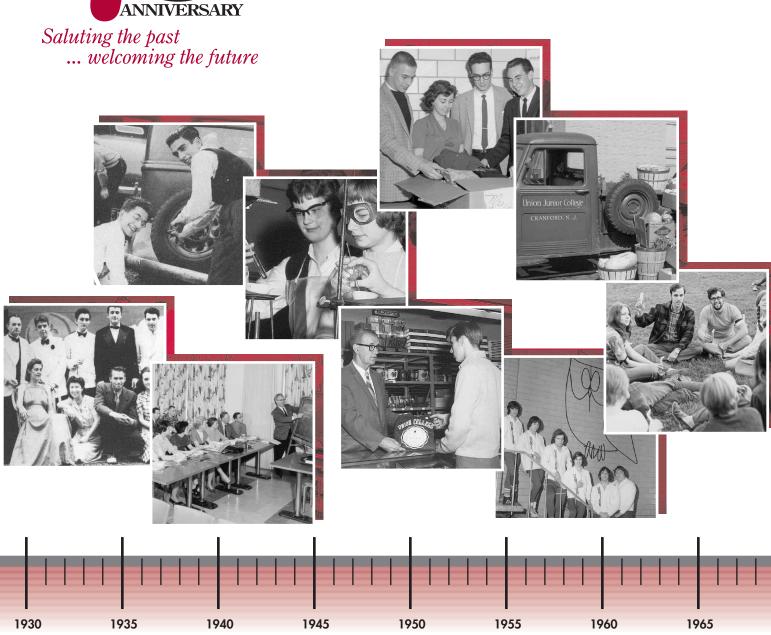
- ... Academic Information should be directed to the office of the Vice President for Academic Affairs
- ... Tuition and Fees should be directed to the office of the Vice President for Financial Affairs
- ... Student Services, including admissions, registration, placement testing, and office hours should be directed to the office of the Vice President for Student Services

This catalog has been published by the Office of Marketing and College Communications

and

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www.ucc.edu