

Graduate Catalog



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Introduction

WELCOME

Welcome to the Graduate School at Rowan University! The Graduate School offers stimulating and challenging graduate education experiences. Small classes, well-qualified professors, focused and dynamic courses characterize our varied graduate programs. The Graduate School provides scholarly opportunities to meet professional and personal desires for lifelong learning and career development and promotes an exceptional environment for achievement and fulfillment. Our programs emphasize the integration of theory and practice through classroom applications, field experiences, projects and theses, and culminating capstone experiences.

Rowan University offers degree programs at the graduate level leading to the Master of Arts, the Master of Business Administration, the Master of Education, the Master of Science, Master of Music and the Master of Science in Teaching degrees. There is also a doctoral program leading to the Doctor of Education (Ed.D) in Educational Leadership, and an Education Specialist degree (Ed.S.) in School Psychology. There is a new master's program in Criminal Justice. There are also selected programs that can lead to licensure by the New Jersey Department of Education. The University is accredited by the Middle States Association of Colleges and Secondary Schools. Eligible Master of Arts education programs and certification programs are fully accredited by the National Council for the Accreditation of Colleges of Teacher Education (NCATE).

We hope your educational experience at Rowan University will be positive and rewarding. This catalog provides information that will be useful for you as you plan and complete your program. If you need assistance or have questions, please do not hesitate to call your program advisor and/or The Graduate School. We are here to serve

ROWAN UNIVERSITY IN BRIEF

Type

Comprehensive, coeducational, non-sectarian, state-supported, founded in 1923

Colleges

Business, Communication, Education, Engineering, Fine and Performing Arts, Liberal Arts and Sciences, Professional and Continuing Education.

Degrees

Bachelor of Arts, Bachelor of Fine Arts, Bachelor of Music, Bachelor of Science, Master of Arts, Master of Business Administration, Master of Music, Master of Science, Master of Science in Teaching, Educational Specialist, and Doctor of Education

Campuses

Glassboro, NJ-Main (approximately 20 miles southeast of Philadelphia, PA) Camden, NJ-Branch

Size

Approximately 7,318 full-time and 2,370 part time students; approximately 611 full-time equivalent (FTE) faculty

Administrative Offices Telephone Numbers

-	
Academic Affairs	256-4011
Academic Success Center	256-4259
Alumni Office	256-4131
Bursar	256-4150
Camden Campus	756-5400
Career & Academic Planning	256-4456
Counseling & Psychological Service Center	256-4222
Dean, Business	256-4025
Dean, Communication	256-4340
Dean, Education	256-4750
Dean, Engineering	256-5300
Dean, Fine and Performing Arts	256-4550
Dean, Liberal Arts and Sciences	256-4850
Dean, Professional and Continuing Education	256-4129
Dean of Students	256-4040
Development Office	256-5410
Disability Resources	256-4234
Financial Aid	256-4250
Graduate School	256-4050
Information Resources	256-4401
Library	256-4800
Main Switchboard	256-4000
President	256-4100
Provost	256-4108
Public Safety	256-4922
Recreation Center	256-4900
Registrar	256-4350
Specialized Services	256-4233
Student Center	256-4601
Student Health Center	256-4333
University Relations	256-4240
VP Administration and Finance	256-4140
VP Student Affairs	256-4283
University Advancement	256-4095

PROGRAMS

College of Business

M.B.A., Master of Business Administration

M.S., Accounting (admission suspended)

College of Communication

M.A., Public Relations

M.A., Writing

College of Education

Ed.D., Educational Leadership

Ed.S., Educational Services: School Psychologist Certification

M.A., Counseling in Educational Settings

M.A., Educational Technology*

M.A., Elementary School Teaching*

M.A., Environmental Education and Conservation*

M.A., Higher Education

M.A., Learning Disabilities

M.A., Reading Education

M.A., School Administration

Principal Preparation

School Business Administration Preparation

M.A., School and Public Librarianship

M.A., School Psychology

M.A., Special Education

M.A., Subject Matter Teaching *

Art (with College of Fine and Performing Arts)

Music Education (with College of Fine and Performing Arts)

Biological Sciences (with College of Liberal Arts and Sciences)

Physical Sciences (with College of Liberal Arts and Sciences)

Mathematics (with College of Liberal Arts and Sciences)

M.A., Supervision and Curriculum Development

M.Ed. Standards Based Practice

M.S., Teaching

Collaborative Teaching

Elementary Education

Secondary Education

College of Engineering

M.S., Engineering

Chemical Engineering

Civil Engineering

Electrical Engineering

Engineering Management

Environmental Engineering

Mechanical Engineering

College of Fine and Performing Arts

M.M., Music

M.A, Theatre

College of Liberal Arts and Sciences

M.A., Criminal Justice

M.A., Mental Health Counseling and Applied Psychology

M.A., Mathematics

Certificates of Graduate Study

Computers in Education *

Early Childhood Education *

Elementary School Mathematics *

Elementary Language Arts *

Foreign Language Education*

History/World History

Mental Health Counseling

Middle School Mathematics Education

Principal Preparation

Secondary Mathematics

Teaching and Learning

Theatre Practice

Writing: Composition and Rhetoric

Certification Programs (leading to New Jersey certification)

Associate Educational Media Specialist

Endorsement in Teacher of Students with Disabilities

ESL/Bilingual Education

Learning Disabilities Teacher/Consultant

Supervisor

Substance Awareness Coordinator

^{*} Program under review. Check with the College for information about the status of the program.

Academic Calendar

Fall 2007

Tuesday, September 4 Classes Begin Thursday, September 17 Convocation Friday, October 22 1st Quarter Concludes Friday, November 9 Veterans' Day Observed (No Classes) Thursday-Friday, November 22-23 Thanksgiving Recess (No Classes) Friday, December 14 2nd Quarter Concludes Monday-Friday, December 17-21 Finals Week Friday, December 21 Semester Concludes

Spring 2008

Tuesday, January 22 Classes Begin Monday, March 10 3rd Quarter Concludes Monday-Friday, March 17-21 Spring Break (No Classes) Good Friday (No Classes) Friday, March 21 4th Quarter Concludes Monday, May 5 Tuesday-Saturday, May 6-10 Finals week Saturday, May 10 Semester Concludes Thursday, May 15 **Graduate Commencement** Friday, May 16 **Undergraduate Commencement** Monday, May 26 Memorial Day (No Classes)

Summer 2008

Session 1	First 3 week session	May 19-June 5
Session 2	Eight week session	June 9-July 31
Session 3	First 5 week session	May 19-June 19
Session 4	Second 5 week session	June 23-July 24
Session 5	Second 3 week session	July 28-August 14

^{*}Academic calendar subject to change

From Normal To Extraordinary: A History Of Rowan University

Rowan University has evolved from its humble beginning in 1923 as a normal school, with a mission to train teachers for South Jersey classrooms to a comprehensive university with a strong regional reputation.

In the early 1900s, many New Jersey teachers lacked proper training because of a shortage of schools in the state that provided training. To counter the trend, the state decided to build a two-year training school for teachers, known then as a normal school, in southern New Jersey.

The town of Glassboro was an early favorite because of its excellent rail system, harmonious blend of industry and agriculture, natural beauty and location in the heart of South Jersey. Several towns in South Jersey competed to be the site of the new normal school because of the economic benefit and prestige such an institution would bring. In 1917, to sway the decision in their favor, 107 residents of Glassboro raised more than \$7,000 to purchase 25 acres, which they offered to the state for free if they selected Glassboro as the site.

The land tract included the Whitney mansion and carriage house. Before the purchase, the entire property belonged to the Whitney family, prominent owners of the Whitney Glass Works during the 1800s. This show of support, along with the site's natural beauty, convinced the selection committee that Glassboro was the perfect location.

In September 1923, Glassboro Normal School opened with 236 young women arriving by train to convene in the school's first building, now called Bunce Hall. Dr. Jerohn Savitz, the University's first president, expanded the curriculum as the training of teachers became more sophisticated. Despite the rigors of the depression, the program was expanded to four years in 1934, and in 1937 the school changed its name to New Jersey State Teachers College at Glassboro.

The college gained a national reputation as a leader in the field of reading education and physical therapy when it opened a clinic for children with reading disabilities in 1935, and added physical therapy for the handicapped in 1944. The college was one of the first in the country to recognize these needs and was in the forefront of the special education movement.

Rowan's second president, Dr. Edgar Bunce, created a junior college program in 1946 to serve World War II veterans taking advantage of the GI Bill.

In the 1950s, Dr. Thomas Robinson, the University's third president, expanded the curriculum, increased enrollment and added several buildings to the campus. In 1958, the school's name was to Glassboro State College to better reflect its mission.

The University received worldwide attention when it hosted a historic summit conference between President Lyndon Johnson and Soviet Premier Aleksei Kosygin. The conference was held in Hollybush, the former Whitney Mansion. The University was chosen because of its strategic location midway between Washington, D.C. and New York. The meetings between the two leaders on June 23-25, 1967 led to a thaw in the Cold War and eased world tensions.

The University's fourth president, Dr. Mark Chamberlain, guided the college through its next phase of growth as enrollment doubled and the college became a multi-purpose institution. As new majors and a Business Administration Division were added, the four divisions grew into schools and a board of trustees was formed. With a 1978 Division III National Championship in baseball—the first of 11 national championships—the athletic program established itself as one of the premier athletic programs in the country.

The fifth president, Dr. Herman James, assumed the leadership of the college in 1984. Under his direction Rowan expanded by establishing the first doctorate program among the state's public institutions and adding the colleges of engineering and communication. Dr. James was also responsible for the construction of Campbell Library, the Student Recreation Center and Rowan Hall.

In July 1992, industrialist Henry Rowan and his wife, Betty, donated \$100 million to the institution, then the largest gift ever given to a public college or university in the history of higher education. Later that year, the school changed its name to Rowan College of New Jersey. The college achieved university status in 1997 and changed its name to Rowan University.

To lead Rowan University into the 21st century, the Board of Trustees named Dr. Donald J. Farish as the sixth president in July 1998. Under his leadership, the university is working on an aggressive improvement plan that will give the university a national reputation for excellence and innovation and will make it the public university of choice in the region. The plan calls for a greater campus-wide focus on academic and student support initiatives as well as more than \$500 million being spent on campus construction and renovation projects.

Recent campus improvements include the construction of the university townhouses, Science Hall, Education Hall and the Innovation Center, the first building of the South Jersey Technology Park at Rowan University. The University has also seen a marked increase in private and alumni giving, as well as its student and institutional profile.

These efforts have caught the attention of national organizations that evaluate colleges and universities. US News & World Report ranks Rowan University in the "Top Tier" of Northern Regional Universities. Kaplan included the University in "The Unofficial, Biased Insider's Guide to the 320 Most Interesting Colleges." Also, Kiplinger's named Rowan University one of the "100 Best Buys in Public Colleges and Universities" and the Princeton Review included Rowan in the latest edition of "The Best Northeastern Colleges."

Rowan University is divided into six academic colleges: Business, Communication, Education, Engineering, Fine & Performing Arts, and Liberal Arts & Sciences, a graduate school and the College of Professional and Continuing Education. Rowan's nearly 10,000 students can select from among 36 undergraduate majors, seven teacher certification programs, 26 master's degree programs and a doctoral program in educational leadership.

From the modest normal school begun more than 80 years ago, Rowan University has become an extraordinary comprehensive institution that has improved the quality of life for the citizens of New Jersey and the surrounding states.

The Rowan University Mission

A leading public institution, Rowan University combines liberal education with professional preparation from the baccalaureate through the doctorate. Rowan provides a collaborative, learning-centered environment in which highly qualified and diverse faculty, staff, and students integrate teaching, research, scholarship, creative activity, and community service. Through intellectual, social and cultural contributions, the University enriches the lives of those in the campus community and surrounding region.

The Rowan Vision

Rowan University, at the next level, will continue to focus on its commitment to learning and teaching, combining liberal education with professional preparation. Rowan will advance through the rankings of regional universities on the strength of its excellent undergraduate programs and its noteworthy development of a learning-centered

environment. At the same time and without compromising the primacy of its focus on residential, undergraduate education, Rowan University will continue to build on its growing leadership in graduate and continuing professional education.

The Rowan Experience

The pursuit of high qualitative standards for academic programs for Rowan University will be carried forward in the context of a philosophy that the ideal educational experience focuses on the development of students as whole persons while they are engaged in rigorous academic pursuits. While cultivating the complete intellectual, physical, emotional, social and cultural well being of all members of the University community, the Rowan experience is built upon residential learning communities, mentoring programs, a commitment to service learning and volunteerism, a required Rowan Seminar for incoming freshmen, and awareness of current findings in the study of student life. Additionally, the Rowan experience provides the opportunity for students to work closely with faculty and professional staff in research and professional activities. A principal goal at Rowan is to motivate all students to take responsibility for their own learning, which is the outlook most conducive to the strongest intellectual growth and development.

Organization Of The University

Rowan University is led by a board of trustees made up of 15 lay citizens, two full-time, undergraduate students (one is a non-voting member), and the president of the university.

The institution is organized into five divisions—Academic Affairs, Student Affairs, Administration and Finance, University Advancement, and University Relations.

Academic Affairs, led by the provost, is comprised of six academic colleges—Business, Communication, Education, Engineering, Fine & Performing Arts and Liberal Arts & Sciences—a graduate school, and a college of Professional and Continuing Education. Student Affairs provides a variety of student and academic support services including housing and security. Administration and Finance ensures the day-to-day operations of the university, including budget management, capital construction and campus maintenance. University Advancement raises funds through private giving and builds ties with alumni. University Relations manages the institution's publications, marketing, web services, public relations, and media and community relations.

The University also has a very active Student Government Association. It oversees the activities of nearly 150 clubs and organization.

In addition to its Glassboro campus, the University maintains a branch campus in Camden, N.J. It also recently purchased 600 acres of land, located one mile from the main campus, for the future development of a west campus.

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Division of Academic Affairs

Academic Affairs

Academic Affairs

Ali A. Houshmand, Provost Bole Hall (856) 256-4108 houshmand@rowan.edu

James Newell, Associate Provost for Academic Affairs (856) 256-4012 newell@rowan.edu

Robert Zazzali, Associate Provost for Faculty Affairs (856)256-4110 zazzali@rowan.edu

Rowan University is an institution of higher learning in which priority is given to the intellectual development of its students. Intellectual development is held to be important for its own sake, essential as part of preparation for future careers and significant for the personal growth of students. Further, the University is committed to an academic tradition that encourages research and provides public service as a function of its social responsibility.

All academic programs offered at Rowan University have broad perspectives affecting the mind, body and spirit of its students. Intellectual pursuits often are matched by experiential enrichment-field experience, work study and personal involvement.

Students at Rowan University are expected to master bodies of knowledge. This mastery is typically accomplished by means of subject-matter specialization in combination with a required general education program strongly based in the liberal arts and sciences.

Academic excellence is core to all programs at Rowan University. Our faculty has the requisite expertise to assure the currency and high quality of the curriculum. The academic administrators and professional staff are selected according to their experience and expertise in curriculum, policy, and leadership. Support staff is essential to a well-functioning division that aims to promote student learning. Academic programs at Rowan University are reviewed, enhanced and/or modified regularly by the faculty to assure excellence and currency. Student learning outcomes assessment provide information to make changes where needed in the curriculum or to assure the excellence of programs. We seek accreditation or external review for academic programs to demonstrate quality.

The academic program is divided into three main offerings: those courses which constitute the major program of study, general education courses which assure breadth and depth of the liberally educated mind, and free electives which provide students opportunities to explore various intellectual areas of curiosity.

The Academic Affairs Division is headed by the Provost or Chief Academic Officer. The Provost is responsible for leadership and oversight of academic programs, faculty affairs, Library Services, technology delivery and planning and the Rowan University Camden

Campus. The Deans of the Colleges of Business, Communication, Education, Engineering, Fine & Performing Arts, Liberal Arts & Sciences, Professional & Continuing Education, the Graduate School, Library and Rowan at Camden report to the Provost. The Registrar, the associate provost for academic affairs, the associate provost for information resources and the directors of Financial Aid, Student Information Services and Admissions also report to the Provost. The Provost reports directly to the President and is second in the chain of command at the University.

Rowan University at Camden

Eric Clark, Dean Tyrone W. McCombs, Associate Dean Camden Campus (856) 756-5400 clarke@rowan.edu mccombst@rowan.edu

Rowan University at Camden offers programs and services convenient for the residents of the City of Camden and surrounding counties. In a shared facility with Camden County College, Rowan University at Camden is located in the University District of Camden, New Jersey. Students attending Rowan at Camden can take general education courses and complete a full degree program in one of the following majors: Sociology, Elementary Education, and Law and Justice Studies.

The English as a Second Language (ESL) Program at Rowan at Camden is very unique. It provides non-native speakers of the English language with the opportunity to study English, improve their language and academic skills and take Rowan courses at the same time.

The Educational Opportunity Fund (EOF) Program of Rowan at Camden provides students who are financially or academically disadvantaged New Jersey residents the opportunity to pursue a degree. The EOF students are required to attend a summer pre-college program. During the program, students are enrolled in college preparatory and developmental courses. At the end of the summer program students are evaluated for acceptance to the University for the fall semester.

The courses at Rowan at Camden are offered in the day and in the evening for a diverse student body. The flexible course scheduling is designed for individuals who may work. In addition, Rowan at Camden also has a childcare facility for those students who may have family responsibilities. Rowan University at Camden also offers cross registration with Rutgers University-Camden and Camden County College-Camden. In addition, Rowan at Camden offers a limited number of support services in collaboration with the City institutions including the Library and recreation center.

Rowan at Camden also shares a new bookstore with the other two City institutions. The new bookstore which is named The University District Bookstore is located on the corner of Broadway and Cooper Street directly across from the Rowan at Camden facility. The bookstore carries all books for courses offered at Rowan at Camden.

Library Services

Bruce A. Whitham, Dean Campbell Library (856) 256-4800 whitham@rowan.edu

Library Services supports the University's educational and research mission through the

judicious selection, management, promotion, and training in the use of information resources and services. Library Services are provided through the virtual environment of the Internet and in library and archival spaces conducive to academic and social engagement, and to the promotion of intellectual curiosity.

Keith and Shirley Campbell Library

The Keith and Shirley Campbell Library is the main library on campus. Opened in 1993, the 118,000 sq. ft. facility, houses more than 400,000 books, multimedia materials, periodicals, newspapers, and special collections in a variety of formats. Campbell Library provides orientations, tours, and workshops throughout the academic year, including the summer sessions. A 30-workstation lab is available for "hands on" library instruction and labs, seminar and group study rooms are available for use by students. Campbell Library also houses a state-of-the-art media center where computer-based skills are learned in structured classroom presentations and through informal collaborative learning opportunities.

The Campbell Library and Instructional Technology Services partnership media and computer equipment, are available and may be checked out for use by the current Rowan University community.

Government Documents

Rowan University participates in the U.S. Federal Documents Depository program and maintains a selective depository, located on the second floor of Campbell Library. Library Services also collects paper and virtual materials at the city, state, and international government level as well as those of non-governmental organizations; and provides research assistance and help in obtaining desired documents.

Archives and Special Collections

University Archives and Special Collections are housed in the Stewart Room, located in the Campbell Library. Named in memory of Frank Stewart, a prominent New Jersey industrialist who donated an extensive and valuable collection of New Jersey historical documents and artifacts, the Stewart Room collection has grown to include a wide range of important source materials beginning with the Colonial and Revolutionary eras. Researchers and scholars from across the nation use these important collections. The University Archives include items from the historic summit in 1967 between President Lyndon Johnson and Soviet Premier Aleksei Kosygin, which took place at the Hollybush mansion on campus.

The Music Library at Wilson Hall

Located in Wilson Hall, the home of the Music and Performing Arts Department, the Music Library maintains unique collections and offers specialized information services and instruction for students and faculty. The Music Library houses significant collections of scores, CDs, and recordings. In addition, electronic access to the Naxos Music Library, Grove Music Online, and Music American, among others, is available through the Library Services Web Site. Listening equipment and specialized labs are also available in the Music Library.

Virtual Library Services

Most of Rowan University's educational and research resources are now available to current Rowan users when and from wherever needed. Research and Instructional Services staff are available for extended hours through the "Ask Us!" and "Virtual Reference Online" services. Hundreds of databases, electronic resources, research guides, and search tools are accessible, in addition to thousands of full0text journal titles and other unique and specialized sources.

Research

S. Jay. Kuder, Associate Provost Memorial Hall 856-256-4053 kuder@rowan.edu

The Office of the Associate Provost for Research oversees research activities at the university, including the Office of Government Grants and Sponsored Projects and compliance activities such as the Institutional Review Board for Human Subject Research (IRB) and the Institution Animal Care and Use Committee (IACUC).

Information Resources

Anthony Mordosky, Associate Provost Memorial Hall (856) 256-4743 mordosky@rowan.edu

The Division of Information Resources provides leadership, planning, coordination, and support services for the information technology infrastructure of the university and its satellite campus. Information Resources is committed to providing students, faculty, and staff with universal access to library and information technology resources that support and enhance academic and administrative programs and promote student-centeredness, excellence in instructional practice, quality management, and efficiency and integrity of operations. This division consists of the Office of the Associate Provost for Information Resources, Instructional Technology, Enterprise Information Services and Network and System Services Units.

Graduate School

S. Jay Kuder, Dean Memorial Hall (856) 256-4053 kuder@rowan.edu

The Graduate School mission is to provide programmatic leadership, coordination and administrative support for quality graduate programs and experiences at Rowan consistent with national, state and regional educational needs. Through graduate degree programs at the master's, specialist, and doctoral levels and through graduate certificate programs and graduate courses, The Graduate School expands academic opportunities for students to meet workplace, professional and personal desires for lifelong learning. Led by the Graduate Council, graduate program advisors and faculty and the Dean and staff of The Graduate School, the Rowan graduate experience is an integral component of the overall University mission to provide an exceptional environment for achievement and fulfillment.

The office of The Graduate School, located in Memorial Hall (1st floor), is open Monday through Friday (Monday through Thursday from mid-May to mid-August). The main phone number of The Graduate School office is (856) 256-4050. The office can be reached by e-mail at gradoffice@rowan.edu.

The office staff can provide information about graduate programs and admissions procedures and can help students obtain additional academic advisement. The staff of the office of The Graduate School are:

S. Jay Kuder, Dean, The Graduate School (856) 256-4053 kuder@rowan.edu

Brenda Marlin Coordinator, Graduate Advisement (856) 256-4051 marlin@rowan.edu

Karen Heiser Secretary to the Dean (856) 256-4167 heiser@rowan.edu

Alicia Groatman Admission Specialist (Post-BA Programs) (856) 256-4027 groatman@rowan.edu Dorie Gilchrist Director of Graduate Admissions (856) 256-4054 gilchrist@rowan.edu

Karen Haynes Coordinator, Graduate Admission (856) 256-4052 haynesk@rowan.edu

Cheri James Secretary, The Graduate School (856) 256-4059 james@rowan.edu

Admission to The Graduate School

To be admitted to a graduate program (degree or non-degree) at Rowan University, an applicant must have a baccalaureate degree from a regionally accredited college or university in the United States or its equivalent from a foreign institution of higher education.

Applicants to graduate degree programs must also present evidence of potential for graduate study demonstrated by undergraduate academic performance, two letters of recommendation (at least one should evaluate related professional skills, e.g., teachers should include an evaluation of teaching skills by a supervisor), and standardized test scores taken within the last five years. Some programs have additional specific requirements. The Graduate Application contains information about specific program requirements; program descriptions in this catalog also identify program-specific additional admission requirements.

Graduate applications are available for degree, non-degree, certificate and certification programs by contacting The Graduate School, Memorial Hall, Glassboro, New Jersey 08028-1701; (856) 256-4050; fax (856) 256-4436; or on line at gradoffice@rowan.edu.

Honors Admission for Rowan Students

Rowan students who have graduated within the last three years, or Rowan seniors in their final semester are exempt from paying an application fee and from taking standardized tests (except where it is necessary to meet standards recommended by accrediting bodies, certification agencies, statutory regulations and/or professional societies) if they have achieved a cumulative GPA of 3.8 or above in their undergraduate coursework and meet all other admissions requirements.

Admissions Requirements for International Applicants

In addition to the application requirements for all students as noted above, foreign or international applicants who have completed a baccalaureate degree at a college or university outside the U.S. are required to earn minimum scores of 213 (computer-based test) or 550 on the paper test of English as a Foreign Language (TOEFL), provide evidence of immunization against measles, mumps, and rubella, and evidence of the ability to have medical insurance coverage during their proposed stay in the U.S. Applicants are further required to submit all application materials, including transcripts, diplomas, certificates, etc. translated into English. In some cases, international applicants must arrange with World Education Services to have at least a document by document review of their educational credentials. World Education Services must confirm that the applicant's undergraduate experience is the equivalent of four years of undergraduate study at an accredited U.S. college or university, culminating in the bachelor's degree. Also, foreign or international students are required to certify that sufficient funds to support their academic and personal living expenses during their stay in the U.S. are available. A non-refundable admissions deposit of \$300.00 is required as a condition of granting the F-1 visa. This deposit will be applied to tuition and fees for the student's first semester at Rowan University. Student deposits which are not applied to tuition costs within one year of acceptance may not be applied to tuition costs after that time. The F-1 visa is the only visa acceptable to Rowan University for purposes of admission. As a condition of continuing matriculation, foreign or international students are required to maintain full-time (at least 9 semester hours per term) enrollment in graduate courses leading to a degree.

Program Transfers

Students wishing to transfer from one program to another should complete a transfer request form and return the form to The Graduate School. Approval for transfer is given by the program advisor of both the exiting and receiving programs, department chair, college dean, and the dean of The Graduate School. The student, however, must meet the conditions established by the advisor of the program into which transfer is requested. Students with questions about program change or special requests should see the program advisor or the staff of The Graduate School. The six-year requirement for matriculated students to complete a program begins with the date of the initial program.

Non-Degree Option

Students who wish to take graduate-level course work for personal enrichment or professional development with no intention of seeking acceptance into a graduate degree or certificate/certification program, may enroll as a "Non-Degree Graduate Student." Students must meet the prerequisite requirements of the course/courses for which they wish to enroll. Non-matriculated students must enroll as a non-degree graduate student if they wish to take more than 9 schedule hours at the graduate level and do not intend to become a degree candidate. Some programs (e.g. the MBA and MST programs) do not permit non-degree students to enroll.

As a non-degree graduate student, individuals may take up to 18 schedule of graduate course work, including those courses taken before declaring non-degree status. This limitation does not apply to custom-designed, professional development courses unless they can be applied to a graduate degree program. Non-Degree graduate students may take no more than nine (9) schedule hours or three (3) courses in one graduate program. Students who wish to take more than nine semester hours in one program must apply for admission to that program or seek permission of the graduate program coordinator, with the approval of the department chair, college dean and the Dean of the Graduate School to take additional courses in that program due to compelling circumstances.

Non-degree students may apply for admission to a degree program at any time. They must meet all of the admission requirements of the Graduate School and the graduate program to which they are applying. No more than nine (9) schedule hours may generally be utilized toward a degree program (six (6) schedule hours toward a certificate/certification program). It is the responsibility of the graduate program coordinator, with the approval of the department chair, college dean and the Dean of the Graduate School to determine which credits can be applied to the program. Admission as a Non-Degree graduate student does not imply or guarantee acceptance into a graduate degree or certificate/certification program.

Students wishing to apply for the Non-Degree Graduate Student program must complete an application form, including official transcripts from all undergraduate and graduate schools, and pay the non-refundable graduate application fee.

Restriction on Non-Matriculated Students

Non-matriculated graduate students must apply for admission to a graduate program (degree or non-degree) before completing nine hours of graduate credit if they wish to continue graduate study. The University reserves the right to specify what courses may be available for non-degree seeking and non-matriculated students and to establish certain minimum qualifications for enrollment in graduate courses by non-degree seeking students and to restrict their course registrations. Most M.B.A. and M.S.T. graduate courses are not available to non-degree seeking and non-matriculated students.

No more than nine semester hours of graduate courses may be taken by non-matriculated students. No more than eight semester hours may be taken in any one semester. Non-degree and non-matriculated students who register for graduate courses at Rowan University for the purpose of pursuing certification through the New Jersey Department of Education are subject to all restrictions applicable to other non-degree seeking and non-matriculated students regarding course enrollments and course credit limitations.

Post-Baccalaureate Teacher Certification Programs

Post-baccalaureate teacher certification programs are available in approved undergraduate teacher certification programs at the University. These programs are designed to provide initial teacher certification to candidates who may be graduates of an accredited college or university or certified teachers seeking an additional certification that does not require a master's degree. These programs require an earned bachelor's degree in undergraduate programs with the same course requirements as Rowan's degree programs. Admission to post-baccalaureate teacher certificate programs is through the Graduate School Office of (256-4027).

Courses in post-baccalaureate programs are at the undergraduate level. Students accepted into the post-baccalaureate teacher certification program are restricted to a maximum of six semester hours of graduate course work. Registration in additional graduate courses requires the approval of The Graduate School dean. Students who exceed this six semester hour maximum may have their registrations withdrawn.

Frequently Asked Questions about Graduate Study

1. How can I take a course before being accepted into a program? Some students prefer to "try out" one or two graduate courses before applying to a program or to improve their academic or professional credentials. Non-matriculated students are permitted to take up to nine credits (usually three courses) of graduate coursework. Non-matriculated students may during the Extended Registration period if they provide proof of the award of the undergraduate degree. If students provide evidence of the award of a master's degree or higher, they will be permitted to register for non-reserved courses beyond the nine credit limit. Matriculated, non-degree students may take up to 18 semester hours of coursework (but no more than 9s.h. in one degree or 6s.h. in one certification program).

2. Can I go part-time?

A substantial number of students pursue degree or certification programs on a part-time basis. To accommodate these students, academic departments have scheduled most graduate courses in late afternoons and evenings. Most graduate courses meet once a week, usually from 4:30-7:00, 7:10-9:40, or 6:30-9:00 p.m. in the fall and spring semesters. The Registrar's Office prepares course schedule booklets each semester listing available courses and meeting times.

3. What are the application deadlines?

Most Rowan University graduate applications are accepted at any time of the year (rolling admissions). However School Psychology, Learning Disabilities, Counseling in

Educational Settings, Reading Education, the Master's in Science and Teaching and the Writing programs have established two annual deadlines, October 15 for spring admissions decisions and February 15 for fall admissions. The Mental Health Counseling Program has only one annual deadline, February 15.

For programs with rolling admissions completed applications, including required scores, should be submitted at least two months before the beginning of the semester in which the student wishes to become matriculated.

4. How are admissions decisions made?

Applications cannot be reviewed by a program admissions committee until all required materials are received. In order to facilitate this process, all materials should be submitted at one time in the envelope attached to the application. Applicants will be notified of a decision as soon as possible by letter.

Because of competition for available slots, students must be aware that complying with all admissions requirements does not guarantee acceptance. Applicants are evaluated on the basis of multiple criteria: grade point average (both undergraduate and graduate); recommendations; standardized test scores and any additional criteria required by the program of choice, such as interviews, writing samples, etc., as listed in the application requirements in this catalog under individual program descriptions. Every effort is made to identify and admit those students who demonstrate clearly both the ability to benefit from the proposed program of study and the greatest promise of scholarly achievement by carefully examining a variety of different criteria.

5. How long can I take to complete my program?

Students have six years from the date they matriculate to complete their graduate degree programs. Under certain circumstances, a one-time extension of up to one additional year may be granted.

6. Can I get financial aid?

Need-based financial aid for graduate students is administered by the Office of Financial Aid at Rowan University (256-4250). Applications should be filed as soon as possible after January 1. Applicants are advised not to wait for an admission decision before applying for need-based financial aid. In addition, a limited number of graduate assistantships are available annually through The Graduate School. Applications are available in March prior to the fall semester of the next academic year. Successful applicants receive tuition waiver and a stipend in exchange for part-time employment on campus. Call The Graduate School (256-4050) for more information.

7. What if I just want to get New Jersey teaching certification? At Rowan University, the post-baccalaureate program leading to regular initial New Jersey teaching certification is an undergraduate program.. Individuals who seek additional certifications at the graduate level are encouraged to apply for program admission through The Graduate School.

Academic Policies and Requirements

The following selected policies and procedures govern conditions that affect student enrollment. It is important to note that these are not a summary of all academic policies and procedures that govern graduate study. For more information on these and other policies that may relate to academic affairs, students are encouraged to consult the Graduate Student Handbook.

Registration Procedures

WEB Telephone registration for matriculated students is usually conducted in April and May for the Fall semester, in October and November for the Spring semester and in March for the Summer sessions. Matriculated students may not register for more than 18 s.h. per semester unless approval is obtained from their academic dean, or, for undeclared majors, from the Office of Career & Academic Planning. Payment of tuition and fees for those students who use touch-tone or WEB registration must be made by the date indicated on the course confirmation invoice. Students who do not pay by the date indicated on the invoice will have their confirmations canceled. Students wishing to re-register after such a cancellation may do so at final registration by making selections from courses with seats remaining and paying tuition and fees at that time. WEB Telephone registration course confirmation invoices for students receiving scholarships, VA benefits, graduate assistant stipends and other financial aid must be validated by the Bursar's Office by the date indicated on the invoice. Students are responsible for this validation regardless of who is paying the bill. If such validation has not been completed by the due date on the invoice, the confirmation will be canceled. If students wish to reregister after such a cancellation, they may do so at final registration by making selections from courses with seats remaining and presenting evidence of financial aid at that time.

Extended and Final Registration

(Matriculated and Non-Matriculated Students)

Extended registration is usually conducted prior to the **beginning** of a semester or summer session. **Final** registration is conducted prior to the first week of a semester or summer session at which time a late registration fee is charged. Payment of tuition and fees for students who register during **Final** registration is due at the time of registration.

Matriculated/Non-Matriculated Status

Matriculated students are those who have formally been admitted to the University through the Graduate School Office, have confirmed their intention to enroll in either a certificate granting program or a degree program, and who subsequently register and attend classes. Matriculated students regularly enroll in classes on either a full-time or part-time basis. Non-matriculated students are those who have not been formally admitted to the University through the Graduate School Office.

Advising

Information about graduate programs and requirements are available from The Graduate School and the academic college. Academic advising is provided by the college.

It is the student's responsibility to seek advisement and to follow the prescribed program. Variances from requirements must be approved by the program advisor, the academic department chair, the appropriate college dean and the dean of The Graduate School. Since most courses are offered on a rotating basis, the student should confer with the program advisor to establish a sequence for enrolling in courses.

Immunization and Medical Records

As a condition of admission and continued enrollment, each student is required to provide evidence of immunization against measles, mumps, and rubella (N.J.S.A. 18A:61D-1). Students are also required to submit a complete medical record to the student health center. Additional information on these requirements is available from The Graduate School. (256-4050) or the Student Health Center (256-4333).

Deferred Payment Plan

Under certain circumstances, deferred payments plans are available for full-time students. For more details, students must consult with the Bursar's Office (256-4150).

Full-Time Status

A full-time graduate student is one who has enrolled for a minimum of nine (9) credit hours per semester.

Research Papers—The Term Paper Law

New Jersey Public Law 1977-C-215 prohibits the preparation for sale and/or subsequent sale of any term paper, thesis, dissertation, essay or other assignment with knowledge that the assignment will be submitted in whole or in part for academic credit. The law provides a \$1,000 fine for any person or firm violating its provisions.

Academic Honesty

The vitality of any academic program is rooted in its integrity. It is essential to Rowan University that the grades awarded to students reflect only their own individual efforts and achievements. Each segment of the academic community, i.e., faculty, students and administration, is responsible for the academic integrity of the University. Academic dishonesty, in any form, will not be tolerated. Students found to have committed an act of academic dishonesty may be subject to failure in the course, suspension from the University, or both.

Grading System

The following are used to evaluate students' performances in courses:

letter grade	point value	
A	4.0	Excellent
A-	3.7	
B+	3.3	
В	3.0	Good
B-	2.7	
C+	2.3	
C	2.0	Fair
C-	1.7	
D+	1.3	
D	1.0	
D-	0.7	
F	0.0	Failure
P		Pass
NC		No Credit
IN		Incomplete

The following notations are made by the registrar:

W	,	Withdrawal
NR		Not Recorded

The NR notation will be inserted by the registrar when instructors do not record grades for students in courses in which these students are registered. This notation may be changed later to a regular letter grade by instructors using the Change of Grade procedure. The symbol could be changed to a W if students present sufficient evidence of withdrawal from the course involved.

The use of P/NC (Pass/No Credit) in selected courses has been approved by the University Senate. A list of approved P/NC courses is published each semester in the Master Schedule of Classes. Students must accept the responsibility of reviewing that listing. P/NC grades will not contribute to the computation of cumulative grade point averages or the designation of graduation honors. Descriptive reports will accompany P/NC grades only at students' written requests and at the option of the instructor. If students do not request an option for P/NC before the end of the last day of the second week of class, they will be graded on the A-F scale. Transfer and first-year students registering during or after September 1995 will be permitted to take up to 10 percent of the credits earned as P/NC.

Students engaged in exchange programs are graded on the P/NC basis.

The interim grade of IN (incomplete) may be assigned by an instructor under certain circumstances. This grade must be removed before the end of the following academic semester. If students believe that circumstances warrant an extension, they may request the instructor, in writing, for such an extension. If approved, the instructor will renew the incomplete in the Registrar's Office when grades are due. Failure to remove the incomplete grade within the prescribed time will automatically change the IN to an F.

Change of Grade Policy

Grades are subject to change under the following conditions:

INCOMPLETES: A grade of incomplete (IN) may be changed to a letter grade.

ERRORS: A grade calculated or recorded erroneously may be changed to the grade actually earned.

DISPUTES: A disputed grade may be changed if the student appeals it successfully. A disputed grade differs from a grade recorded in error in that disagreement over evaluation or application of criteria rather than miscalculation or clerical mistake is involved.

The policies for these three conditions differ substantially. Students are advised to read each policy carefully, paying particular attention to the respective time lines.

A request for change of grade is appropriate only when an error has been made by the professor in calculating or recording a student's grade or when an "Incomplete" has turned into an "F" and the student has met all requirements, for the course. In cases of a need to change a final grade assigned for a course, the time limit for confirmed contact of the professor who awarded the grade is twenty (20) business days, not including summer, into the semester following the one in which the grade was recorded. If the professor is unavailable or fails to respond by the 30th business day of the semester, students have an additional ten (10) business days to contact the department chair. Where the department chair and the instructor are one and the same, twenty (20) business days suffice before the student can move on to the next step. Students should retain evidence of their attempts to reach either party, in extraordinary, rare, and compelling circumstances beyond the control of the student, these limits may be extended, and changes may be made only with the written approval of the course instructor, when available, the department chair, and the dean.

A change of grade is not a substitute for an "Incomplete." If a student has work missing at the end of a semester –exams, papers, assignments to be written or rewritten – an "Incomplete" may be assigned if circumstances warrant. It is not appropriate to use change of grade to alter P/NC to A-F grade or vice versa after the completion of the semester unless an error has been made. In designated courses a student may request a P/NC option before the end of the drop-add period during the semester in which the course is taken as noted in university policy. Students who do not declare an option for P/NC before the end of the drop/add period are to be graded on the A-F scale.

Process for Resolving Disputed Grades

It is the responsibility of the classroom instructor to evaluate each student's work and to assign a grade which is a fair and valid measure of the student's achievement in the course. In the event of a dispute over an assigned grade, the student will document in writing the rationale for the grade dispute. The student must provide a copy of his or her perception of the dispute to the instructor and the department chair. It will then become part of the permanent record concerning the dispute. This document must be signed and the date of the transmittal to the instructor and the department chair noted on the document.

The time limit for initial confirmed contact of the professor who awarded the grade is twenty (20) business days, not including summer, into the semester following the one in which the grade was recorded. If the professor is unavailable or fails to respond by the 30th business day of the semester, students have an additional ten (10) business days to contact the department chair. Where the department chair and the instructor are one and the same, twenty (20) business days suffice before the student can move on to the next step.

1. Department Level:

- a) The student and the instructor will meet to attempt resolution of the disputed grade. If the instructor is no longer accessible for any reason (e.g., prolonged illness, no longer at Rowan), the student may continue the process as noted in this policy by first meeting with the department chair (see 1 b),
- b) If the matter is not resolved, the student and the instructor will then meet with the department chair, who will act as a facilitator, to determine if resolution is possible. If the dispute cannot be resolved informally, faculty will continue to be available to

assist in the resolution of the dispute.

2. College Level

If the issue is not resolved at the department level, within ten (10) business days from the time the department chair is informed of the dispute, the student shall schedule a meeting with the appropriate academic dean within five (5) business days of the departmental decision and will provide, in writing, the rationale for the grade dispute. The academic dean will attempt to effect a reconciliation between the two parties within ten (10) business days of receiving the student's written rationale for the grade dispute. Pertinent documentation provided by the instructor and the student shall form the basis for discussion at this stage.

3. Grade Grievance Committee Level

If the matter is still unresolved, ten (10) business days after the meeting with the academic dean, the student may pursue the matter with the associate provost for academic affairs. The associate provost for academic affairs will provide the Grievance Committee with the student's written grievance to determine whether a formal hearing is warranted. If the Grievance Committee determines a formal hearing is warranted, a date and time will be set for the hearing. The Grade Grievance Committee shall, at the conclusion of the hearing, have prepared a written recommendation to the provost. The recommendation shall be submitted within four working days after the hearing.

4. Provost Level

Within ten (10) working days of receiving the recommendation, the provost will take action and shall notify both parties in the grievance of the decision and action taken. This action is final.

The Grievance Committee shall be composed of two faculty members appointed by the Senate, two students appointed by the SGA, and two administrators appointed by the University president or his/her designee. A chairperson shall be elected from and by the membership and shall have the right to vote. The associate provost for academic affairs shall serve as an ex-officio member of the Committee without vote. A majority of the Committee membership must be present for all meetings of the committee.

Every effort will be made by the associate provost for academic affairs to schedule a grade grievance hearing at a time that is mutually convenient to the instructor and the student. This may, however, not always be possible. The associate provost for academic affairs will set the schedule for the meeting after careful consideration of the personal schedules of the parties involved. A hearing will not be set for a time when either the instructor or the student has a class at Rowan scheduled. One continuance is permitted if unforeseen events make one or the other party's attendance impossible. Thereafter, a new date for the hearing will be set, and the committee will be convened despite the absence of one or both of the parties to the dispute.

If any committee member has a direct personal or professional relationship with any individual(s) involved in a particular case, that committee member may disqualify him/herself from serving on the committee while the case is being heard. Further, if a charge of bias is raised by an individual, the contested committee member may disqualify him/herself from committee deliberations. Failing voluntary action in either situation, the committee itself must reach a decision as to the continuance of the individual so questioned. If a member is disqualified, another individual from the same constituency shall be appointed to serve in his/her place.

Repeating a Course

In the event that a student must or voluntarily chooses to repeat a course, the grade received for the repeated course will constitute the final grade for that subject for cumulative G.P.A. purposes whether the grade is higher or lower than the grade received in the original course. The original grade, although not counted in the cumulative G.P.A., remains on the student's transcript. Herein, the University stipulates that the same course may not be taken more than twice including withdrawals. However, except for general education courses, further restrictions may be determined by the individual departments/colleges, only to meet standards recommended by accrediting bodies, statutory regulations, and/or professional societies. Appeals may be made through the normal appeals process.

Viewing Final Exams and Papers

Faculty members have the responsibility of making final exams and papers accessible to students for viewing for a period of one semester after a final grade has been issued, or when an Incomplete becomes a final grade.

Academic Warning and Dismissal From the Graduate Program

Academic Warning

Students will be placed on academic warning for either of the following conditions:

- 1. A student receives two grades (6 s.h.) of **C+ or below**.
- 2. A student has a cumulative GPA of less than 3.0 after accumulating 9 graduate credits or more.

Dismissal Conditions

Academic dismissal occurs when students fail to maintain satisfactory progress toward the attainment of their graduate degrees or certifications. Students accumulating more than 6 s.h. of C+ or below or earning a cumulative GPA of less than 3.0 after taking 12 graduate credits or more will be subject to academic dismissal. Such dismissal will generally, but not always, take place at the end of the academic year, whether or not the student is currently registered for courses. Students so dismissed may not register for any additional graduate courses at Rowan University either as matriculated or non-matriculated students. Students who do register will have their registrations withdrawn by the Registrar. Students who have been dismissed may seek readmission through the Office of The Graduate School after one academic year. Students who are dismissed forfeit grants, graduate assistantships, and/or scholarship aid that may be in effect at the time. Students who are academically dismissed have the right to appeal through the dismissal appeal process of The Graduate School.

Class Attendance

Students are expected to be present at each scheduled class for which they are officially registered. Rowan's "community of learners" can be realized only when teachers and learners interact in ways deemed appropriate for any particular class. Because Rowan

recognizes diversity in both teaching and learning styles-and even course design and delivery-rules may vary with the learning experience, e.g., online or distance learning courses.

Faculty establish the parameters of a particular learning experience and are expected to maintain the efficiency of the community and to keep accurate attendance records. Faculty are also expected to counsel students who develop a pattern of excessive and unexplained absences, and to request assistance from the dean of students if the pattern of absences continues.

Students who are absent for reasons of illness, death in the family, inclement weather, religious observances, official university activities or for matters of personal conscience should inform each of their instructors, ideally with a written excuse, before the fact or as soon as possible thereafter. Except in cases where classroom experience can not be repeated, faculty may provide these students the opportunity to make up written work, tests or other assignments at the earliest possible convenient time.

In any event, faculty are under no obligation to make special provisions for students absent for reasons other than those listed above. Faculty may establish additional attendance criteria which are consistent with the above paragraphs. In learning communities, where attendance is critical to the functioning of the group, the rationale and justification for additional attendance requirements must be part of the syllabus provided for students prior to the end of the drop/add period. Faculty may establish additional attendance criteria which are consistent with the above paragraphs. In learning communities, where attendance is critical to the functioning of the group, the rationale and justification for additional attendance requirements must be part of the syllabus provided for students prior to the end of the drop/add period.

Audit Policy

Students who wish to attend classes in a particular course and not receive credit may do so by registering in person during final registration or Drop/Add at the Office of the Registrar. Auditors may choose whether or not to do the normally required course work; likewise, instructors may choose whether or not to formally evaluate auditors work. Auditors receive neither grade nor credit for any course. Courses designated "AU" (audit) on student's transcripts do not count in defining full-time/part-time status, financial aid or veterans benefits, or degree requirements. Students are not permitted to audit private lessons for credit in the Department of Music, internships, student teaching, independent study, or other experiential courses. Tuition for courses taken under the audit designation is established by the University's Board of Trustees.

Course Withdrawal System

Registration in a given Rowan University course implies the student's obligation to complete its requirements. Provisions for withdrawal are made for special circumstances. Except in extreme circumstances when the department chair and the dean of a particular college allow, students are not permitted to withdraw from the same course more than two (2) times.

The notation of W, withdrawal, is not a grade. The notation of W is made by the Registrar on the basis of information supplied by the student. Students should follow the regulations stated below in order to receive the notation of W.

a. To drop a course during the drop/add period only, students must secure a Drop/Add Form from the Registrar's Office. When students withdraw from a course during the

drop/add period, neither the course nor the drop will be recorded on the transcript.

- b. To withdraw from a course between the drop/add period and mid-semester, students must secure a Withdrawal from Course Request Form A from the Registrar's Office. The reason for the request may be stated on the form and must be signed by both the student and the course professor, who must note the student's last date of attendance in class on the form. Upon receipt of the signed Withdrawal from Course Request Form A, the Registrar's Office will enter a W on the official transcript.
- c. To withdraw after mid-semester, the same process as stated in item b above will prevail, except that the reason(s) for the request must be stated and approval must be obtained from the professor and respective department chairperson. If the approval is granted, the professor will indicate that the student is withdrawing with a passing grade (WP) or withdrawing with a failing grade (WF). The professor will also note the student's last date of attendance in class on the form. Upon receipt of the properly approved form, the Registrar's Office will enter a WP or WF on the official transcript.
- d. Withdrawals during the last four weeks of the semester are considered exceptional and may occur only with the approval of the professor, department chairperson and dean and only for good and sufficient reasons beyond the control of the student. (WP/WF remains in effect.)

Repeating a Course

In the event that a student must or voluntarily chooses to repeat a course, the grade received for the repeated course will constitute the final grade for that subject for cumulative G.P.A. purposes whether the grade is higher or lower than the grade received in the original course. The original grade, although not counted in the cumulative G.P.A., remains on the student's transcript. Herein, the University stipulates that the same course may not be taken more than twice including withdrawals. However, except for general education courses, further restrictions may be determined by the individual departments/colleges, only to meet standards recommended by accrediting bodies, statutory regulations, and/or professional societies. Appeals may be made through the normal appeals process.

Senior Privilege

Seniors at Rowan University who have earned at least a 3.0 GPA may request permission from The Graduate School Dean to register for one graduate-level course per semester. The total number of all graduate credits taken shall not exceed 6 semester hours. Students may take a graduate course for application to either an undergraduate or a graduate degree, but may not apply the course to both. For a student to enroll in a graduate course, recommendations are required from both the student's undergraduate program advisor and the chairperson of the department(s) in which the graduate course(s) is housed. Furthermore, final approval of exceptions to this policy must be obtained from the Dean of The Graduate School.

Requirements for a Graduate Degree and/or Certificate

The requirements for successful completion of each degree and/or certificate program differ, however there are specific requirements that are common to all graduate programs:

1. A maximum of **twelve** semester hours in graduate credit from another accredited U.S. college or university may be applied toward a graduate degree program, provided the grade for each course is at least a B (3.0) and has been earned within the last 10 years. A maximum of **six** semester hours can be applied to a graduate certification or certificate program. Students who have received a Master's degree from Rowan University and who apply for and are admitted to a second Rowan University Master's degree, may request that up to 12 credits from the first degree be applied to the second degree. The courses must meet the specific course requirements of the second degree program as well as all graduate requirements and policies and be approved by the program advisor and the admissions committee.

Students must complete a form in The Graduate School Office requesting the transfer of credits. This form and an official transcript of the course(s) should be submitted to The Graduate School for processing. The transfer of courses must be approved by the student's program advisor, the department chair, the appropriate college dean, and the dean of The Graduate School.

Transfer courses may be accepted within the following provisions:

- a. Transfer courses from accredited U.S. institutions of higher education may be accepted as free electives.
- b. If the student wishes to apply the transfer course to a program requirement, the student must request a variance in the program requirements. The variance must be approved by the student's program advisor, the department chair, the appropriate college dean, and the dean of The Graduate School.
- 2. In order for Rowan University to recommend to the New Jersey Department of Education that a certification be awarded after completion of a program of studies, the student must have successfully completed a minimum of 15 semester hours or two-thirds of the program's semester hour requirements (whichever is appropriate) in residence at Rowan University.
- 3. In very rare and compelling instances beyond the control of the student, it may be possible to apply a selected upper level (junior/senior) undergraduate course to the requirements of the graduate degree or certification program. Students who wish to request this alternative must do so in writing to their respective graduate program and academic advisors. Approval must be granted by the advisor(s), department chair, appropriate college dean, and The Graduate School dean. Students may not request permission to apply more than 3 credits of such undergraduate courses to their degree or certification programs. The undergraduate course may only be taken after a student has successfully matriculated into a graduate program and after written approval as described above has been obtained.

- 4. A cumulative grade point average of 3.000 must be maintained for graduate work involved in the program course requirements. To maintain satisfactory academic progress, students may earn no more than six semester hours in courses with grades of **C+ or below**. Grades of **C- and below** do not meet the requirements for graduate credit and will not be applied to the credits necessary in graduate degree programs. Students must earn at least a **B** average (3.000 GPA) to receive any graduate degree or recommendation for certification. Students who fail to maintain satisfactory academic progress are subject to academic warning and/or dismissal. For information on the University's academic warning and dismissal policies, readers are referred to the appropriate section in the catalog entitled "Academic Policies." (p 134).
- 5. The master's degree or the advanced certification program must be completed within six academic years following the first enrollment as a matriculated student in graduate courses at Rowan University. Students who do not maintain continuous enrollment within limits prescribed by University policy may be involuntarily withdrawn from the University. In rare and compelling instances, an extension of up to one year may be requested by a degree candidate to complete his/her program. This request may be granted only once upon approval by the program advisor and dean of The Graduate School.
- 6. Most programs require that a student present a written project as one of the requirements for the degree. The project must have academic significance and must be completed under the guidance of the student's program advisor or someone officially designated by the advisor. The project, as a general rule, will be in the student's area of specialization in the graduate program. Typically, it will be completed as part of the requirement of a seminar in the field of specialization. The project must show evidence that the student:
 - a. -understands the essentials of a research problem
 - b. -proceeds independently with a well organized plan of work
 - c. -demonstrates reasonable familiarity in handling the research methods involved in the project
 - d. -demonstrates reasonable facility in writing and interpreting the material, and
 - e. -demonstrates skill in relating findings and conclusions to professional needs.
- 7. A final written comprehensive examination is required of candidates for the master's degree, with the exception of the Master in Business Administration, the Master of Science in Teaching, and the Master of Science in Engineering. The examination is normally administered twice a year with a minimum of three months between the scheduling of the examinations. Prospective graduates may repeat the examination once. Exceptions to this must be approved by the program advisor, departmental chair, appropriate college dean and dean of The Graduate School. The examination shall be prepared, reviewed and the results evaluated by the student's graduate program committee. The committee shall also develop a system of identification that ensures the anonymity of the student until the examination evaluators have completed the assessment of the total examination.

The examination committee will prepare written, predetermined criteria for success in the examination. Upon request of the program advisor, these criteria may be distributed, in writing, to the student when the student applies to take the examination. Students will make application to the program advisor to schedule the examination.

Comprehensive examinations are usually scheduled in the fall (October-November) and in the spring (March-April). The specific schedule, within this framework, will be available in advance from the program advisor and The Graduate School. Nevertheless, it is the sole responsibility of the student to schedule the comprehensive examination with his/her advisor. In exceptional circumstances the student may be scheduled for the examination in the summer upon the recommendation of the program advisor and the approval of the dean of The Graduate School.

8. Each candidate for the master's degree is required to enroll in at least two sequential semesters in which the student must demonstrate the ability to engage in sustained and indepth study. For the purpose of this requirement, a summer session may be counted as a semester. The seminar and research courses, with the approval of the program advisor, may fulfill this requirement.

Seminar and Research

(Master of Arts and Master of Science in Teaching)

Only fully matriculated students may register for research seminar courses. Approval by the program advisor is required before a student may register for any specialization research seminar and internship. Registration in these courses requires a grade point average of 3.000 in the basic professional and specialization courses. The student may be required to successfully complete the course, 0824.501 Procedures and Evaluation in Research, as a prerequisite for registration in the seminar and research courses. Although the structure of the seminar and research component may vary for the various curricula, each curriculum includes the study of research methods and findings and the designing and conducting of research.

Where the grade of **NC** has been recorded from a previous enrollment in the graduate seminar because the student did not complete the master's project, the student should register for the appropriate number of credit hours in "Research Seminar (R)" during a regular term or a summer term. Approval to register for Research Seminar (R) must be obtained from the dean of The Graduate School.

The written research project must be prepared in the format style of the American Psychological Association unless approved for an alternate style by the program advisor and the dean of The Graduate School.

Graduate Credit by Examination

Examinations for academic credits in lieu of regular class enrollment are very rare and are available to graduate students at Rowan University only under the following conditions:

- 1. Each department and the program advisor will determine which of the department's courses, if any, might be completed for credit by examination.
- 2. Students who wish to exercise the credit-by-examination option, if it is available, must register and pay all tuition and fees for the course. Examinations will be administered only once. Students who pass the examination will be given a grade of "**P**" (Pass). Students who do not pass the examination must be given a grade of "**NC**" (No Credit). Students who receive a grade of "**NC**" may register and re-take the course if they wish. However, under no circumstances may students request to exercise the credit-by-examination option more than once per course.
- 3. Examinations will be developed by those faculty usually teaching the subject matter, but must be approved by a majority of the members of the department. Upon the approval of the department, the program advisor, in consultation with the department chair, should inform the appropriate dean of those courses for which tests have been developed and which may be used for credit by examination. Questions regarding courses that may be available for credit by examination should be directed to The Graduate School. There should be on file in the department more than one form of each examination for those courses which the department has approved for credit by examination.
- 4. The examination should be comprehensive enough to satisfy the faculty of the department and the University that academic standards are maintained. The examination may be written, oral or performance based; but, in any case, it should be evaluated by at least two members of the department who teach graduate courses, at least one of whom has taught the course for which the examination has been prepared.
- 5. Each program advisor will keep proper records of all examinations for credit and forward a summary of results to The Graduate School.
- 6. A method of periodic review of the effectiveness of examination for credit will be established by the Graduate Council in accordance with prevailing policies and procedures.
- 7. Students may apply to the degree or certification program a maximum of six (6) semester hours through the credit by examination process.
- 8. The University will establish appropriate fees for credit by examination.
- 9. The Graduate School, in accordance with prevailing policies and procedures, will establish dates on which tests may be administered.

Financial Information

Tuition and Fees at Rowan (2006-2007)*

*subject to annual change

Tuition

Graduate tuition rates are:

Full-Time

New Jersey resident \$9.886

Non-resident \$9,886

Part-Time

New Jersey resident \$549 per credit hour

Non-resident* \$549 per credit hour

Doctoral tuition rates are:

New Jersey resident \$608 per credit hour

Non-resident \$608 per credit hour

General Services Fee

This fee is charged to all students at \$25.45 per credit hour with a maximum of \$305.40 semester for general services that include: health examinations, use of health center, access to medical help, placement service, counseling service, graduation expenses (including the diploma) and other services not funded by the state.

Instructional Technology Fee

This fee is charged to all students at \$11.70 per credit hour with a cost to full-time students of \$140/semester for technological services which includes new equipment and maintenance of current equipment.

Student Center Fee

This fee is charged to all students at \$19.70 per credit hour with a maximum of \$236.50/semester. Total construction costs for the Student Center building, including costs of the bond sale and assumed interest rate, were approximately \$6,000,000. Therefore, it is necessary to assess the student body a fee to cover the operating expenses and amortization cost of the building, as well as use of the Recreation Center.

Recreation Center

Access to the recreation center is available to all enrolled students. Associate memberships for faculty, staff, and alumni are also available. For information on associate memberships, contact the recreation center at 256-4900.

Facilities Fee

This fee is charged to all students at \$48.00 per credit hour with a cap of \$528.00 /semester. The facilities fee is to help defray the cost of the debt service on recently constructed or renovated buildings plus the operation and maintenance cost of newly constructed buildings.

^{*}For the policy on determining New Jersey residency for purposes of tuition, contact the Rowan University Registrar's Office at 256-4350.

Late Payment Fee

Students on Deferred Payment Plan who fail to pay bills by the date due will be charged a nonrefundable late payment fee between \$25 and \$50, depending on when payment is made.

Late Registration Fee

Students who fail to register at the time designated will be charged a non-refundable \$75 fee.

Parking

Commuting students may park on campus after purchasing a Rowan University parking decal. Decals are \$40. Students with a commuter decal may park in a designated white lined space in Lots A, B, C, D, M, R and Y.

Vehicles parking without a decal or in other than a designated space will be subject to a fine and having the vehicle towed at owner's expense. Handicapped spaces are provided for individuals whose physical handicaps require their use. A handicapped parking decal from Rowan must be displayed. This rule is vigorously enforced.

Returned Check Charge

A charge of \$25-50 will be made for each check that is given to the University if it is returned by the bank for any reason.

Identification Cards

The University requires that all matriculated students carry an official identification card at all times. This card is needed for library use, student activities, registration, cashing checks, recreation center and security purposes. The initial charge for an ID card is \$10, and a \$25 charge is made for each replacement of a lost card.

Student Insurance

As a service to students, Rowan University makes available a low cost health and accident protection plan. The \$136 fee includes coverage for twelve months. Additional coverage for a student's spouse and/or children may also be purchased. All students who compete in intercollegiate sports programs are covered while participating by a separate policy purchased by the University. Premiums for insurance are subject to change.

Transcript Fee

A transcript is provided to each student upon graduation. Additional transcripts are available through the Registrar's Office for \$10/15 each.

Refund Policy

Refunds will be prepared for all students who officially withdraw from the University. Requests for official withdrawal must be made through the Counseling Center. This procedure assures that students will receive the proper refund for tuition, fees, room and board charges.

Approved Refund Schedule

Tuition, General Services Fee, Student Center Fee, Technology Fee, Student Activity Fee and Facilities fee only.

Part-Time students: Written notice, using a Withdrawal Form (available from the Registrar's Office) must be submitted to the Registrar. The date of receipt of the Withdrawal Form in the Office of the Registrar will be used in computing the refund.

Full-Time students: Refunds will be processed only for students who officially withdraw from all of their courses. There is no refund for withdrawal from individual courses.

Financial Aid students: Refunds of Federal Financial Aid are processed in accordance with federal guidelines.

Withdrawal before end of Add/Drop

Registration 100% First third of semester 40% Withdrawal after first third of semester None

Outstanding Financial Obligations

The University may deny a student graduation, readmission, registration, or records because of outstanding financial obligations to the University. This action may be taken in cases where reasonable notice of a debt and the consequences of nonpayment have been given to the student. If a student does not meet his/her outstanding obligations by the established deadlines under the policy, the student will automatically be denied registration for the following semester, in addition to losing all other university services. Denial for future semesters will also be continued until such time as the obligation is met. The student will have the right to a hearing in cases of dispute concerning an obligation. The request for a hearing must be submitted in writing by the student to the appropriate department or office head in which the obligation exists. If it becomes necessary, any appeal of a decision resulting from such a hearing must be arranged through the collection manager, Business Office, Savitz Hall or dean of students, Savitz Hall. The University will have the right to withhold the degree and all records, including certification, transcripts, placement services, etc., pending satisfactory financial arrangements.

A complete text of the Outstanding Financial Obligations Policy may also be obtained from the collection manager, Business Office, or the dean of students in Savitz Hall.

Graduate Assistantships and Research Assistantships

A limited number of graduate full- or part-time assistantships and research assistantships are available each year for qualified matriculated degree students who are recommended by one of the academic or student affairs units of the University and approved by the dean of The Graduate School and the provost. The terms and conditions associated with these assistantships may vary at the discretion of the University. The stipend of the assistantship may also vary. The maximum workload is 20 hours per week for full-time regular assistantships. Half-time and research assistantships may also be available. In addition, the graduate assistant receives a waiver of tuition for program required courses only taken during the fall and spring semesters. Tuition waivers may, at the discretion of the University, vary according to the terms and conditions of the assistantship.

The length of the assistantship is normally one academic year, commencing on September 1 and concluding on June 30. Students may request to extend their assistantships through the end of the succeeding summer semester (tuition waiver only), but must work ten hours for each credit of study during the summer. The maximum number of credit hours for which tuition may be waived is generally governed by the requirements of the graduate program to which they are admitted, including the summer term. In selected instances under certain conditions, consideration may be given, upon request by the graduate assistant, to extend the assistantship beyond one year. Other

conditions, at the discretion of the University, may also be established for the graduate assistantships.

Graduate assistant applications are generally available from The Graduate School in March of each year for the succeeding academic year.

Resident and Recreation Center Assistantships

Opportunities are available for matriculated graduate students to work as resident directors or student recreation center assistants. These graduate students must fulfill the institutional obligations of these assistantship programs and serve from September 1 until August 30 of the succeeding year. For resident directors there is a monetary stipend plus room and board for the fall and spring terms. For more information, students should contact the Office of Residence Life at 256-4266 or the Director of the Student Recreation Center at 256-4900.

Financial Aid Programs

Financial aid is available to graduate students who have been admitted as degree candidates, are making satisfactory academic progress, intend to register at least half-time, and fulfill the eligibility requirements of the program for which they apply. For purposes of financial aid, the University has established that nine semester hours of course work constitutes full-time status. For information, contact the Financial Aid Office at 256-4250.

Federal College Work Study (FWS)

If the student is eligible and funds are available, FWS allows a student to work on- or off-campus. Applicants must be citizens or eligible non-citizens of the United States. All FWS jobs must be cleared through the Financial Aid office. A FWS award is the maximum amount that a student may earn and receive funding from this program. It is the responsibility of the student to find a FWS job and to monitor earnings so as to avoid exceeding the FWS award.

Educational Opportunity Fund Graduate Grant (EOF)

Applicants must be New Jersey residents for 12 months prior to making application. To be eligible, the applicant must be a student from an economically disadvantaged background who demonstrates financial need. Applicants receiving an EOF graduate grant need not have been EOF recipients as undergraduates. Grants in the amount of up to \$4000 may be awarded annually. Duration and amount of grants depend on the course of study selected. Students who seek financial aid through EOF are required to apply in advance of beginning their studies at Rowan University. Students wishing to apply for EOF assistance are strongly encouraged to contact the EOF Office (256-4080) well before they begin their studies.

William D. Ford Federal Direct Stafford Loan (Formerly GSL)

This program is available to matriculation which the obligation exists. d students who file a free application for federal student aid and present a valid student aid report to the Financial Aid Office. Students must be citizens or eligible non-citizens of the United

States to be eligible. A graduate student who is enrolled at least half-time and is making satisfactory academic progress toward a degree or certificate may borrow up to \$8,500 each academic year with a cumulative amount of \$65,000 (including undergraduate amounts). If the student is eligible, the federal government may pay the interest until six months after graduation or withdrawal from the University, at which time the borrower must begin to repay the loan. Information on interest rates from this program are available from the Financial Aid Office.

New Jersey CLASS Loan Program

Students may borrow up to the full cost of attendance (minus other financial assistance). Students must be matriculated in a graduate program. For more information see www.hesaa.org or contact the Financial Aid office at 256-4250.

Veterans' Benefits

Eligible veterans may receive financial assistance in monthly payments based on dates and duration of service. Students interested in veterans assistance should contact their local offices of the Veterans Administration or the Office of Specialized Services (256-4233).

Scholarship Programs

Students seeking assistance through any of the following programs should contact the appropriate office as noted below.

Alumni Scholarships

A limited number of Alumni Scholarships is available each year. These are partial scholarships intended to help defray the costs of graduate education. Contact the Rowan University Foundation office (256-4314).

MST Scholarships

A limited number of scholarships are available to eligible students from minority racial and under-represented ethnic groups who qualify for admission to the Master of Science in Teaching (MST) graduate degree program. Contact The Graduate School (256-4050).

Student Life

Student Rights and Responsibilities

Rowan University's primary concern is the student. The University provides an environment where students can pursue academic endeavors, social growth and individual self-discipline. To foster this type of development, students can exercise certain rights and must meet certain responsibilities.

In all matters, both academic and co-curricular, students have the right to fair and impartial treatment. They have the right to freedom from unlawful discrimination based on race, color, creed, religion, age, sex, sexual orientation, national origin or physical disability.

Students have the right to engage in the free and peaceful expression of ideas. They may speak, write or publish freely on any topic in accordance with the guarantees of federal and state constitutions. As members of the Rowan University community, students have the right to participate in discussions at the University. They have the right to engage in peaceful and orderly picketing demonstrations and protests so long as they do not violate public law or disrupt functions of the University.

Students at Rowan University (including their persons, living quarters, papers and personal effects) are secure and free from illegal searches and seizures.

It is the responsibility of the student to become knowledgeable of, and to observe, all University policies, regulations and procedures. The University is under no obligation to waive a requirement or grant an exception because a student pleads ignorance of a policy, regulation or requirement or because a student asserts that he/she has not been informed of such policy, regulation or requirement.

It is the student's responsibility to become familiar with, and to remain informed about, all academic, administrative, financial or other policies, regulations or requirements concerning admission, registration, payment of tuition or fees, continued enrollment, grades and satisfactory program progress, graduation requirements or any other matter which affects the student. Students are especially expected to know the requirements of the program in which they are enrolled. While the faculty and staff will endeavor to assist in every manner possible, students are responsible for becoming and remaining informed of current program and graduation requirements, their status in the program and their progress toward graduation.

Family Educational Rights and Privacy Act of 1974

In accordance with the provisions of the Family Educational Rights and Privacy Act of 1974, students have the right to inspect and review their own educational records. Records include permanent academic records in the Registrar's Office, student housing records in the Office of Residence Life, placement records and credentials (except those on file prior to January 1, 1975), judiciary hearing records in the Office of the Dean of Students, and health service records in the Student Health Center. However, students must personally sign a release permitting the University the right to release copies of such records to outside individuals or agencies. Unless students sign such a release, records can be released only by court order. For details concerning this policy, contact the Dean of Students.

Sexual Harassment

Harassment on the basis of sex violates Section 703 of Title VII of the Civil Rights Act of 1964 and is not tolerated on the Rowan University campuses. Unwelcome sexual advances, requests for sexual favors and other verbal or physical conduct of a sexual nature constitute sexual harassment when:

- submission to the sexual advances is a condition of employment (or academic success) expressed in explicit or implicit terms;
- employment decisions (or academic decisions) are based on an employee (or a student) submitting to or rejecting sexual advances;
- such conduct has the effect of substantially interfering with an affected person's work performance or of creating an intimidating, hostile, or offensive work (or learning) environment.

Students who feel they may have been sexually harassed, as a first step, may (1) file an incident report with the Office of Residence Life and University Housing in Savitz; or (2) file an incident report with the Office of Public Safety in Bole Annex; or (3) file an incident report with the Office of Judicial Affairs in Savitz.

Student Conduct

Rowan University is an academic community and as such the University has instituted a Student Code of Conduct to set forth the standards and expectations that are consistent with its purpose as an educational institution. A0 The University reaffirms the principle of student freedom, coupled with an acceptance of full responsibility for one's behavior and the consequences of such behavior. Rowan University recognizes the rights of its students guaranteed by the Constitution of the United States and the State of New Jersey, which include a student's rights within the institution to freedom of speech, inquiry, assembly, peaceful pursuit of an education, and reasonable use of services and facilities of the university. While it is the goal of the student disciplinary process to educate students as to the purpose and importance of abiding by the Code of Conduct, the University will also issue sanctions as are appropriate and necessary to ensure continued and/or future adherence to this Code, and to protect the university community from disruptive behavior. The Code of Conduct has been developed to guarantee procedural fairness to students when there has been an alleged failure to abide by Rowan University's policies and regulations. Procedures may vary in formality given the gravity and nature of the offense and the sanctions that may be applied.

The Office of Judicial Affairs is responsible for coordinating and adjudicating all University policy violations through oversight of the Campus Hearing Board and Administrative hearing officers as well as the Appeals process. Judicial Affairs is also responsible for tracking the completion of all disciplinary sanctions and addressing any noncompliance. Each student is responsible for reading and complying with the Code of Conduct which is published in the Student Information Guide and available at http://www.rowan.edu/studentaffairs/main_office/Publications/Infoguide.pdf.

Grievance Procedure

Rowan provides a uniform method by which students can pursue, formally or informally, claims of inequitable treatment in their academic careers. This method covers such concerns as grade grievances; discrimination allegations in educational programs or activities because of sex, race, ethnicity, or physical handicap; and inequitable treatment by a faculty member because of student participation in the recontracting, promotion or A-328 assessment procedures. Not included are disciplinary matters, which are processed through the Judicial Board System.

Counseling and Psychological Services Center

Z. Benjamin Blanding, Assistant Vice President for Student Development/Director, - Health Counseling & Psychological Services Savitz Hall (856) 256-4222 blanding@rowan.edu

In the Counseling and Psychological Services Center, professionally trained counselors provide confidential personal counseling to students. The Center provides individual and group counseling, workshops and presentations, mediation and student leadership training. Some common concerns for college students include: academic/personal skill building, sexual assault and other trauma, substance use and abuse, eating and body image issues, stress, anxiety, isolation, interpersonal difficulties as well as situations involving depression, grief and loss.

The Center also provides exit interviews to assist students in their decision making regarding leaves of absence and withdrawals from the University.

The University's Critical Incident Response Team is coordinated through the Center and each of the staff is a member of the team. This university-wide group responds to crises by meeting with various groups on campus in order to provide time to process responses to a crisis.

Career and Academic Planning Center Lizziel Sullivan Williams, Interim Director

Savitz Hall 256-4456

The Career and Academic Planning Center (CAP Center) is designed to provide matriculated students and alumni with assistance in the process of making career and job search strategy decisions. Making an initial or mid-life career decision and developing an effective search for a specific job are all areas that can be explored with professionals in the Center. The resume bank, job hotline, and on-campus recruitment program are additional services available. A part of CAP, the Career Resource Center offers contact names and addresses for specific employment opportunities.

Graduate Education Resource Center

The Graduate School Memorial Hall 256-4050

A Graduate Education Resource Center is located in Memorial Hall in the office complex of The Graduate School. Graduate catalogs and other related materials from colleges,

universities and professional schools (business, law, medicine) are housed in this Center for use by students seeking information about graduate study at Rowan or elsewhere in the country. In addition, students may access Internet resources and homepages of universities/colleges/schools to gather information about their post-baccalaureate educational programs, admissions requirements, curricula, etc. Call The Graduate School (256-4050) for information about Resource Center hours.

Health Services Center

Nancy M.H. Pontes, Director Linden Hall (856) 256-4333 Fax (856) 256-4427

Rowan University Student Health Center provides nursing and medical services for students. The Student Health Center supplements the complete health services provided by family physicians. It serves students for short-term illnesses and emergencies.

Although the Health Center is usually able to treat students with acute needs, students who require long-term bed care, special diagnostic and therapeutic procedures, or individual nursing care are admitted to nearby hospitals. Some students return home for treatment. The Student Health Center provides the services of qualified physicians during scheduled hours Monday through Friday and on call basis.

The Health Center does not cover the cost of any prescription drugs not available in the SHC; the cost of diagnostic laboratory procedures; or charges from physicians, providers, or other referrals. The Student Health Center, located in Linden Hall, serves faculty and staff on an emergency basis only. Hours will be posted.

International Student Services

Craig Katz, Director of International Student Services Savitz Hall (856) 256-4239 katz@rowan.edu

The Office of International Student Services is responsible for the recruitment, admission, and support of International Students and Scholars at Rowan University. We ensure student and institutional compliance with visa requirements and immigration regulations. The Office works to foster an environment which supports individual and departmental initiatives in the area of International Education at Rowan University. We also coordinate programs and activities and provide a variety of support services for foreign-born students and scholars at the University.

Rohrer College of Business

Edward J. Schoen, Dean Edgar F. Bunce Hall 856-256-4025 schoen@rowan.edu

Margaret Van Brunt , Assistant Dean Edgar F. Bunce Hall 856-256-4047 vanbrunt@rowan.edu

Karen Siefring, Assistant to the Dean, Advising Edgar F. Bunce Hall 856-256-4037 siefring@rowan.edu

About the MBA Program

Rowan's MBA program is especially suited for full-time employees working in the tri-state area. The program is personal, pragmatic and progressive. Classes are conveniently scheduled in the evening and on Saturdays to accommodate demanding work schedules. Rowan's reputation as a respected regional university makes the reasonable cost of a Rowan MBA a wise investment.

Accreditation

The Rowan University MBA program is accredited by AACSB International - The Association to Advance Collegiate Schools of Business. Awarded to only 18 percent of U. S. business programs, AACSB accreditation assures quality and promotes excellence and continuous improvement in undergraduate and graduate education for business administration and accounting.

Programs Offered

Specialization in Accounting Specialization in Entrepreneurship Specialization in Finance Specialization in Management Specialization in Marketing

Mission

The Rohrer College of Business of Rowan University empowers its students to compete and succeed responsibly in their careers.

The Rohrer College of Business Faculty make quality teaching, supported by relevant scholarship, their highest priority.

Rowan University's undergraduate business programs are grounded in liberal arts, focus on excellent business practices, and offer students opportunities for experience-based learning.

Rowan University's graduate business programs provide contemporary graduate business education to professionals of diverse fields and academic backgrounds, and accentuate knowledge and skills required for career advancement.

In partnership with the Center for Innovation and Entrepreneurship, the Rohrer College of Business promotes entrepreneurship throughout the University and in the regional community.

Services

Information and personal appointments can be requested by phone, fax, e-mail, or in-person.

Voice: 856-256-4024 Fax: 856-256-4439 E-mail: mba@rowan.edu

College of Business Dean's Suite, 2nd Floor Bunce Hall

MBA Program Director:
Daniel J. McFarland, Ph.D.
MBA Program Director & Professor of MIS
Voice: 856-256-5426

E-mail: mcfarland@rowan.edu

M.B.A., Master of Business Administration

Daniel J. McFarland , M.B.A. Program Director Edgar F. Bunce Hall 856-256-5426 mcfarland@rowan.edu

The Master of Business Administration (M.B.A.) program at Rowan University provides contemporary graduate business education to professionals from diverse fields and academic backgrounds. The program prepares students as team leaders and team players with effective interpersonal, oral, and written communication and group process skills. The M.B.A. curriculum emphasizes critical thinking, quantitative analysis and computing applications, and the technological and international nature of business.

The Rowan M.B.A. program offers small class sizes with an average student/faculty ratio of 15 to 1. M.B.A. classes are scheduled on evenings and Saturdays. The program attracts graduates from business, sciences, engineering and other programs whose careers are leading them to positions of increasing responsibility in business or industry.

The M.B.A. program consists of 12 graduate classes with nine required and three elective courses. The three elective courses allow the individual student to tailor the academic program to meet his/her specific career development needs. Prospective students who do not have the required foundation courses may choose to apply directly to the graduate M.B.A. program or enroll in the Pre-M.B.A. program to complete the missing foundation courses. Acceptance into the Pre-M.B.A. program does not guarantee acceptance into the M.B.A. program.

Admission Requirements for Pre-M.B.A. All applicants must submit a Pre-M.B.A. application and an official transcript of all undergraduate programs attended. Applicants must have been awarded a baccalaureate degree from an accredited institution of higher learning, having achieved a minimum four-year grade point average of 2.5 (out of 4.0) or a 2.8 grade point average during the last 60 semester hours. The student may not receive less than a 2.80 grade point average in all foundation courses.

Admission Requirements for M.B.A. In addition to the University requirements for admission to a graduate program, the following requirements must be met:

- 1. The applicant shall provide the Graduate Management Admission Test (GMAT) or the Graduate Record Examination (GRE) score taken within the last five years.
- 2. If professional (relevant management or supervisory) experience is being used as a basis for support of the applicant's qualification, a letter must be written by the applicant's supervisor or by a responsible executive of the company describing the applicant's current position, responsibilities and length of service.

- 3. The applicant shall provide evidence of ability to use a computer for word processing and development of electronic spreadsheets. Acceptable evidence may include a college course transcript, CEU certificate, documents from the work site, or a personal written statement attesting to the proficiency attained.
- 4. The applicant shall provide a written statement of career objectives.
- 5. International applicants must complete an international graduate application.

All M.B.A. students must maintain a 3.0 GPA. Students are expected to make steady progress toward the completion of their degree. Full-time students may complete the degree requirements in 1 year. All students have a maximum of six years to complete the program.

Foundation Course Requirements (Subject to approval by program director)

Pre-M.B.A. Requirements:

Students must present evidence of having completed undergraduate college courses equivalent to the Rowan courses listed below:

- Foundations of Accounting (Equivalent to Financial & Managerial Accounting)
- Principles of Economics: Global Perspectives (Equivalent to Macroeconomics and Microeconomics)

27 s.h.

- Calculus Techniques and Applications (or an equivalent)
- Statistics I (or an equivalent)
- Principles of Marketing
- Operations Management
- Principles of Finance

Course Requirements for M.B.A. Program

Required Courses

(All courses are 3 s.h.)

BUS01.518 **Integrative Managerial Skills** ACC03.500 Managerial Accounting FIN04.500 Financial Decision Making Designing, Developing, and Leading High Performance Organizations MGT06.500 **International Business and Society** MGT06.502 MGT07.500 Managerial Decision Making Tools MKT09.500 Marketing Management MIS02.500 Issues in Management Information Systems BUS01.521 Integrative M.B.A. Seminar

Business Electives 9 s.h. Elective courses permit the M.B.A. student to tailor the program to special needs for career development. These elective courses can be focused in areas such as Accounting, Finance, Management, Marketing or MIS. Students are also permitted to take related elective courses from other Rowan graduate programs, such as economics engineering, public relations, and school administration. Electives outside the Rowan M.B.A. program must have the approval of the M.B.A. program director. Business electives include:

BUS01.600 Special Topics in Business Administration ACC03.502 Advanced Managerial Accounting ACC03.504 Seminar in Auditing ACC03.507 Government & Non-for-Profit Accounting Financial Statement Analysis ACC03.510 FIN04.512 Capital Budgeting FIN04.516 Issues in Finance FIN04.600 Investment/Portfolio Analysis Advanced Operations Management & Strategy MGT06.501 Organization Development MGT06.503 Strategic Project-Based Experience ENT06.504 ENT06.505 Entrepreneurship & Innovation ENT06.506 Corporate Entrepreneurship & New Venture Development MGT06.601 Strategic Planning for Operating Managers **Business Forecasting** MGT07.600 **Consumer Analysis** MKT09.501 MKT09.5xx Marketing Research MKT09.600 **International Marketing**

Students may elect as many as three special topic courses.

Total 36 s.h.

Accounting Specialization

The accounting specialization within the Rowan MBA Program is designed to equip students of diverse academic backgrounds with foundational knowledge and advanced topics in accounting. In combination with an undergraduate degree in accounting, students have the option of meeting the 150 credit hour educational requirements for licensure as certified public accountants through the Rowan MBA program.

Specific objectives of the Specialization in Accounting are to provide MBA graduates with the education necessary:

- to undertake independent analysis in accounting using the appropriate research tools;
- to develop specialized knowledge of accounting at the graduate level
- to apply accounting problem solving to "real world" situations.

MBA students satisfy the requirements of the Specializing in Accounting by taking three elective graduate accounting classes.

Entrepreneurship Specialization

The Entrepreneurship specialization within the Rowan MBA Program is designed to equip students of diverse academic backgrounds with foundational knowledge and advanced topics in entrepreneurship and the new venture development process.

Specific objectives of the Specialization in Entrepreneurship include:

- Understand individual motivations and strategies of entrepreneurs and innovators for starting a new business venture.
- Learn to recognize and identify entrepreneurial opportunities.
- Develop analytic decision making skills applied to new venture creation and growth.
- Develop the ability to create a value proposition and build viable new business models.
- Students learn about the broad range of entrepreneurship including new business ventures, high-growth firms, corporate entrepreneurship, and social entrepreneurship.

MBA students satisfy the requirements of the Entrepreneurship Specialization by enrolling in three elective graduate Entrepreneurship courses.

Finance Specialization

The finance specialization within the Rowan MBA Program is designed to provide students with challenging career-oriented graduate preparation needed to acquire the requisite knowledge and skills necessary to be successful in their careers.

Specific objectives of the Specialization in Finance are:

- to provide MBA graduates with a broad understanding of financial theory, markets, and institutions.
- to enable students to undertake independent financial analysis using the appropriate research tools.
- to help students to acquire financial decision-making skills.
- to develop problem solving skills to enable students to apply finance theory to solve "real world" problems.

MBA students satisfy the requirements for the Specialization in Finance by taking three elective graduate finance classes.

Marketing Specialization

The marketing specialization within the Rowan MBA Program is designed to equip students of diverse academic backgrounds with foundational knowledge and advanced topics in marketing.

Specific objectives of the Specialization in Marketing are to provide MBA graduates with the education necessary:

- To conduct marketing analysis and develop marketing strategy and plans, for profit and non-profit organizations
- To develop specialized knowledge of marketing at the graduate level
- To apply management problem solving models to "real world" situations.

MBA students satisfy the requirements of the Specialization in Marketing by taking three elective graduate marketing courses.

M.S., Accounting (no applications being accepted)

NOTE: M.S. in Accounting program is on hold pending upon New Jersey State 150-credit hour requirement for the Certified Public Accounting examination, Certified Management Accounting examination, and the Certified Internal Auditor examination. No applications are being accepted.

The description listed below describes the M.S. in Accounting program as it will be implemented to prepare students for year 2005 CPA examination.

The goal of the M.S. in Accounting program is to extend the financial/accounting education of qualified students with advanced study in each of the major areas in the accounting field. It will provide a broad background for careers in the public, corporate, government, and non-profit areas of accounting. The program will fulfill the 150 credit-hour requirement by the State of New Jersey for the Certified Public Accounting (CPA) examination as well as the Certified Management Accounting (CMA) examination and the Certified Internal Auditor (CIA) examination. Students may pursue either a full-time or a part-time course of study. Full-time students with an undergraduate accounting major should be able to complete the program within one calendar year.

Prospective students who have not met the required foundation courses may enroll in the pre-M.S. program while completing the necessary foundation courses. Acceptance into the Pre-M.S. program does not guarantee acceptance into the M.S. program.

Admission Requirements for Pre-M.S.

Applicants who have not completed the required undergraduate foundation courses listed below may apply to a pre-M.S. in Accounting program by submitting a pre-M.S. application and official transcript(s) of all undergraduate programs attended. Pre-M.S. applicants must have been awarded a baccalaureate degree from an accredited institution of higher learning, having achieved a minimum four-year grade point average of 2.5 (out of 4.0) or a 2.80 grade point average during the last 60 semester hours. As the foundation courses are completed, the cumulative grade point average for the last 60 hours of undergraduate courses may be recomputed with the inclusion of the grades received in the foundation courses. However, the student may not receive less than a 2.80 grade point average in all foundation courses.

Admission Requirements for the M.S. in Accounting

A. Applicants with a Bachelor's Degree

In addition to the General Education requirements for admission to a graduate program, the following minimum requirements must be met:

- 1. Students entering the program after receiving a bachelor's degree from a four-year college or university must meet the foundation course requirements cited below and earn greater than 800 in the following formula: 100 x (GPA on a 4.00 scale) + GMAT score must be greater than 800.
 - a. Student must have earned a minimum of 2.5 (on a 4.0 scale) as an undergraduate.
 - b. Students must have scored at least 450 in the GMAT.
- 2. If professional (relevant accounting or financial) experience is being used as a basis for support of the applicant's qualification, a letter must be written by the applicant's supervisor or by a responsible executive of the company describing the applicant's current position, responsibilities, and length of service.

- 3. The applicant shall provide evidence of the ability to use a computer for word processing and development of electronic spreadsheets. Acceptable evidence may include a college course transcript, CEU certificate, documents from the work site, or a personal written statement attesting to proficiency attained. Meeting the above criteria does not guarantee acceptance into the M.S. in Accounting program.
- B. Undergraduate Rowan University Students

Students may apply for admission into the MS in Accounting program upon completion of their junior year at Rowan University. The student must meet the following requirements:

- 1. Be a matriculated student with a major in Accounting at Rowan University
- 2. Completed a minimum of 30 credits at Rowan University
- 3. Completed Intermediate Accounting I & II
- 4. Achieved a 3.0 GPA at the end of their junior year
- 5. Score at least 475 in the GMAT

With permission of the program adviser and the Dean of The Graduate School, admitted students may take one graduate course in their senior year, which will only be applied to the graduate degree.

Foundation Course Requirements

Completion of the graduate courses in the MS in Accounting program necessitates that students have a strong background in the fields of economics, management, business, law, marketing, mathematics, and accounting. To insure that students have this background and have the necessary prerequisites to take the graduate MS courses, the undergraduate courses listed below are required of all applicants:

- A. The following undergraduate economics and mathematics courses are required:
 - Macroeconomics
 - Microeconomics
 - Calculus
 - Statistics I and Statistics II
- B. The following undergraduate management, law, and finance courses are required:
 - Principles of Management

OR

- Organizational Behavior
- Principles of Marketing
- Principles of Finance
- Legal Environment of Business
- Management or Accounting Information Systems
- C. The following undergraduate accounting courses are required:
 - Principles of Financial Accounting
 - Principles of Managerial Accounting
 - (Foundations of Accounting can be substituted for both Principle courses)
 - Intermediate Accounting I
 - Intermediate Accounting II
 - Cost Accounting
 - Concepts in Federal Taxation

Many applicants to the M.S. program will have completed some (or all) of these foundation courses at the undergraduate level. Undergraduate foundation courses completed with a grade of C+ or better will be applied to meet the foundation requirements.

Course Requirements for the M.S. in Accounting Required Courses

(All courses are 3 s.h. unless otherwise noted.)

24 s.h.

ACC03.507	Government and Not-for-Profit Accounting
ACC03.506	Advanced Domestic and International Accounting
ACC03.504	Seminar in Auditing
ACC03.503	Corporate and Partnership Taxes

ACC03.502 Advanced Managerial Accounting
ACC03.508 Seminar and Research in Accounting
FIN04.500 Financial Decision Making

AND

One of the following three finance courses may be taken as the finance elective:

FIN04.512 Capital Budgeting

FIN04.600 Investments/Portfolio Analysis

FIN04.516 Issues in Finance

Business Electives 6 s.h.

Elective courses permit the M.S. student to tailor the program to special needs for career development. Electives outside the Rowan Business program must have the approval of the M.S. program director.

Total 30 s.h.

College of Communication

Allen C. Monroe , Dean Bozorth Hall 856-256-4340 monroe@rowan.edu

Linda C. Sweeten , Assistant Dean for Administration Bozorth Hall 856-256-4337 sweeten@rowan.edu

Esther J. Mummert , Advisor Bozorth Hall 856-256-4090 mummerte@rowan.edu

Graduate programs in the College of Communication offer students the opportunity to expand and hone their skills as writers and problem-solvers for the Information Age. With a mix of theoretically informed and practice-driven classes, students acquire important research and writing techniques that advance their professional and personal goals in an increasingly complex and diverse society.

The College of Communication graduate courses are designed to provide students with challenging and rewarding activities that enhance their professional development. The faculty in the College of Communication graduate programs is committed to produce an articulate and informed citizenry. Opportunities exist for graduate students to learn more about cutting-edge technology, the ethical practices of communication practitioners, as well as work with professional publications. In addition, numerous outreach programs provide students with practical application that relates to their courses of study.

Students who graduate from the College of Communication master's degree programs are leaders in the communication industry, attend doctoral or M.F.A. programs to further their studies, or become successful freelance authors and public relations practitioners.

Programs Offered

The College of Communication offers two Master of Arts degree programs: Public Relations and Writing. Students can choose a specialized area within each of these programs, such as corporate public relations or school public relations in the Public Relations program and corporate communication, composition studies, or journalism/creative writing in the Writing program.

M.A., Public Relations

Joseph N. Basso , Coordinator Bozorth Hall 856-256-4609 basso@rowan.edu

This program leads to a master's degree in public relations. It will equip students to serve as a director of communication and public relations for corporations, businesses, industries, schools, colleges, and non-profit organizations. It also enables the graduate to work in public relations and advertising firms.

Some graduates use the degree as a stepping stone to a doctorate in communication; others apply their skills in positions that require excellent writers or presenters. A number of graduates have become executive directors for non-profit organizations and others have become CEOs of small and large businesses because of their ability to work with and motivate people.

The program emphasizes real-world applications of the theories and techniques learned and features a modular approach, which allows students to take courses with varying credits, taught by full-time faculty and adjunct faculty practitioners who are experts in their fields.

Admission Requirements

In addition to the General Education requirements for admission to a graduate program, it must be noted that students who succeed in this program need to write well. Therefore, candidates must submit writing samples and may be asked to complete a writing task when appearing for an admissions interview. While a high undergraduate GPA average and a high GRE verbal score speak well for the candidate, these things do not guarantee admission into the program. Prior to admission to Rowan, students need to have taken a course in publication layout and design. If not, the course must be taken before completing the program and does not count toward the 33 semester hours of the program.

Course Requirements

Students should make their first course Public Relation Overview, School Public Relations or Public Affairs Overview. These courses will let students know if they might enjoy a career in this field and if they have the ability necessary to succeed in public relations. Two other courses that students should take early in the program are: Techniques in Communication and Introduction to Communication Research. The overview course and these two courses are required for enrollment in Seminar and Internship. Full-time students may take the Seminar and Internship at the same time as the previously listed courses. It is possible for full-time students to complete the degree requirements in a calendar year. Seminar must be taken in the fall-spring sequence. All of the courses are offered in the evening. To obtain the M.A. in PR, students must maintain a 3.0 GPA, pass a comprehensive exam, and write an approved thesis.

Sequence of Courses

The following are suggested courses for one of the three tracks:

- Corporate Public Relations
- Educational Public Relations
- Public Affairs

You must complete or be enrolled in Seminar to take the comprehensive exam. If you currently practice PR, you may be exempt from 3 of the suggested 6 s.h. of Internship.

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Public Relations Core (required for all tracks)
                                                                                       21-24 s.h.
   MAPR01.551
                    Public Relations Overview*(Corporate)
   OR
   MAPR01.560
                    Public Affairs Overview (*) (Public Affairs)
   OR
   MAPR98.503
                    School Public Relations*(Educational)
(*) Take one course. DO NOT TAKE ALL.
   MAPR01.547
                    Techniques in Communication 3 s.h.
                    Introduction to Communication Research 3 s.h.
   MAPR01.550
   MAPR01.553
                    Grad Case Studies in PR 1 s.h.
   MAPR01.544
                    Public Relations Planning 2 s.h.
   MAPR01.620
                    Seminar in Public Relations 6 s.h.
   MAPR01.610
                    Internship in Public Relations 3 s.h.
Suggested Fall Semester - Corporate Track
                    PR Overview 3 s.h.
   MAPR01.551
   MAPR01.547
                    Techniques in Communication 3 s.h.
                    Intro to Communication Research 3 s.h.
   MAPR01.550
   MAPR01.620
                    Seminar 3 s.h.
   MAPR01.518
                    Publication Layout and Design (if needed) OR
   MAPR06.515
                    Online Public Relations
Suggested Spring Semester - Corporate Track
   MAPR01.553
                    Case Studies 1 s.h.
   MAPR01.544
                    PR Planning 2 s.h.
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MAPR01.620 Seminar 3 s.h. Internship 3 s.h. OR
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Advanced Techniques Modules 3 s.h.

Suggested Summer Session - Educational Track

Modules (variable credit)

Suggested Fall Semester - Educational Track

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MAPR98.503
                    School Public Relations 3 s.h.
                    Techniques in Communication 3 s.h.
   MAPR01.547
                    Intro to Communication Research 3 s.h.
   MAPR01.550
                    Seminar 3 s.h.
   MAPR01.620
   FNDS21.502
                    Foundations of Education 3 s.h.
Suggested Spring Semester - Educational Track
                    Case Studies1 s.h.
   MAPR01.553
   MAPR01.544
                    PR Planning 2 s.h.
   MAPR01.620
                    Seminar3 s.h.
   Graduate Psychology Course3 s.h.
   Modules
   MAPR01.610
                    Internship 3 s.h.
   OR
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Advanced Techniques

Suggested Summer Session - Educational Track

Modules (variable credit)

Suggested Fall Semester - Public Affairs Track

MAPR01.560	Public Affairs Overview 3 s.h.
MAPR01.547	Techniques in Communication 3 s.h.
MAPR01.550	Intro to Communication Research 3 s.h.
MAPR01.620	Seminar 3 s.h.
MAPR06.515	Online Public Relations 3 s.h.
OR	
MAPR01.610	Internship 3 s.h.

Suggested Spring Semester - Public Affairs Track

MAPR01.559	Strategic Public Affairs
	Advanced Techniques
MAPR01.553	Case Studies 1 s.h.
MAPR01.544	PR Planning 2 s.h.
MAPR01.620	Seminar 3 s.h.
	Modules 3 s.h.

Suggested Summer Session - Public Affairs Track

Modules (variable credit)

Modules

Modules are mini-classes carrying less than three credits and meet only part of the semester. Modules focus on a specific topic and are 1.0-2.0 credits unless otherwise noted.

3 s.h.

Writing Modules

MAPR01.511	Writing Speeches

MAPR01.548 PR Graduate Writing Basics 1 s.h.

Public Relations Modules

MAPR01.524	Fundraising and Development 2 s.h. (**)
MAPR01.525	Making Effective Presentations
MAPR01.528	Global PR 1 s.h. (**)
MAPR01.530	Internal Communications in Organizations
MAPR01.531	Media Planning and Buying 1 s.h.
MAPR01.532	Media Relations
MAPR01.533	Crisis Public Relations 1 s.h. (**)
MAPR01.534	Small Group Communications
MAPR01.535	Interpersonal Communications
MAPR01.536	PR Law/Ethics 1 s.h. (**)
MAPR01.537	Contemporary PR Challenges 1 s.h.
MAPR01.538	Legislative Liaison for PR Practitioners 1 s.h. (**)
MAPR01.539	Client Relationships 1 s.h.
MAPR01.541	Understanding and Writing Grant Proposals
MAPR01.554	Planning Special Events 1 s.h.
MAPR01.555	Persuasive and Feature Writing 1 s.h.
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Mass Media and Public Opinion Modules

MAPR01.523 How Polls and Surveys Work: How to Conduct Them 1 s.h.

(**) Recommended modules for the Public Affairs Track

M.A., Writing

Diane Penrod , Coordinator Hawthorn Hall 856-256-4330 penrod@rowan.edu

The M.A. in Writing program is an interdisciplinary approach to written communication. All students in the program share four required courses before deciding on a specialization to follow.

Individuals who are seeking a graduate degree that concentrates solely on Composition Studies, Journalism, Creative Writing, or Communication Studies should consider applying to programs that specialize in those areas. The degree's emphasis is on application, but theories and techniques related to writing are also presented to offer students a solid background in writing for various audiences.

This program prepares students for teaching writing at the post-secondary level, for career advancement in journalism, for professional enrichment through creative writing or for careers in corporate communication. Some graduate students may use this degree in preparation for earning a doctorate in English, composition studies, creative writing, or communication and journalism.

Admission Requirements

In addition to the University requirements for admission to graduate programs, all candidates must:

- 1. exhibit an interest in writing
- 2. submit an 8-10 page writing sample (materials of their choosing)
- 3. appear for an admissions interview at the discretion of the Graduate Program Advisor and the program's Admissions Committee.

Most applicants to the M.A. in Writing program will have an undergraduate degree or a strong background in English, communication, journalism, creative writing or rhetoric; however, graduates of other disciplines (such as business, the sciences, engineering, psychology, law, and education) are also encouraged to apply.

Course Requirements

All students in the program take four required courses (Core I: Theories and Techniques for Writers, Core II: Research for Writers, and Seminar I and II) totaling 12 credit hours. Students spend an additional 12 credit hours pursuing personal interests in one of the following three areas of specialization: corporation communication, composition studies, or journalism and creative writing. Six hours of graduate study include an interdisciplinary component, which may be taken in any appropriate graduate program at Rowan University or at a different university. The remaining 3 credit hours are devoted to completing a thesis, portfolio of publishable works or major project to demonstrate student expertise in the area of specialization. The Thesis/Project component will be guided by the Graduate Program Advisor and each student's Thesis Advisor through the Seminar I and Seminar II courses.

Note: Students interested in pursuing the teaching of writing at a two-year/community college should apply to the Master of Arts in Writing program at this time. For more information on this track, please contact the Graduate Program Advisor.

Sequence of Courses

Students are expected to complete the Core I and Core II requirements within the first 12 credit hours of the program. In addition, Core I should be taken before Core II. Core I is offered in the fall semesters. Core II is offered in the spring semesters. Seminar I should be taken in the spring before beginning the thesis or project. Seminar II should be taken the semester the student is working on his or her thesis or project.

Course Offerings

Course Offerings		
(All courses carry 3 s	semester credit hours unless otherwise designated)	
Required courses (all students)		12 s.h.
MAWR01.554	Core I: Theories and Techniques for Writers	
MAWR01.559	Core II: Research Methods for Writers	
MAWR01.561	Seminar I	
MAWR01.571	Seminar II	
Composition Studies	Track	12 s.h.
MAPR01.546	Contemporary Rhetoric	
MAWR01.549	Issues in Composition Studies	
MAWR01.555	Writing for Electronic Communities	

111111111111111111111111111111111111111	issues in Composition Studies
MAWR01.555	Writing for Electronic Commun
MAWR01.556	Assessment of Writing
MAWR01.560	Managerial Communication
MAWR01.564	Information Architecture
MAWR01.618	Special Topics (courses vary)
MAWR01.560	Managerial Communication

Creative Writing/Journalism Track

12 s.h.

MAWR01.557	Advanced Feature Writing for Print Media
MAWR01 558	Fiction Workshop

Fiction Workshop

MAWR01.618 Special Topics (courses vary)

MAWR02.505 Poetry Workshop MAWR02.510

Writing for Broadcast

MAWR02.515 Creative Nonfiction Workshop

MAWR02.520 Writing the Novel

MAWR02.521 Writing the Nonfiction Book

MAWR02.522 Nonfiction Workshop

Interdisciplinary Component (Electives)

With the approval of the graduate program advisor, students may select courses from one of the tracks in the Master's program, from other Rowan graduate programs, or from approved graduate courses from another university to fulfill this requirement.

Certificate of Graduate Study in Writing: Composition & Rhetoric

Diane Penrod, Program Advisor **Bozorth Hall** 856-256-4330 penrod@rowan.edu

The major goals of this program are to:

- 1. enhance professionals' knowledge of contemporary issues and practices in composition and rhetoric
- 2. form a learning community of professionals and educators dedicated to improving their writing abilities
- 3. provide a forum in the tri-state area for an exchange of ideas about evolving standards and strategies in the field of writing

After completing this certificate program, students will be able to:

- 1. articulate the historical evolution of the field of composition and rhetoric since its inception
- 2. apply critical principles and theories in the field of composition and rhetoric to the writing experience
- 3. conduct advanced research in the field of composition and rhetoric using on-line and printed materials
- 4. participate actively in the assessment and review of current writing practices
- 5. understand and apply current technology in the writing process
- 6. initiate positive changes in writing curricula that reflect cutting-edge trends in composition and rhetoric.

Course Requirements:

MAWR01.555 Writing for Electronic Communities
MAWR01.549 Issues in Composition Studies
MAWR01.556 Assessment of Writing

Total 9 s.h.

College of Education

Carol Sharp, Dean Education Hall 856-256-4750 sharp@rowan.edu

Jill A. Perry , Interim Associate Dean Education Hall 856-256-4753 perry@rowan.edu

Mission

The Rowan University College of Education's primary mission is to help our faculty and undergraduate and graduate candidates develop the knowledge, skills, and dispositions needed to foster academic, social and personal responsibilities, and social justice in themselves so that they can, in turn, facilitate high achievement in P-16 learners. Our programs provide an intellectually rigorous and challenging environment for preparing to teach, preparing for other education or health-related services, or preparing for leadership in education and selected health-related services. Built upon a liberal education, the College's programs combine the study of research, theory, and wisdom of practice in diverse settings with a variety of opportunities to apply knowledge and dispositions to practice, thus promoting professional achievement and personal fulfillment.

The overarching theme of the graduate programs in the College of Education is "The Learning Community in Action". The goals of all programs are based on this theme. The graduate programs in the College of Education have been designed to enable candidates who:

- are committed to and have high expectations for student learning.
- are responsible for facilitating learning in all students and for fostering staff professional growth
- are members and leaders of learning communities
- are instructional leaders effecting change in classrooms, schools, state agencies and/or professional organizations
- are developers and consumers of educational research and meta-analysis and use research to inform practice
- are collaborators with other team members and parents
- show through inquiry, critical analysis, and synthesis, an understanding of their advanced professional role
- demonstrate the application of sound theory
- are assessors of strengths and areas of unmet needs in students, schools, and professional organizations
- use technology in their practice
- know the content of their field and discipline and can explain important priciples and concepts in professional and state standards
- know their diverse students, families, and the communities in which they work
- use culturally responsive practice
- understand and build upon the development levels of students and staff
- understand the multiple contexts in which schools operate
- act with integrity, fairness, and in an ethical manner

Accreditation

Rowan University's College of Education programs are accredited by the National Council for Accreditation of Teacher Education (NCATE).

Programs Offered

Ed.D in Educational Leadership

Ed.S in Educational Services: School Psychologist Certification

M.A. in Counseling in Educational Settings

M.A. in Educational Technology*

M.A. in Elementary School Teaching*

M.A. in Environmental Education and Conservation*

M.A. in Higher Education

M.A. in Learning Disabilities

M.A. in Reading Education

M.A. in School Administration

Principal Preparation

School Business Administration

M.A. in School Psychology

M.A. in School and Public Librarianship

M.A. in Special Education

M.A. in Subject Matter Teaching

M.A. in Supervision and Curriculum Development

M.Ed. in Standards-Based Practice

M.S. in Teaching

Certificate of Advanced Graduate Study

Principal Preparation

Certificates of Graduate Study are offered in the following:

Computers in Education*

Early Childhood Education*

Elementary School Mathematics*

Elementary School Language Arts*

Foreign Language Education

Mathematics Education

Principal Preparation

Teaching and Learning

Certifications are offered in the following:

Associate Ed Media Specialist

Endorsement in Teacher of Students with Disabilities

ESL/Bilingual Education

Supervisor's Certification

Ed.D., Educational Leadership

David C. Hespe, Chairperson, Educational Leadership Education Hall 856-256-4701 edleadership@rowan.edu

Change is inevitable. One does not debate whether change will take place; rather one wonders who will control it and pace it. In public school districts and other educational institutions, this is the challenge of the 21st century educational leader. Our vision, therefore, is to create a network of leaders who will facilitate profound and meaningful change for education, especially in our region.

Our mission is to offer a doctoral program that prepares leaders at all levels, and in various educational settings. The program focuses on a clearly articulated study of leadership, organizations, policy, change, and research.

^{*}These programs are under review. Contact the College of Education about the status of the programs.

The Educational Leadership Department faculty is dedicated to offering a rigorous course of study that will provide students with an opportunity to develop into successful field practitioners. This will happen when students become immersed in the literature and research of leadership and education. Our expectation is that students will achieve this by actively participating in a learning community that continually assesses scholarly research and its relationship to transforming educational institutions through the practice of leadership.

The Educational Leadership doctoral program provides opportunities for students to acquire and construct knowledge that enhances their ability to transform educational institutions to meet the challenging needs of an ever-changing society. This is achieved by educating students to become reflective practitioners who comprehend and evaluate professional literature and research, and who understand leadership and change. In addition, students learn how to translate the research and theory into practice.

Goals for Acquiring Future Leadership Success

In light of the aforementioned vision, the goals of the Ed.D. program in educational leadership are as follows:

- 1. To provide doctoral candidates with opportunities to acquire the knowledge and skills in leadership, organizations, policy, change, and research necessary to be reflective and effective educational leaders.
- 2. To provide doctoral candidates with opportunities to demonstrate their ability as educational leaders to evaluate data and determine the needs of educational organizations, formulate solutions, implement plans to bring about needed changes, and evaluate resulting processes and solutions.
- 3. To establish a network of doctoral graduates that exercise a meaningful force on the improvement of education throughout a variety of communities in the region including but not limited to public and private school systems, higher education institutions, government agencies, private sector educational organizations, and education within business and industry.

Successful candidates will be able to:

- 1. understand leadership theory and its relationship to leadership practice as demonstrated by increasingly sophisticated knowledge and application of leadership practices as they proceed through the program;
- 2. apply leadership theory and contextual knowledge in order to identify and respond to problems in educational settings;
- 3. demonstrate analytical and communication skills necessary for successful leaders to foster and sustain excellence in educational settings;
- 4. demonstrate the ability to critically evaluate various literatures relating to leadership practice and to design and implement research projects in educational settings;
- 5. investigate alternatives and make leadership decisions in educational settings, based on professional research and literature;
- 6. implement and sustain profound change in educational settings.

Preadmission information forums are scheduled for interested candidates. The sessions include a program overview, question/answer opportunities with current students and faculty, and a distribution of program applications. If you would like more information about the forums, or would like to obtain an application, please call (856)-256-4744. Students may also obtain information from our website at: http://www.rowan.edu/edleadership

Admission Requirements

In addition to the University requirements for entrance into graduate study, applicants must provide the following documentation:

- 1. A master's degree from an accredited college or university
- 2. A grade of "B" or better in a graduate course in Organizational Theory and Behavior (or its equivalent)
- 3. A grade of "B" or better in a graduate course in Procedures & Evaluation in Research or Statistics (or its equivalent)

- 4. A minimum 3.5 GPA in prior graduate studies
- 5. Evidence of sufficient computer skills to operate a word processing program
- 6. A personal interview with program faculty

In addition, the candidate must submit:

- 1. Three recommendations from individuals in a position to attest to the applicant's ability to engage in rigorous academic study at the doctoral level
- 2. Two official transcripts from all institutions attended
- 3. A leadership portfolio and resume, which will be reviewed for evidence of demonstrated leadership and leadership potential.

Program Structure

The doctoral program is conducted in three phases; two invlove students in a cohort. The program totals 75 semester hours, 51 s.h. of required courses, 12 s.h. of electives, and 12 s.h. for the dissertation. The cohort fosters a spriit of community, provides a peer support network and helps maintain focus on completing the program.

Students begin the doctoral program with "open" courses. After completing preliminary review and the four required courses as a cohort.

Phase One contains 12 required credit hours, including the four core courses required for admission to the cohort:

- 1. Leadership Theory
- 2. Research Literature Analysis and Writing
- 3. Organizations as Cultures: Theory & Applications
- 4. Conductiong and Analyzing Qualitative Research for Educational Leadership

Other required doctoral courses (Diversity in Educational Leadership and The Policy Environment) and electives are also open to students. Students may enroll on a part-time or full-time basis and may take up to nine credit hours as a non-matriculated student. Students must complete the required four courses of Phase One before entering Phase Two.

The cohort in Pase Two contains 12 required credit hours. Students take four courses together:

- 1. Leadership Seminar I
- 2. Conducting and Analyzing Survey Research for Educational Leadership
- 3. Changing Organizations
- 4. Applied Ethics in Educational Leadership

Other required doctoral courses (Diversity in Educational Leadership and The Policy Environment) and electives are also open to students. Students may also begin the Leadership, Applications, Fieldwork, and Seminar sequence concurrent with cohort courses, or may wait until the following year.

Phase Three, the dissertation phase, contains 33 credit hours. Cohort students enroll in the two semester Leadership, Applications, Fieldwork, and Seminar sequence, 18 s.h. (which may overlap with Phase Two) and Advanced Leadership, 3 s.h. The dissertation comprises the remaining 12 hours required in this phase. Other required doctoral courses (Diversity in Educational Leadership and The Policy Environment) and electives are also open to students, and must be completed prior to graduation.

PHASE I

Semester 1 (Fall)		
EDSU28.715	Leadership Theory	3 s.h.
EDST24.722	Research Leterature Analysis & Writing for Ed. Leadership	
EDSU28.706	Diversity for Educational Leadership*	3 s.h.
Semester 2 (Spring)	·	
EDAM27.701	Organizations as Cultures: Theory and Applications	3 s.h.
EDST24.723	Conducting and Analyzing Survey Research for Ed. Leadership**	3 s.h.
EDAM27.733	The Policy Environment	3 s.h.

BENCHMARK I: Preliminary Review prior to entrance into Phase II

PHASE II Semester 3 (Summer) EDSU28.205 Leadership Seminar I 3 s.h. EDSU28.706 Diversity and Educational Leadership 3 s.h. Semester 4 (Fall) EDAM27.704 **Changing Organizations** 3 s.h. Leadership, Applications, Fieldwork, and Seminar I*** EDST24.720 9 s.h. Elective(*) t3 s.h. Semester 5 (Spring) EDAM27.750 Applied Ethics of Educational Leadership 3 s.h. EDST24.720 Leadership, Applications, Fieldwork, and Seminar II** 9 s.h. PHASE III Semester 6 (Summer) 9 s.h. EDST24.722 Leadership, Applications, Fieldwork, and Seminar EDAM27.752 Advanced Leadership** 3 s.h. Elective(****) 3 s.h. BENCHMARK II: Dissertation Proposal Semester 7 (Fall)

6s.h

6s.h

EDST24.795

Semester 8 (Spring) EDST24.795 Dissertation Research (*)

Dissertation Research (*)

Ed.S. Educational Services: School Psychologist Certification

Donna Cook , Chairperson, Special Educational Services/Instruction Education Hall 856-256-4745 specialed@rowan.edu

Additional Admission Requirements

Applicants for the Educational Specialist degree program must meet all requirements for the M.A. program and hold a master's degree in school psychology, another specialized area of psychology, or in a related field of study with the core requirements applicable to a graduate degree program in psychology approved by the department admissions committee. Applicants who did not obtain an M.A. in School Psychology at Rowan must submit GRE Psychology Test (#81) scores. Admission to the externship experience will be coordinated and approved by the program adviser following a procedure in which all prior records and information are reviewed to evaluate the candidate's scholastic abilities, knowledge, skills, and professional work characterisites relevant to competence and fitness to function as a school psychologist. Non-matriculated students are not eligible to enroll in the restricted courses within this program.

Other Requirements

The Certification Program has a residency requirement of 15 semester hours of credit within a one-year time span at any point during the program. (The student must register for a minimum of 15 semester hours within any three consecutive semesters, including summer session.)

^{*} Required courses that may be taken any semester

^{**} Cohort Course

^{***} May also be taken in the third year, in which case dissertation would be fourth year

^{****} A total of 12 hrs. of electives are required and may be taken at any time.

PRACTICUM: The practicum involves a total of 300 clock hours of professional school psychology experience in a public school setting, the Rowan Assessment and Learning Center, and through hands-on experience associated with the intervention and assessment courses.

EXTERNSHIP: The externship/internship involves one year, or its equivalent, of 1200 clock hours of supervised professional school psychology experience obtained primarily in public schools. The Ed.S. in Educational Services: School Psychologist Certification degree is awarded upon completion of all courses, practicum and externship/internship requirements.

Course Requirements

The following courses will also satisfy the state requirements for the school psychologist's certificate. This list includes 36 s.h. of M.A. program courses and 40 s.h. of Ed.S. program courses. A total of 76 credits in graduate courses is required with the following distributions:

Educational Founda	tions/School Psychology Practice and Development	12 s.h.
SPED08.547	Professional School Psychology	
FNDS21.530	Foundations of Multicultural Education*OR	
PSY05.610	Social and Cultural Diversity*	
EDSU28.546	Educational Organization and Leadership	
CURR29.580	Fundamentals of Curriculum Development	
Education of Studen	ts with Disabilities	6 s.h.
SPED08.555	Education/Psychology of the Exceptional Learner	
PSY06.628	Psychodiagnostics II	
	5.628 is limited to fully matriculated students with permission of program	adviser)
Assessment, Interven	ntion and Reserach	30 s.h.
PSY06.627	Psychodiagnostics I	
PSY06.629	Psychodiagnostics III	
PSY06.632	School Psychology: Consultation and Intervention	
COUN26.526	Individual Counseling Procedures*	
COUN26.509	Group Counseling in Educational Settings* OR	
SPED08.545	Home/School/Community Collaboration	
PSY01.570	Research Methodology & Statistics for Counseling Psychologists*	
PSY22.600	Seminar I in Applied Research in School Psychology*	
PSY22.601	Seminar II in Applied Research in School Psychology*	
EDST24.561	Applied Reserach Statistics Lab*	
	6.627, 628, 629 & 632 is limited to fully matriculated students with perm	nission of
program adviser)		
Human Behavioral 1		12 s.h.
	abnormal psychology required prior to enrollment.)	
PSY22.507	Development and Learning*	
PSY09.560	Lifespan Development*	
PSY03.624	Psychopathology of Childhood and Adolescence*	
LDTC18.520	Neurological Bases of Educational Disorders*	
Practicum/Externsh		16 s.h.
PSY22.530	Consultation & Clinical Services Practicum	
PSY22.634	51 Colloquium (Externship) in School Psychology (Fall)	
PSY22.634	52 Colloquium (Externship) in School Psychology (Spring)	
Total (including M.A	a. courses)	76 s.h.
¥1 N / A		

M.A., Counseling in Educational Settings

*denotes M.A. courses

Donna Cook , Chairperson, Special Educational Services/Instruction Education Hall 856-256-4745 specialed@rowan.edu

This program prepares individuals for careers as School Counselors in K-12 educational settings or for careers in Student Affairs, working in higher education settings.

School Counseling:

For individuals who aspire to careers in K-12 schools, this program leads to a Master of Arts degree in Counseling in Educational Settings, and also, New Jersey certification in School Counseling. Graduates may work in elementary, middle, and/or secondary school settings, providing student counseling services. Such services include individual and group counseling for students regarding personal, social, and educational needs; consultation with faculty and other professional staff; assessment of individual students regarding personal-social, academic and career interests and needs; consultation with families regarding the individual's educational progress and career-related plans, as well as one's personal and social development; and working cooperatively with community resources in assisting individuals and families.

Although the program's focus is in elementary, middle and secondary school settings, a number of our graduates seek and obtain employment in higher education. Careers in higher education include positions in college counseling centers, career centers, admissions, registrar, student life, resident life and dean of students offices. Students who are interested in these careers seek practicum and internship experiences that reflect their interests.

Upon completion of the program, graduates have the option to purse career advancement opportunities such as, the License in Professional Counseling, Supervisor or Director of Student Services, and the Substance Abuse Coordinator Certificate.

Course Requirements

For Graduate Students whose matriculation is effective Spring Semester, 2006 and thereafter.

Specialization in Counseling 19 s.h.		
COUN26.520	Design and Administration of Developmental Counseling Programs 3 sh	
COUN26.526	Individual Counseling Procedures 3 sh	
COUN26.528	Individual Counseling Procedures Lab 1 sh	
COUN26.509	Group Counseling in Educational Settings 3 sh	
COUN26.510	Group Counseling in Educational Settings Lab 1 sh	
COUN26.582	Career Counseling and Development 3 sh	0 1 1
COUN26.605	Advanced Workshop/Counseling in Educational Settings (Two workshop	s @ 1 sh
D03/02 510	each)	
PSY03.518	Psychological Evaluation and Counseling/Drug and Alcohol 3 sh	
Testing and Evaluat	tion	3 s.h.
SCPY25.516	Applied Tests and Measurements	5 5.11.
501 120.010	Tippined Tests and Treasurements	
Human Growth and	l Development	6 s.h.
PSY09.560	Life Span Develoopment 3 sh	
PSY22.507	Development and Learning 3 sh	
Sociological Founda		6 s.h.
PSY05.610 COUN26.597	Social and Cultural Diversity 3 sh	
COUN20.397	Institutions and Agencies 3 sh	
Research		6 s.h.
COUN26.603	Research I/Counseling in Educational Settings 3 sh	0 5.11.
COUN26.604	Research II/Counseling in Educational Settings 3 sh	
		8 s.h.
COUN26.527	Practicum/Counseling in Educational Settings 3 sh	
COUN26.529	Practicum Lab/Counseling in Educational Settings 1 sh	
COUN26.601	Internship/Counseling in Educational Settings 4 sh	
Total		48 s.h.
1 otal		TO 5.11.

Students who have already completed a master's degree from another institution or a master's degree in a related field may apply for admission to the program leading to certification as a school counselor. The departmental admissions' committee will determine the appropriateness of the applicant's master's degree if in a related area. An individual transcript analysis will determine courses necessary for the certificate. Admission requirements to this certificate program are the same as the admission requirements for the master's degree in Counseling in Educational Settings, except the GRE test is not required.

M.A., Educational Technology

Frank Orlando , Chairperson, Foundations of Education Education Hall 256-256-4755 foundations@rowan.edu

This program is not currently accepting applications. Please check with the College of Education for updates on the program.

M.A., Elementary School Teaching

Jill A. Perry , Chairperson, Teacher Education Education Hall 856-256-4739 teachered@rowan.edu

This program is not currently accepting applications. Please check with the department of Teacher Education for updates on this program.

M.A. Environmental Education and Conservation

Jill A. Perry , Chairperson, Teacher Education Education Hall 856-256-4739 teachered@rowan.edu

This program is not currently accepting applications. Please check with the department of Teacher Education for updates on this program.

M.A., Higher Education

David C. Hespe, Chairperson, Educational Leadership Education Hall 856-256-4701 edleadership@rowan.edu

This program has two tracks: (1) administration and (2) instruction. The administration track is intended to serve individuals employed in a higher education setting who wish to increase their knowledge and skills as well as those who seek an entry level position in a two year or four year college or university.

Full-time students in the administration track may complete the program in two years, excluding summers, by following a highly sequenced pattern of course enrollments. Part-time students may also enroll in the administration track and will be advised regarding the sequencing of courses in order to complete the program in four years or less. The administration track consists of twelve courses (36 s. h.) of course work.

The instructional track is intended to serve those individuals who seek adjunct or full-time instructor positions primarily at a two-year college, in the following selected disciplines: reading, mathematics, computer science, and English as a Second Language (ESL). Limited opportunities to pursue specializations in biology or chemistry and physics are also available, and individuals who are interested in pursuing these opportunities must discuss them with the program advisor. Depending on the selected specialization, the instructional track consists of 31-37 semester hours of course work, including a one-semester instructional internship.

Admission Requirement

In addition to the University requirements for admission to a graduate program, a personal interview may be required.

Graduation Requirements

As part of the requirements for the award of the master's degree, students must complete a research project on a topic approved by the program advisor. Students in the administration track are required to complete a two-semester 300 clock-hour clinical experience (150 clock hours each semester) within the courses, Seminar/Internship in Higher Education Administration I and II. Students in the instructional track are required to pass a comprehensive examination in the teaching specialization area as well as a one-semester clinical experience in the course entitled, Seminar/Internship in Higher Education Instruction.

Advising

The academic advisors for the administration and teaching specializations are:

Administration/Instruction - Dr. Burton Sisco

Computer Science - Dr. Joel McLaren Crichlow

English as a Second Language (ESL) - Dr. Jacqueline Benevento

Mathematics - Dr. Marcus Wright

Reading - Dr. Stacey Leftwich

Matriculated students must consult with their academic advisor before selecting specialization courses. A list of courses prescribed by the academic advisor must be given to the program coordinator for placement in the student's program folder.

Course Requirements

Administration Component

Required Core Courses

Students are required to enroll in all five (5) of the following required core courses:

HIED06.605
EDST24.501
Higher Education in America
Procedures and Evaluation in Research
EDAM27.620
EDAM27.637
EDAM27.737
Higher Education in America
Procedures and Evaluation in Research
Legal Issues in Higher Education
Higher Education Administration
The College Student: Issues and Support Programs

Restricted Elective Courses

Students must select a minimum of three (3) courses from the following bank of restricted elective courses:

MGT06.503	Organization Development
MAPR01.551	Public Relations Overview
HIED06.606	Selected Topics in Higher Education
FNDS21.530	Foundations of Multi-Cultural Education
EDST24.503	Quantitative Analysis in Educational Research
EDST24.707	Applied Analysis for Educational Leadership
EDST24.709	Issues in Survey Research
COUN26.509	Group Counseling in Student Personnel Services
COUN26.526	Individual Counseling Procedures
COUN26.582	Career Counseling and Development
EDAM27.621	Student Services in Higher Education
EDAM27.622	Planning and Resource Allocation in Higher Education
EDAM27.625	Change in Higher Education
EDAM27.741	Current Issues in Higher Education
	-

EDAM27.742	The Curriculum of Higher Education
EDAM27.746	Higher Education Governance
EDAM27.748	Human Resource Development
EDSU28.706	Diversity and Educational Leadership
CURR29.503	Teaching Adult Learners
CURR29.504	Understanding Adult Learning and Development
PSY05.623	Social Psychology

Students may also select courses from the College of Communication that are offered in modular format, including:

MAPR01.511	Writing Speeches (0.5 s.h.)
MAPR01.557	Using Electonic in PR (2 s.h)
MAPR01.524	Fundraising and Development (1.5 s.h.)
MAPR01.530	Internal Communications in Organizations (0.5 s.h.)
MAPR01.532	Media Relations (0.5 s.h.)
MAPR01.533	Crisis Public Relations (0.5 s.h.)
MAPR01.536	Public Relations Law and Ethics (1.0 s.h.)
MAPR01.538	Legislative Liaison for Public Relations Practitioners (0.5 s.h.)
MAPR01.558	Intgrated Marketing in Communication (1 s.h.)

Related Elective Courses

Students may select a total of six (6) semester hours of free, related graduate elective courses. These courses must receive the prior approval of the program advisor.

Capstone Requirements

Students are required to enroll in the following two (2) capstone courses:

EDAM27.628 Seminar/Internship in Higher Education Administration I (*) Seminar/Internship in Higher Education Administration II(*)

(*) includes master's thesis project

Total (minimum) 36 credits

Program Portfolio

Beginning Fall 2006, all newly admitted students in the M.A. in Higher Education Administration program are required to prepare and keep a portfolio throughout the duration of the program experience. The portfolio provides an opportunity for students to document and reflect upon their learning throughtout the program and to help synthesize and integrate learning across the various subjects studied in the courses taken. In addition, it serves as a tool to help faculty observe student progress and learning which is assessed through a Synthesis/Reflective Application Exercise conducted prior to enrolling in the Seminar/Internship in Higher Education Administration I capstone course.

Instructional Component

Professional Preparat	ion	13 credits
HIED06.603	Seminar/Internship in Higher Education Instruction (*)	
HIED06.605	Higher Education in America	
EDST24.501	Procedures & Evaluation in Research	
CURR29.503	Teaching Adult Learners	

Professional/Academic Specialization

18-24 s.h.

Students wishing to matriculate in the teaching specializations of mathematics, computer science, or in a teaching specialization in one of the hard sciences, must possess the corresponding baccalaureate degree.

Within the scope of the academic specialization, students must undertake a major research or thesis project and pass a comprehensive examination.

Total 31-37 s.h.

(*) The Seminar/Internship in Higher Education Instruction must be taken in the student's final semester.

M.A., Learning Disabilities

Donna Cook , Chairperson, Special Educational Services/Instruction Education Hall 856-256-4745 specialed@rowan.edu

The Master's degree in Learning Disabilities is an innovative program which provides motivated teachers with the knowledge and skills needed to meet the multitude of challenges found in both regular and special education classrooms. All three tracks in the program, each with a specific focus, are designed to prepare classroom teachers to meet the needs of children with learning disabilities. Collaborative clinically-based and field-based experiences are included in each track. This program is nationally accredited (NCATE and CEC).

Track I

Track I is designed to prepare candidates for the Learning Disabilities Teacher/Consultant certification. Students in this track work in collaboration with other members of a child study team.

Track II

Track II is for graduate students who wish to facilitate learning for young children with developmental delays and disabilities.

Additional Admission Requirements

In addition to those minimum requirements listed by the University for admission to graduate study, this program has the following requirements:

- 1. A New Jersey standard teaching certificate
- 2. Evidence of effective teaching experience (Tracks I and III, one year; Track II, two years)
- 3. Program committee interview
- 4. Writing sample (completed at interview)

Course Requirements

Track I

This track requires a letter from applicant's principal or supervisor attesting to a minimum of two years of effective teaching experience by the applicant.

Basic Professional C Required:	Component	6 s.h.
SCPY25.516	Applied Tests and Measurements and	
PSY22.586	Psychology of Motivation and Learning	
OR		
PSY22.510	Theories of Learning	
OR		
LDTC18.510	Applied Theories of Learning	
Specialization		21 s.h.
SPED08.555	Education & Psychology of Exceptional Learners	
LDTC18.520	Neurological Bases of Educational Disorders	
READ30.530	Teaching Reading to the Exceptional Child	
LDTC18.503	Foundations of Learning Disabilities	
LDTC18.504	Assessment of Learning Disabilities	
LDTC18.505	Correction of Learning Disabilities	
LDTC18.525	Advanced Assessment Techniques	
LDTC18.650	Clinical and Field Experiences in Learning Disabilities*	

Seminar and Research 6 s.h.

LDTC18.600	Seminar and Research in Learning Disabilities I
LDTC18.601	Seminar and Research in Learning Disabilities II

Total 39 s.h.

Track II

Basic Professional Component	6-9 s.h.
	0 / 0.11.

Required	(1	on	ly)):
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FNDS21.502 Foundations of Educational Policymaking

Historical and Philosophical Foundations of Education FNDS21.527

Foundations of Multicultural Education FNDS21.530

Otl

ther Choices:	
CURR29.580	Fundamentals of Curriculum Development
PSY06.533	Tests and Measurements
OR	
SCPY25.516	Applied Tests and Measurements
PSY22.512	Educational Psychology

EDST24.501 Procedures and Evaluation in Research PSY22.586 Psychology of Motivation and Learning

LDTC18.510 Applied Theories of Learning

Specialization 21-24 s.h.

SPED08.555	Education & Psychology of Exce	ptional Learners
LDTC18.540	Motor Development in Young Ch	nildren with Disabilities
PSY10.625	Physiological Psychology	
OR	LDTC18.520	Neurological Bases of Educational Disorders
LDTC18.550	Foundations of Early Childhood/	Special Education
LDTC18.545	Language Development in Young	Children with Disabilities

Testing of the Preschool Child PSY06.631

Clinical and Field Experiences in Learning Disability(*) LDTC18.650

Seminar and Research 6 s.h.

LDTC18.600-601 Seminar and Research in Learning Disabilities I and II

Electives 3s.h. 33-39 s.h. Total

(*) matriculated students only and permission of advisor required

LDT/C Certification

Students who have already completed a master's degree in Learning Disabilities from another institution or a master's degree in a related field may apply for admission to the program leading to certification as a Learning Disabilities Teacher/Consultant. The departmental admissions' committee will determine the appropriateness of the applicant's master's degree if in a related area. An individual transcript analysis will determine courses necessary for the certificate. Admission requirements to this certificate program are the same as the admission requirements for the master's degree in Learning Disabilities, except the GRE test is not required.

Learning Disabilities Teacher-Consultant Certification

Donna Cook, Chairperson, Special Educational Services/Instruction **Education Hall** 856-256-4745 specialed@rowan.edu

Students who have already completed a master's degree in Learning Disabilities or a related field may apply for admission to the program leading to certification as a Learning Disabilities Teacher-Consultant. The departmental admissions committee will determine the appropriateness of the applicant's master's degree if in a related area. An individual transcript analysis will determine courses necessary for the certificate. Admission requirements to this certificate program are the same as the admission requirements for the master's degree in Learning Disabilities, except the GRE test is not required.

M.A., Reading Education

Cindi Hasit, Chairperson, Reading Education Hall 856-256-4770 reading@rowan.edu

The Master of Arts in Reading Education is nationally accredited by the National Council for Accreditation in Teacher Education in conjunction with the International Reading Association. Students in the program will have the opportunity to develop both a contemporary conceptual framework and effective strategies that are appropriate for guiding literacy development of students in classroom and clinical environments. Completion of the established program of studies leads to a Master of Arts degree in Reading Education. Upon completion of the program, the student will have fulfilled the academic requirements for State of New Jersey certification as a reading specialist. If the student has fulfilled all other non-academic state certification and experience requirements, the student is eligible for certification as a K-12 reading specialist at the time of graduation. The course of studies provides students with an understanding of the basic principles of developmental and content area reading instruction. Students acquire advanced knowledge of the reading process. They engage in hands-on experiences in diagnosing and teaching learners who are experiencing difficulty with literacy acquisition. Students learn procedures for administering reading programs in elementary, secondary, and post-secondary schools. In their coursework and reading seminar experiences, students read and interpret current reading research and develop expertise in applying relevant findings to classroom instruction and engaging in action research.

Unique Features

The Department of Reading maintains a highly regarded public reading clinic which provides diagnostic and remedial services to children and adults. While enrolled in the course, Clinical Experiences in Reading, students are required to engage in closely supervised tutoring of clients attending the clinic. Departmental faculty develop a collegial relationship with students in the program and actively encourage and promote their professional growth and development. The faculty assist students in publishing their work, help them present their ideas at conferences, and encourage them to take leadership roles in local reading councils. Graduates have successfully completed doctoral programs at major universities. The faculty work very closely with special educators in order to prepare reading specialists who are capable of addressing the literacy needs of special learners.

Additional Admission Requirements

In addition to the University graduate admissions requirements, as part of the initial application procedure, all applicants are required to schedule an appointment with the program advisor in order to discuss the program and certification requirements. Any Rowan graduate student who is matriculated in another program and is considering making a transfer request into the Reading Education program is also required to schedule a pre- transfer appointment with the Reading Education program advisor. The objective of the Reading program is to graduate highly knowledgeable and skilled students who, upon graduation, are immediately certifiable as reading specialists. The State of New Jersey requires a minimum of two years full-time classroom teaching experience. Therefore, in addition to the requirements for graduate admission to the University, the preferred applicant holds a permanent teaching certification and upon graduation will have had a minimum of two years classroom experience

Additional Graduation Requirements

Students in the program will be recommended for graduation if they have a minimum of a 3.0 average in the specialization courses and a passing grade on the departmental comprehensive examination.

as the classroom teacher in charge. An on-site writing sample may be required prior to admissions consideration. Acceptance decisions are made three times a year, in October, March, and July. The course sequence and prerequisites prevent full-time students from completing the program in one year.

Course Requirements

Students may take the courses in the Restricted Elective areas at any time. These courses do not have prerequisites. Students must adhere to the proper course sequence in the Specialization area.

Clinical Experiences in Reading	6 s.h.
Teaching Reading in the Content Areas	3 s.h.

Specialization 30 s.h.

The following courses may be taken before matriculation into the Reading Education program.

READ30.515	Teaching Reading Across the Grades
READ30.520	Teaching Reading in the Content Areas
READ30.535	Word Study: Phonics, Spelling, and Vocabulary Instruction
READ30.540	Administration and Supervision of Reading Programs
LIBR01.502	Survey of Children's Literature
OR	·
LIBR01.503	Survey of Young Adult Literature

The following course sequence requires matriculated status in the Reading Education program. In addition, READ30.515 and READ30.535 must have been completed with a minimum grade of B (3.0). The courses must be completed in the listed sequence.

READ30.550	Diagnosis of Remedial Reading Problems
READ30.560	Correction of Reading Problems
READ30.570	Clinical Experiences in Reading
READ30.600	Seminar & Research in Reading

Prior to enrollment in READ30.600, the student must successfully complete the departmental comprehensive examination.

Restricted Electives 3 s.h.

(Select one course) Courses may be selected from any course in the College of Education or related courses from other colleges with the approval of the advisor.

Total 37 s.h.

Certification Program A non-degree program of graduate courses leading to reading specialist certification is available to teachers who meet regular M.A. in Reading Education program criteria and State of New Jersey requirements.

State requirements for this certificate are:

- 1. A standard (not provisional) New Jersey instructional certificate
- 2. Two years of successful teaching experience
- 3. Completion of 30 semester hours of graduate courses selected in consultation with the graduate advisor

Courses required for the reading specialist certificate must be taken in the following areas:

- a. Elem./Secondary Reading Foundations
- b. Diagnosis of Reading Problems
- c. Correction of Reading Problems
- d. Clinical Practicum in Reading

In addition, students need courses in at least three of these areas:

- a. Children's or Adolescent Literature
- b. Psychology
- c. Organization of Reading Programs
- d. Staff Supervision
- e. Linguistics
- f. Measurement
- g. Special Education
- h. Research
- i. Foundations of Education

If fewer than 20 credits are needed for certification requirements, the student is not eligible for a Rowan University certification endorsement and must file directly with the State Department of Education for certification.

M.A., School Administration (Principal PreparationTrack)

David C. Hespe , Chairperson, Educational Leadership Education Hall 856-256-4701 edleadership@rowan.edu

This program is designed to serve the educator who aspires to become a leader in P-12 educational organizations. The aim of the program is to provide the candidate with the opportunity to learn the diagnostic and prescriptive skills necessary to function as a collaborative leader in a learning organization. The principal preparation program meets the requirements established by the New Jersey Department of Education for state certification as a public school administrator in positions such as assistant superintendent for curriculum and instruction, principal, assistant principal, vice principal, and director. In order for candidates to qualify for the Certificate of Eligibility (C.E.) for the principal endorsement, they must achieve a satisfactory score on the School Leaders Licensure Assessment.

Goals of the Program

The M.A. in School Administration (Principal Preparation Track), in accord with Rowan University and the College of Education aspires:

- to prepare district and school leaders who will guide culturally and programmatically diverse educational institutions in the 21st Century;
- to create and nurture a learning community that fosters leadership excellence through personal and professional growth and enrichment within a context of mutual support and intellectual stimulation; and
- to provide an environment for teaching and learning that focuses on a vision for excellence, a positive culture for teaching and learning, effective instructional practices, the facilitation of learning communities, managerial efficiency and effectiveness, advocacy for children and families, dynamic interaction with community, fairness and ethical behavior, and reflective practice and the development of scholarly practitioners.

Objectives of the Program

- 1. To prepare educational leaders who promote the success of all students by facilitating the development, articulation, implementation and stewardship of a vision of learning that is shared and supported by the school community.
- 2. To prepare educational leaders who promote the success of all students by advocating, nurturing, and sustaining a school culture and instructional program conducive to student learning and staff professional growth.
- 3. To prepare educational leaders who promote the success of all students by ensuring management of the organization, operations and resources for a safe, efficient and effective learning environment.
- 4. To prepare educational leaders who promote the success of all students by collaborating with families and community members, responding to diverse community interests and needs, and mobilizing community resources.

- 5. To prepare educational leaders who promote the success of all students by acting with integrity, fairness and in an ethical manner.
- 6. To prepare educational leaders who promote the success of all students by understanding, responding to and influencing the larger political, social, economic, legal and cultural context.

Process for Admission to the Program

- 1. Candidates must submit a completed Application Form for Admission to the Graduate School of Rowan University. This includes all of the following:
 - (a) Applicant information (See Part A of application)
 - (b) A thoughtfully prepared statement of professional objectives and reflective essay on what the candidate expects to achieve as a result of study in this graduate program (See Part B of Application)
 - (c) Two recommendations from the candidate's superintendent, principal, supervisor, or professional colleague attesting to his/her potential as an educational leader. (See Part C of Application)
- 2. In addition to the completed application, candidates must also provide to the Graduate School all of the following:
 - (a) Two (2) copies of the official transcript from a regionally accredited college or university showing the award of the bachelor's degree (institution to send official transcript to the Graduate School).
 - (b) A current professional resume that clearly demonstrates that the candidate has successful experience in teaching or a related professional role within the P-12 environment. Past leadership behavior (e.g., committee chair, community leader) and experience in working with adults and children is highly desirable
- 3. An interview with and/or positive recommendation of the program advisor.
- 4. Approval of department chairperson, dean of the College of Education, and dean of the Graduate School.
- 5. Upon receipt of the notification of an offer of admission from the Graduate School, candidates must formally accept the offer, by returning the matriculation card enclosed with the offer.

Admission and matriculation in the M.A. in School Administration (Principal Preparation Track) program represents the successful achievement of Benchmark 1 (see below) of the program.

Criteria for Admission to the Program

Admission to this M.A. program is determined by the applicant's demonstration of the following four criteria:

- Academic preparedness
- Verbal and written communication skills
- Ability to analyze, synthesize, and think critically
- Commitment to learning

Academic Preparedness is determined by a review of the applicant's undergraduate (and graduate, where applicable) transcripts and resume. The candidate will possess an undergraduate cumulative GPA of at least 3.0/4.0 and total GRE scores (V+Q) of at least 950 (with a verbal score of at least 450) or an MAT score that places the applicant at the 37th percentile. Applicants who have already completed graduate level course work with grades of at least "B" will be strongly considered. Further, applicants will submit a professional resume that clearly demonstrates (a) successful experience in teaching or a related professional role within the P-12 environment, (b) past leadership behavior (e.g., committee chair, community leader), and (c) experience in working with adults and children.

Verbal and Written Communication Skills is determined by a review of the applicant's written application essay which (a) provides a statement of career goals, (b) provides a personal vision for school leadership, and (c) demonstrates a commitment to ethical principles, equity, and diversity in the pursuit of learning for all students.

Ability to Analyze, Synthesize, and Think Critically is determined by a review of the applicant's essay and a personal interview with the faculty of the Educational Leadership Department. During the interview, the faculty will look for evidence of the candidate's ability to: (a) forge a positive school or organizational culture, (b) provide instructional leadership, (c) balance technical managerial skills with visionary leadership toward high stakes accountability goals, and (d) influence and facilitate change.

Commitment to Learning is determined by: (a) the applicant's written application essay and personal interview, and (b) recommendations from the applicant's district superintendent, present principal, and at least one professional colleague. These written recommendations are required. Program Requirements

- 1. Candidates must successfully complete a minimum of 33.h. of approved courses, including approved transfer credits within a period of six years from the date of matriculation with a grade-point average of 3.0 or above. A maximum of 9 s.h. of approved course work may be accepted in transfer from another institution.
- 2. Candidates must achieve a passing score on the School Leaders Licensure Assessment.
- 3. Candidates must successfully complete field experience and internship components of approximately 300 clock hours through course-embedded field work and the Practicum/Seminar in Administration and Supervision.
- 4. Candidates must successfully complete all required benchmarks and present a comprehensive portfolio as a requirement for successfully completing the program. The program portfolio shall include a summative reflective essay, which summarizes and synthesizes the candidate's knowledge, skills, and dispositions that are prescribed in the national and state standards for the program. The portfolio shall further include candidate-developed and candidate-selected artifacts that represent authentic learning products and that support the candidate's essay.

PHASE 1 - Required Core Courses 15 s.h. Introduction to School Leadership EDAM27.506 3 s.h. CURR29.580 Fundamentals of Curriculum Development 3 s.h. 3 s.h. EDST24.504 Action Research in Education Technology for Educational Leadership EDAM27.632 3 s.h. EDSU28.546 Educational Organizations and Leadership 3 s.h.

These required core courses represent Phase 1 of the program requirements. All candidates must complete all five courses in Phase 1 and successfully complete the requirements for Benchmark 2 (see below) before they will be permitted to enroll in any Phase 2 or Phase 3 courses.

PHASE 2 - Professional Preparation		15 s.h.
EDAM27.535	School Finance and Records	3 s.h.
EDAM27.559	Law and Ethics for School Leadership	3 s.h.
EDSU28.522	Instructional Leadership and Supervision	3 s.h.
EDAM27.510	Change for School Improvement	3 s.h.
EDSU28.523	Building Organizational Capacity	3 s.h.

These restricted elective courses represent Phase 2 of the program requirements. All candidates must complete five approved courses in Phase 2, including a course-embedded field experience component of approximately 150 clock hours, and successfully complete all requirements for Benchmark 3 (see below) before they will be permitted to enroll in Phase 3 of the program.

PHASE 3 - Practicum/Seminar

3 s.h.

EDAM27.600 Practicum/Seminar in Administration and Supervision 3 s.h.

The Practicum/Seminar course represents Phase 3 of the program and must be taken as the final course. This course includes a one-semester 150-clock hour clinical experience under the guidance of a university supervisor and field mentor. At the completion of the Practicum/Seminar, all candidates must successfully complete Benchmark 4 (see below) as a condition for program completion and graduation. Total Credits Required for Program Completion 33 s.h.

PROGRAM BENCHMARKS

Benchmark 1 - Candidate admission and matriculation in the M.A. in School Administration (Principal Preparation Track) program

Benchmark 2 - Upon completion of the required core courses (15 credits, Phase 1); candidate must demonstrate satisfactory academic progress toward the completion of the program, meet with his/her advisor, and undergo a formative review of the program portfolio. Candidates must successfully complete Benchmark 2 as a prerequisite for moving into Phase 2 (restricted electives) of the program.

Benchmark 3 - Upon completion of the professional preparation courses (15 credits, Phase 2), candidate must demonstrate satisfactory academic progress toward the completion of the program, achieve a passing score on the School Leaders Licensure Assessment, show evidence of successful completion of the course-embedded field experiences, meet with his/her advisor, and undergo another formative review of the program portfolio. Candidate must also present an acceptable plan for the practicum/seminar and successfully complete Benchmark 3 as a prerequisite for moving into Phase 3 (practicum/seminar) of the program.

Benchmark 4 - Upon completion of the practicum/seminar (3 credits, Phase 3), candidate must demonstrate satisfactory academic progress toward the completion of the program, submit a program portfolio of authentic learning products that supports a summative reflective essay synthesizing the candidate's learning. Candidate must also present his/her portfolio in a manner that demonstrates the extent to which he/she has acquired the knowledge, skills, and dispositions prescribed in the national and state standards for the program. The successful completion of all required coursework and all benchmarks is required for successful program completion and graduation and a positive recommendation for licensure.

M.A., School Administration (School Business Administrator Preparation Track)

David C. Hespe, Chairperson, Educational Leadership Education Hall 856-256-4701 edleadership@rowan.edu

This program is designed to meet the requirements established by the Department of Education for certification and licensure as a school business administrator in the state of New Jersey.

Goals of the Program

The M.A. in School Administration (School Business Administrator Preparation Track), in accord with Rowan University and the College of Education, aspires:

- 1. to prepare district leaders who will guide culturally and programmatically diverse educational institutions in the 21st Century;
- 2. to create and nurture a learning community that fosters leadership excellence through personal and professional growth and enrichment within a context of mutual support and intellectual stimulation; and
- 3. to help to provide an environment for teaching and learning that focuses on a vision for excellence, a positive culture for teaching and learning, effective instructional practices, the facilitation of learning communities, managerial efficiency and effectiveness, advocacy for children and families, dynamic interaction with community, fairness and ethical behavior, and reflective practice and the development of scholarly practitioners.

Objectives of the Program

- 1. To prepare school business officials who understand and can demonstrate the ability to provide an effective administrative organization, public policies, and intergovernmental relations.
- 2. To prepare school business officials who can demonstrate an understanding and comprehension of the principles associated with effective school finance, budgeting, financial planning, accounting, auditing, financial reporting, cash management, and technology for school business operations.
- 3. To prepare school business officials who can demonstrate the ability to provide effective management and monitoring of personnel, benefits, professional development, labor relations, employee agreements, and fostering of good human relations.

- 4. To prepare school business officials who can demonstrate expertise in physical plant planning, accountability for capital resources, and the administration of the substantial public investment in schools.
- 5. To prepare school business officials who can demonstrate expertise in purchasing, supply and fixed asset management, and real estate management.
- 6. To prepare school business officials who can demonstrate expertise in strategic planning, instructional support and program evaluation, communications, and management information systems.
- 7. To prepare school business officials who can demonstrate expertise in risk management and transportation, food, and other ancillary school support services.

Process for Admission to the Program

- 1. Candidates must submit a completed Application Form for Admission to the Graduate School of Rowan University. This includes all of the following:
 - (a) Applicant information (See Part A of Application)
 - (b) A thoughtfully prepared statement of professional objectives and reflective essay on what the candidate expects to achieve as a result of study in this graduate program (See Part B of Application)
 - (c) Two recommendations from the candidate's superintendent, principal, supervisor, or professional colleague attesting to his/her potential as an educational leader. (See Part C of Application)
- 2. In addition to the completed application, candidates must also provide to the Graduate School all of the following:
 - (a) Two(2) copies of the official transcript from a regionally accredited college or university showing the award of the bachelor's degree (institution to send official transcript to the Graduate School).
 - (b) A current professional resume that clearly demonstrates that the candidate has successful experience in a professional role within the P-12 environment. Past leadership behavior (e.g., CPA professional work, committee chair, community leader) and experience in working with adults and children is highly desirable
- 3. An interview with and/or positive recommendation of the program advisor.
- 4. Approval of department chairperson, dean of the College of Education, and dean of the Graduate School.
- 5. Upon receipt of the notification of an offer of admission from the Graduate School, candidates must formally accept the offer, by returning the matriculation card enclosed with the offer.

Admission and matriculation in the M.A. in School Administration (School Business Administrator Track) program represents the successful achievement of Benchmark 1 (see below) of the program.

Criteria for Admission to the Program

Admission to this M.A. program is determined by the applicant's demonstration of the following four criteria:

- Academic preparedness
- Verbal and written communication skills
- Ability to analyze, synthesize, and think critically
- Commitment to learning

Academic Preparedness is determined by a review of the applicant's undergraduate (and graduate, where applicable) transcripts and resume. The candidate will possess an undergraduate cumulative GPA of at least 3.0/4.0 and total GRE scores (V+Q) of at least 950 (with a verbal score of at least 450) or an MAT score that places the applicant at the 37th percentile. Applicants who have already completed graduate level course work with grades of at least "B" will be strongly considered. Further, applicants will submit a professional resume that clearly demonstrates past leadership behavior (e.g., committee chair, community leader).

Verbal and Written Communication Skills is determined by a review of the applicant's written application essay which (a) provides a statement of career goals, (b) provides a personal vision for school/district leadership, and (c) demonstrates a commitment to ethical principles, equity, and diversity in the pursuit of learning for all students.

Ability to Analyze, Synthesize, and Think Critically is determined by a review of the applicant's essay and a personal interview with the faculty of the Educational Leadership Department. During the interview, the faculty will look for evidence of the candidate's ability to: (a) forge a positive school or organizational culture, (b) provide sound leadership, (c) balance technical managerial skills with visionary leadership toward high stakes accountability goals, and (d) influence and facilitate change.

Commitment to Learning is determined by: (a) the applicant's written application essay and personal interview, and (b) recommendations from professional colleagues. These written recommendations are required.

Program Requirements

- 1. Candidates must successfully complete a minimum of 33 s.h. of approved courses, including approved transfer credits within a period of six years from the date of matriculation with a grade-point average of 3.0 or above. A maximum of 9 s.h. of approved course work may be accepted in transfer from another institution.
- 2. Candidates must successfully complete a field experience component of approximately 300 clock hours through course-embedded field work and the Practicum/Seminar in Administration and Supervision.
- 3. Candidates must successfully complete all required benchmarks and present a comprehensive portfolio as a requirement for successfully completing the program. The program portfolio shall include a summative reflective essay, which summarizes and synthesizes the candidate's knowledge, skills, and dispositions that are precribed in the national standards upon which the program is predicated. The potrtfolio shall further include candidate-developed and candidate-selected artifacts that represent authentic learning products and that support the candiadte's essay.

PHASE 1 - Required Core Courses		12 s.h.
EDST24.504	Action Research in Education	3 s.h.
EDAM27.632	Technology for Educational Leadership	3 s.h.
EDSU28.546	Educational Organizations and Leadership	3 s.h.
EDAM27.510	Change for School Improvement	3 s.h.

These required core courses represent Phase 1 of the program requirements. All candidates must complete all five courses in Phase 1 and successfully complete the requirements for Benchmark 2 (see below) before they will be permitted to enroll in any Phase 2 or Phase 3 courses.

PHASE 2 - Professional Preparation		18 s.h.
EDAM27.534	School Plant Planning and Management	3 s.h.
EDAM27.535	School Finance and Records	3 s.h.
EDAM27.536	Financial Accounting Systems for School Systems	3 s.h.
EDAM27.538	School Business Management	3 s.h.
EDAM27.559	Law and Ethics for School Leadership	3 s.h.
EDAM27.610	Human Resources for School Systems	3 s.h.

These restricted elective courses represent Phase 2 of the program requirements. All candidates must complete five approved courses in Phase 2, including a course-embedded field experience component of approximately 150 clock hours, and successfully complete all requirements for Benchmark 3 (see below) before they will be permitted to enroll in Phase 3 of the program.

PHASE 3 - Practicum/Seminar		3 s.h.
EDAM27.600	Practicum/Seminar in Administration and Supervision	3 s.h.

The Practicum/Seminar course represents Phase 3 of the program and must be taken as the final course. This course includes a one-semester 150-clock hour clinical experience under the guidance of a university supervisor and field mentor. At the completion of the Practicum/Seminar, all candidates must successfully complete Benchmark 4 (see below) as a condition for program completion and graduation.

Total Credits Required for Program Completion Program Benchmarks

33 s.h.

Benchmark 1 -Candidate admission and matriculation in the M.A. in School Administration (School Business Administrator Track) program

Benchmark 2 -Upon completion of the required core courses (15 credits, Phase 1); candidate must demonstrate satisfactory academic progress toward the completion of the program, meet with his/her advisor, and undergo a formative review of the program portfolio. Candidate must successfully complete Benchmark 2 as a prerequisite for moving into Phase 2 (restricted electives) of the program.

Benchmark 3-Upon completion of the professional preparation courses (15 credits, Phase 2), candidate must demonstrate satisfactory academic progress toward the completion of the program, show evidence of successful completion of the course-embedded field experiences, meet with his/her advisor, and undergo another formative review of the program portfolio. Candidates must also present an acceptable plan for the practicum/seminar and successfully complete Benchmark 3 as a prerequisite for moving into Phase 3 (practicum/seminar) of the program.

Benchmark 4 -Upon completion of the practicum/seminar (3 credits, Phase 3), candidate must demonstrate satisfactory academic progress toward the completion of the program, submit a program portfolio of authentic learning products that supports a summative reflective essay synthesizing the candidate's learning. Candidate must also present his/her portfolio in a manner that demonstrates the extent to which he/she has acquired the knowledge, skills, and dispositions prescribed in the national standards upon which the program is predicated. The successful completion of all required coursework and all benchmarks is required for successful program completion and graduation and a positive recommendation for licensure.

M.A., School Psychology

Roberta Dihoff , Coordinator Robinson Hall 856-256-4500 x3783 dihoff@rowan.edu

Donna Cook , Chairperson, Special Educational Services/Instruction Education Hall 856-256-4745 specialed@rowan.edu

The graduate offerings in school psychology are divided into two major programs that have separate and distinct admissions criteria. The two programs are sequential, although a student may wish to pursue only one. It should be noted that admission to one program does not automatically guarantee admission to the subsequent program.

The M.A. in school psychology program builds a substantial background and depth in the theories, major knowledge, and methodological procedures of the discipline of psychology. The subsequent professional program in school psychology for the preparation of school psychologists at the Educational Specialist degree level is concerned with psychological, professional, and related educational courses to develop awareness and skill in interventions, consultations and assessments for school children. The Educational Specialist program includes the practicum and externship component. Field placements give added experience and training in the clinical and consultation aspects of school psychology. The successful completion of both degree programs can lead to a New Jersey school psychologist certificate.

Additional Admission Requirements

In addition to minimum requirements of the University for admission to graduate study, this program requires:

1. A minimum of 15 undergraduate psychology credits (including abnormal psychology and child or adolescent psychology, and 9 s.h. of psychology electives approved by the department admissions committee)

- 2. A minimum grade point average of "B" in undergraduate psychology courses
- 3. Acceptable scores on the Graduate Record Examination
- 4. Interview with the program committee

Course Requirements

Basic Professional (Component	6 s.h.
FNDS21.530	Foundations of Multicultural Education	
	OR	
PSY05.610	Social and Cultural Diversity	
SPED08.555	Education/Psychology of the Exceptional Learner	
Specialization		20 s.h.
COUN26.526	Individual Counseling Procedures (prerequisite for following option)	
COUN26.509	Group Counseling in Educational Settings	
COUN26.527	Practicum in Counseling in Educational Settings	
PSY22.510	Theories of Learning OR	
PSY22.507	Development and Learning	
LDTC18.520	Neurological Bases of Educational Disorders	
PSY09.560	Lifespan Development (prerequisite for following course)	
PSY03.624	Psychopathology of Childhood and Adolescence	
Research		10 s.h.
PSY01.570	Research Methodology and Statistics for Counseliing Psychologists	
PSY22.600	Seminar I in Applied Research for School Psychology (Fall)	
PSY22.601	Seminar II in Applied Research for School Psychology (Spring)	
EDST24.561	Applied Research Statistics Lab (must be taken concurrently with above co	ourse)
Total		36 s.h.

M.A., School & Public Librarianship

Donna Cook, Chairperson, Special Educational Services/Instruction **Education Hall** 856-256-4745 specialed@rowan.edu

The program is designed for students who wish to pursue graduate education to become a school library media specialist or public librarian. Students can earn a master's degree with concentrations leading to certification as a School Library Media Specialist (for school libraries) or Professional Librarian (public libraries). Certification as Associate School Library Media Specialist can be earned by those seeking K-12 certification to perform school library media services under the direction of a qualified supervisor. Before enrolling in any course, interested students must contact the graduate program advisor.

Because of course scheduling, it is advantageous to begin the program in the fall semester. Courses are scheduled for late afternoons, evenings, and Saturdays. A limited number of courses is offered in the summer.

Admissions Requirements

In addition to the admissions requirements of the Graduate School, applicants to this program must submit a writing sample of short essay answers (1-2 substantial paragraphs each) to the following questions:

- 1. Please explain your principal objectives for enrolling in graduate study.
- 2. Describe a difficult challenge you have faced as a student and how you dealt with it.
- 3. Give an example of a goal you achieved that was important to you and analyze how you achieved it.

4. What intellectual and personal qualities do you have that will make you a successful school media specialist or professional librarian?

In addition, applicants for programs leading to certification as Associate School Library Media Specialist or School Library Media Specialist must hold a standard New Jersey teacher certification OR Advanced Standing and Eligibility for teacher certification OR provide proof of intent to meet the alternate route requirements as provided for in the New Jersey Administrative Code, Chapter 6A, Title 9. Alternate route applicants must meet with the graduate program coordinator as part of the application process and show completion of teacher education requirements before beginning the practicum course. Teacher certification is not required for public librarianship.

Public Librarianship

The curriculum in public librarianship is designed for college graduates who wish to pursue a career in New Jersey public libraries. A professionally written thesis and a professional program portfolio are part of the M.A. degree requirements. Students are advised that this program is approved by the New Jersey Department of Education but is not accredited by the American Library Association. Upon completion, students may apply for the Professional Librarian Certificate from the New Jersey State Library at Thomas Edison State College.

Course Requiremen Required Courses	ts (Listed in the preferred sequence)	30 s.h.
LIBR01.506	Foundations of Librarianship (Fall)	
LIBR01.505	Reference Resources and Services I (Spring)	
LIBR01.521	Design & Production of Educational Media (Fall)	
LIBR01.510	Library Collections & Resources (Spring)	
LIBR01.530	Library Technology (Fall)	
LIBR01.507	Managing Library Programs (Spring)	
LIBR01.525	Reference Resources and Services II (Spring) (**)	
LIBR01.511	Organization of Library Resources (Spring)	
LIBR01.600	Graduate Thesis in Library Services I (Fall)	
LIBR01.601	Graduate Thesis in Library Services II (Spring)	
Restricted Electives		9 s.h.
LIBR01.502	Survey of Children's Literature (Fall, Spring, Summer)	
LIBR01.503	Survey of Young Adult Literature (Spring)	
LIBR01.531	Serving the Library's Publics (*)	
LIBR01.532	Library Materials for Adults (*)	
LIBR01.550	Independent Study in Librarianship (Fall, Spring)	
LIBR01.580	Practicum in Library Services (Fall, Spring)	

(*) May not be offered every year

(**) Offered every other year

Total 39 S. H.

School Librarianship

The master's degree program in school librarianship leads to New Jersey certification as School Library Media Specialist, grades K-12. It is designed for certified teachers in fields other than library science, applicants who have completed a teacher education program with student teaching, and students who are taking the education courses specified in NJAC, Chapter 6A, Title 9. A three-semester hour practicum in library service, a professionally written thesis, and a professional program portfolio are part of the M.A. requirements. The College of Education is NCATE accredited, and the school library curriculum is recognized by the American Association of School Librarians, a division of the American Library Association.

Course Requirements (Listed in the preferred sequence) **Required Courses**

	(=15000 in the protested stequence)	
Required Courses		39 s.h.
LIBR01.506	Foundations of Librarianship (Fall)	
LIBR01.505	Reference Resources and Services I (Spring)	
LIBR01.502	Survey of Children's Literature (Fall, Spring, Summer)	
LIBR01.503	Survey of Young Adult Literature (Spring)	
LIBR01.510	Library Collections & Resources (Spring)	
LIBR01.521	Design & Production of Educational Media (Fall)	
LIBR01.511	Organization of Library Resources (Spring)	
LIBR01.580	Practicum in Library Services (Fall, Spring) (**)	
At this point, stude	ents may apply for the Associate School Library Media Specialist Certificate	e.
LIBR01.530	Library Technology (Fall)	
LIBR01.507	Managing Library Programs (Spring)	
LIBR01.516	School Media Centers for Teaching and Learning (Fall)	
LIBR01.580	Practicum in Library Services (Fall, Spring) (***)	
LIBR01.600	Graduate Thesis in Library Services I (Fall)	
LIBR01.601	Graduate Thesis in Library Services II (Spring)	

Restricted Electives 3 s.h.

Select one of the following courses:

LDTC18.503	Foundations of Learning Disabilities
FNDS21.530	Foundations of Multi-Cultural Education
EDST24.501	Procedures and Evaluation in Research
CURR29.580	Fundamentals of Curriculum Development
READ30.520	Teaching Reading in Content Areas

(**) Offered every other year

(***)Students may take Practicum for 2 s.h. credits during their Associate School Library Media Specialist curriculum. Students will then take a further 1 s.h. credit of Practicum to complete the M.A. requirements.

Total 42 s.h.

Associate School Library Media Specialist Certification

Donna Cook , Chairperson, Special Educational Services/Instruction Education Hall 856-256-4745 specialed@rowan.edu

This K-12 educational services certification endorsement authorizes the holder to perform educational media services under the direction of a qualified supervisor. The student must have an instructional certificate (CEAS or standard) or demonstrate intent to fulfill the alternate requirements for education courses set in the NJAC, Chapter 6A, Title 9. Alternate route applicants must meet with the graduate program coordinator as part of the application process and show completion of teacher education requirements before beginning the practicum course. Applicants for certification as Associate School Library Media Specialist must apply, be accepted and be fully matriculated in the certification program and maintain a grade point average of 3.0 in educational media courses in order to be recommended for the certification. The certification program is completely articulated with the master's degree program, and students may transfer into the master's degree program before beginning the last 3 credit hours of the Associate School Library Media Specialist certification program. (Courses are listed in the preferred sequence.)

Required Courses 23-24 s.h.

LIBR01.506	Foundations of Librarianship (Fall)
LIBR01.505	Reference Resources and Services I (Spring)
LIBR01.502	Survey of Children's Literature (Fall, Spring)
LIBR01.503	Survey of Young Adult Literature (Spring)
LIBR01.510	Library Collections & Resources (Spring)

LIBR01.521	Design & Production of Educational Media (Fall)
LIBR01.511	Organization of Library Resources (Spring)
LIBR01.580	Practicum in Library Services (Fall, Spring)**

^{**}Students may take Practicum for 2 or 3 s.h. credits during their Associate Educational Media Specialist curriculum

Endorsement in Teacher of Students with Disabilities

Donna Cook , Chairperson, Special Educational Services/Instruction Education Hall 856-256-4745 specialed@rowan.edu

In compliance with New Jersey State Regulations for teacher licensure, the Special Educational Services/Instruction Department currently offers a graduate endorsement program: Teacher of Students with Disabilities.

Criteria for Admission

- A four (4) year degree from an accredited college of university
- Possess, or be eligible for, a standard or provisional New Jersey instructional certificate
- Minimum of 2.75 grade point average on a 4 point scale
- Transcript evaluation of prerequisite courses in academic and education area
- Three (3) letters of recommendation (not friends/relatives)
- Resume
- Essay on reasons for desiring Teacher of Students with Disabilities Endorsement
- Successful completion of Praxis II in subject specialization area(s) OR successful completion of GREs (Verbal, Quantitative, Writing)
- Program Committee interview

Curriculum Requirements

SPED08.555	Education & Psychology of Exceptional Learners or Equivalent	3 s.h.
SELN10.581	Teaching Strategies for Managing Behavior of Students w/ Disabilities	3 s.h.
SPED08.515	Curriculum, Instruction, & Transition in Special Education	3 s.h.
SELN10.585	Educational Assessment in Special Education	3 s.h.
READ30.535	Teaching Reading to Exceptional Children	3 s.h.
SELN10.577	Collaborative Instruction in Inclusive Classrooms	3 s.h.
SELN10.592	Clinical Seminar in Special Education	1 s.h.
SPED08.520	Clinical Practice in Special Education	2 s.h.
	-	

Program Total 21 s.h.

M.A., Special Education

Donna Cook , Chairperson, Special Educational Services/Instruction Education Hall 856-256-4745 specialed@rowan.edu

This advanced program is designed for individuals who possess an instructional certificate and want to pursue a master's degree in Special Education. The purpose of the program is to provide advanced studies focusing on educational, psychological and sociological needs of the children and youth with disabilities. The course work and related field experiences are designed for foster an understanding of students with special needs, combined with pedagogical skills to accommodate these needs and provide appropriate curriculum modifications when necessary. Upon completing the program, candidates earn a Master of Arts in Special Education.

There are two tracks: Track I, designed for individuals who possess a standard instructional certificate in special education, and wish to increase competency in theory, knowledge, and methodological procedures for working with exceptional individuals; and Track II, designed for individuals who possess a standard instructional certificate, or possess/are eligible for CE or CEAS and wish to obtain Teacher of Students with Disabilities Certification in Special Education. Candidates who complete Track II's certification requirement will be recommended for Teacher of Students with Disabilities certification through the college's certification office.

Certification Option

Students who wish to pursue only a certificate for Teacher of Students with Disabilities must meet the following requirements:

- 1. Documentation of a PRAXIS II passing score in either elementary content or secondary subject tests, in lieu of GRE scores
- 2. Admission to the Graduate Endorsement Program
- 3. Completion of certification courses listed in Track II

Additional Admission Requirements

In addition to minimum requirements of the University for admission to graduate study, this program has special requirements:

- 1. An interview with the program advisor
- 2. Completion of a writing sample at the time of the interview
- 3. A resume
- 4. Evidence of appropriate teaching certification

Course Requirements

Track I

Track I requires 30 semester hours. The courses are organized into three categories: specialization, restricted electives, and research seminar.

Specialization	Collaborative Instruction in Inclusive Classrooms Foundation of Learning Disabilities Teaching Students with Autism and Pervasive Developmental Disorders Teaching Students with Moderate and Severe Disabilities Communication Skills for Students with Disabilities Emotional & behavioral Support Strategies	15 s.h.
Restricted Electives READ30.530 SELN10.578 SPED08.540 LDTC18.520	Teaching Reading to the Exceptional Child Administration & Supervision in Special Education Technology for Students with Special Needs Neurological Bases of Educational Disorders	6 s.h.
Clinical Internship SELN10.593	Clinical Internship	3 S.H
Research Seminar SELN10.600 and	SELN10.601 Research Seminar in Special Education	6 S.H

Track II

Track II requires 39 semester hours.

Certification	21 s.h.
SPED08.555	Education & Psychology of Exceptional Learners
SELN10.581	Teaching Strategies for Managing Behavior of Students with Disabilities: A
	Curriculum Approach
SPED08.515	Curriculum, Instruction, Transition in Special Education
SELN10.585	Educational Assessment in Special Education

READ30.530 SELN10.577 SPED08.520	Teaching Reading to the Exceptional Children Collaborative Instruction in Inclusive Classrooms Clinical Experiences in Special Education	
Specialization LDTC18.503 SELN10.590 SELN10.580 SELN10.582 SELN10.586	Foundation of Learning Disabilities Teaching Students with Autism and Pervasive Developmental Disorders Teaching Students with Moderate and Severe Disabilities Communication Skills for Students with Disabilities Emotional & behavioral Support Strategies	9 s.h.
Restricted Electives SELN10.578 SPED08.540 LDTC18.520	Administration & Supervision in Special Education Technology for Students with Special Needs Neurological Bases of Educational Disorders	3 S.H
Research Seminar		6 S.H

SELN10.600 and SELN10.601 Research Seminar in Special Education

M.A., Subject Matter Teaching

Jill A. Perry, Chairperson, Teacher Education **Education Hall** 856-256-4739 teachered@rowan.edu

This program is not currently accepting applications. Please contact the department of Teacher Education for updates on this program.

Art

Biological Sciences Chemistry/Physics

Mathematics

M.A. Music Education

M.A., Supervision & Curriculum Development

David C. Hespe, Chairperson, Educational Leadership **Education Hall** 856-256-4701 edleadership@rowan.edu

This program is designed to serve the educator who wishes to qualify as an assistant superintendent for curriculum and instruction, department head, curriculum coordinator, supervisor of instruction in the public schools with the authority and responsibility for the continuing direction and guidance of the work of instructional personnel. This certification also qualifies candidates for positions as athletic directors. Candidates who successfully complete this program also meet the state of New Jersey's requirements for supervisor certification. Certification is awarded by the New Jersey Department of Education.

Goals of the Program

The M.A. in Supervision and Curriculum Development, in accord with Rowan University and the College of Education aspires:

1. to prepare district and school leaders who will guide culturally and programmatically diverse educational institutions in the 21st Century;

- 2. to create and nurture a learning community that fosters leadership excellence through personal and professional growth and enrichment within a context of mutual support and intellectual stimulation; and
- 3. to provide an environment for teaching and learning that focuses on a vision for excellence, a positive culture for teaching and learning, effective instructional practices, the facilitation of learning communities, managerial efficiency and effectiveness, advocacy for children and families, dynamic interaction with community, fairness and ethical behavior, and reflective practice and the development of scholarly practitioners.

Objectives of the Program

- 1. To prepare educational leaders who promote the success of all students by facilitating the development, articulation, implementation and stewardship of a vision of learning that is shared and supported by the school community.
- 2. To prepare educational leaders who promote the success of all students by advocating, nurturing, and sustaining a school culture and instructional program conducive to student learning and staff professional growth.
- 3. To prepare educational leaders who promote the success of all students by ensuring management of the organization, operations and resources for a safe, efficient and effective learning environment.
- 4. To prepare educational leaders who promote the success of all students by collaborating with families and community members, responding to diverse community interests and needs, and mobilizing community resources.
- 5. To prepare educational leaders who promote the success of all students by acting with integrity, fairness and in an ethical manner.
- 6. To prepare educational leaders who promote the success of all students by understanding, responding to and influencing the larger political, social, economic, legal and cultural context.

Process for Admission to the Program

- 1. Candidates must submit a completed Application Form for Admission to the Graduate School of Rowan University. This includes all of the following:
 - (a) Applicant information (See Part A of application)
 - (b) A thoughtfully prepared statement of professional objectives and reflective essay on what the candidate expects to achieve as a result of study in this graduate program (See Part B of Application)
 - (c) Two recommendations from the candidate's superintendent, principal, supervisor, or professional colleague attesting to his/her potential as a supervisor. (See Part C of Application)
- 2. In addition to the completed application, candidates must also provide to the Graduate School all of the following:
 - (a) Two (2) copies of the official transcript from a regionally accredited college or university showing the award of the bachelor's degree (institution to send official transcript to the Graduate School).
 - (b) A regular New Jersey or out-of-state instructional (i.e., teaching) certificate or educational services certificate, other than emergency or provisional.
 - (c) A current professional resume that clearly demonstrates that the candidate has a minimum of one year successful full-time experience as a teacher or educational services specialist.
- 3. An interview with and/or positive recommendation of the program advisor.
- 4. Approval of department chairperson, dean of the College of Education, and dean of the Graduate School.
- 5. Upon receipt of the notification of an offer of admission from the Graduate School, candidates must formally accept the offer, by returning the matriculation card enclosed with the offer.

Admission and matriculation in the M.A. in Supervision and Curriculum Development program represents the successful achievement of Benchmark 1 (see below) of the program.

Criteria for Admission to the Program

Admission to this M.A. program is determined by the applicant's demonstration of the following four criteria:

- Academic preparedness
- Verbal and written communication skills
- Ability to analyze, synthesize, and think critically
- Commitment to learning

Academic Preparedness is determined by a review of the applicant's undergraduate (and graduate, where applicable) transcripts and resume. The candidate will possess an undergraduate cumulative GPA of at least 3.0/4.0 and total GRE scores (V+Q) of at least 950 (with a verbal score of at least 450) or an MAT score that places the applicant at the 37th percentile. Applicants who have already completed graduate level course work with grades of at least "B" will be strongly considered. Further, applicants will submit a professional resume that clearly demonstrates (a) successful experience in teaching or a related professional role within the P-12 environment, (b) past leadership behavior (e.g., committee chair, community leader), and (c) experience in working with adults and children.

Verbal and Written Communication Skills is determined by a review of the applicant's written application essay which (a) provides a statement of career goals, (b) provides a personal vision for school leadership, and (c) demonstrates a commitment to ethical principles, equity, and diversity in the pursuit of learning for all students.

Ability to Analyze, Synthesize, and Think Critically is determined by a review of the applicant's essay and a personal interview with the faculty of the Educational Leadership Department. During the interview, the faculty will look for evidence of the candidate's ability to: (a) forge a positive school or organizational culture, (b) provide instructional leadership, (c) balance technical managerial skills with visionary leadership toward high stakes accountability goals, and (4) influence and facilitate change.

Commitment to Learning is determined by: (a) the applicant's written application essay and personal interview, and (b) recommendations from the applicant's district superintendent, present principal, and at least one professional colleague. These written recommendations are required. Requirements for the New Jersey Supervisor's Certificate

- 1. Candidates must hold a master's degree in any discipline from a regionally accredited college of university.
- 2. Candidates must possess a valid New Jersey or out-of-state instructional (i.e., teaching) certificate or a New Jersey educational services certificate.
- 3. Candidates must demonstrate 3 years of successful full-time professional experience in teaching or in a position for which the New Jersey educational services certificate is held. (For a complete list of valid New Jersey educational services certificates, see N.J.A.C. 6A: 9-11.9).
- 4. Candidates must complete an approved program of studies including (a) a general principles P-12 course in staff supervision, (b) a general principles P-12 course in curriculum development and evaluation, (c) a curriculum course in a specific content area or at a specific grade level range, and (d) an elective course in either supervision or curriculum.

Program Requirements

1. Candidates must successfully complete a minimum of 33.h. of approved courses, including approved transfer credits within a period of six years from the date of matriculation with a grade-point average of 3.0 or above. A maximum of 9 s.h. of approved course work may be accepted in transfer from another institution.

2. Candidates must successfully complete all required benchmarks and present a comprehensive portfolio as a requirement for successfully completing the program. The program portfolio shall include a summative reflective essay, which summarizes and synthesizes the candidate's knowledge, skills, and dispositions that are prescribed in the national and state standards for the program. The portfolio shall further include candidate-developed and candidate-selected artifacts that represent authentic learning products and that support the candidate's essay.

PHASE 1 - Required Core Courses		15 s.h.
EDAM27.506	Introduction to School Leadership	3 s.h.
CURR29.580	Fundamentals of Curriculum Development 1, 3	3 s.h.
EDST24.504	Action Research in Education 2	3 s.h.
EDSU28.546	Educational Organizations and Leadership 1, 2	3 s.h.
EDAM27.510	Change for School Improvement 2	3 s.h.

These required core courses represent Phase 1 of the program requirements. All candidates must complete all five courses in Phase 1 and successfully complete the requirements for Benchmark 2 (see below) before they will be permitted to enroll in any Phase 2 or Phase 3 courses.

PHASE 2 - Restricted Electives

15 sh.

Select five (5) courses, at least three (3) of which must be taken from the Curriculum Bank and at least two (2) courses from the Supervision Bank.

Curriculum Bank

CURR29.547	Curriculum Theory*	3 s.h.
CURR29.550	Public School Curriculum 3	3 s.h.
CURR29.590	Curriculum Evaluation* 3	3 s.h.
ELEM02.536	Elementary School Curriculum 4	3 s.h.
SPED08.515	Curriculum, Instruction, and Transition in Special Education 5	3 s.h.
ELEM02.538	Contemporary Curriculum Processes/Elementary Science 3	3 s.h.
ELEM02.540	Contemporary Curriculum Processes/Elementary Mathematics 3	3 s.h.
ECED23.510	Curriculum Development in Early Childhood Programs 3	4 s.h.
PHED35.592	Curriculum Construction in Health & Physical Education 6	3 s.h.
HLTH37.525	Curriculum Strategies in Substance Awareness Education* 6	3 s.h.

Supervision Bank

EDSU28.522	Instructional Leadership and Supervision *2	
EDSU28.523	Building Organizational Capacity *2	3 s.h.
READ30.540	Administration & Supervision of School Reading 7	3 s.h.
SELN10.578	Administration and Supervision of Education for Special Education 5	3 s.h.
EDSU28.501	Administration and Supervision of Music Programs 8	3 s.h.

^{*} These courses may have departmental prerequisites

These restricted elective courses represent Phase 2 of the program requirements. All candidates must complete five approved courses in Phase 2 and successfully complete the requirements for Benchmark 3 (see below) before they will be permitted to enroll in Phase 3 of the program.

PHASE 3 -Practicu	m/Seminar	3 s.h.
EDAM27.600	Practicum/Seminar in Administration and Supervision2	3 s.h.

The Practicum/Seminar course represents Phase 3, the field experience component, of the program and must be taken as the final course. This course includes a one-semester 150-clock hour clinical experience under the guidance of a university supervisor and field mentor. At the completion of the Practicum/Seminar, all candidates must successfully complete Benchmark 4 (see below) as a condition for program completion and graduation.

Total Credits Required for Program Completion

33 s.h.

- 1 Required for state supervisor certification
- 2 This course is offered by the Educational Leadership Department
- 3 This course is offered by the Department of Secondary Education/Foundations of Education.
- 4 This course is offered by the Department of Elementary and Early Childhood Education.
- 5 This course is offered by the Department of Special Education Services/Instruction.
- 6 This course is offered by the Department of Health & Exercise Science.
- 7 This course is offered by the Department of Reading
- 8 This course is offered by the Music Department

M.Ed., Standards-Based Practice

Jill A. Perry, Chairperson, Teacher Education Education Hall 856-256-4739 teachered@rowan.edu

The Standards-Based Practice Master's degree program has three goals:

- to develop teacher leaders who practice teaching skills aligned with the NBPTS 's Five Core Propositions (see Guiding Principles),
- to develop teacher expertise in a content area of choice, and
- to empower teachers to assume leadership roles within their schools and districts.

The program is designed for teachers who desire to develop and hone their leadership skills and who wish to remain in the classroom. The program approaches leadership from the perspectives of exemplary teaching, continuous learning for all, a need to balance change with stability and the importance of peaceful existence in a diverse community of learners.

To that end, teachers will enhance their abilities to lead not only in their classrooms, but also in the school at large by working with curriculum, becoming mentor/master teachers, developing new programs, and a variety of other activities that improve schooling for all children.

Guiding Principles

The following five core propositions of the national board for Professional Teaching Standards(NBPTS) and three additional principles identified by college of Education faculty provide the focus for the master's program in Standards-Based Practice:

NBPTS propositions

- 1. teachers are committed to students and their learning
- 2. teachers know the subjects they teach and how to teach those subjects to students
- 3. teachers are responsible for managing and monitoring student learing
- 4. teachers think systematically about their practice and learn from their experience
- 5. teachers are members of learning communities

Rowan Program principles

- 6. teachers account for the needs of culturally, linguistically, and cognitively diverse learners
- 7. teachers are change agents, teacher leaders, and partners with collegues
- 8. teachers use technology to facilitate student learning and their own professional development

Admissions Requirements

Admission procedures follow those of the Graduate School, Including submission of GRE score. Teaching Certification is required for admission.

Course of Study

The master's in Standards-Based Practice degree requires a total of 36 s.h. The program consists of two areas of concentration:

	18 s.h.
Applied Theories of Learning	3 s.h.
Learning Community Classrooms	3 s.h.
Researching Classroom Practice	3 s.h.
Analysis of Classroom Teacher Behavior	3 s.h.
Educational Change	3 s.h.
Fundamentals of Curriculum Development	3 s.h.
	Learning Community Classrooms Researching Classroom Practice Analysis of Classroom Teacher Behavior Educational Change

Content Area Courses 18 s.h.

The requirement is satisfied by completing any COGS (Certificate of Graduate Study) approved by the University. Consult the Graduate School for a complete list.

Making the decision to enter the program

Students have four options for starting the program:

- 1. Take the program in its entirety to earn the M.Ed. degree and therefore take core courses and COGS courses simultaneously.
- 2. Take the 18 s.h. core to earn a Certificate of Graduate Study (COGS) ub Teaching and Learning and then enter the M.Ed. program.
- 3. Take a COGS in a subject field and then enter the M.Ed. program.
- 4. If students hold National Board certification, two courses in the Teaching and Learning COGS will be waived.

M.S., Teaching - Elementary

Jill A. Perry, Chairperson, Teacher Education Education Hall 856-256-4739 teachered@rowan.edu

This Master of Science in Teaching (M.S.T.) program offers the unique opportunity for students to pursue an initial New Jersey teaching certificate and a master's degree simultaneously. The program is designed to prepare individuals, with the appropriate undergraduate program, as certified elementary or subject matter. Students whose undergraduate degree is in a professional or technical area may need to take as many as 30 additional undergraduate credits to meet certification requirements before being accepted into the program. Questions about appropriate undergraduate majors, academic sequences or pre-requisites should be directed to the program advisor. The subject matter is presently designed for prospective social studies, English, mathematics, foreign language (Spanish and French) and science teachers. The elementary program is designed to prepare prospective teachers for kindergarten through grade five teaching in self-contained classrooms.

The M.S.T. program is both a cognitive and clinical program. The cognitive program is comprised of courses that offer the knowledge and skills necessary for beginning teachers. The clinical component is a supervised observation and internship sequence in public school classroom. The M.S.T. students form and function throughout the program as a cohort group.

The M.S.T. program is presently offered as a full-time program only. The program cycle includes four consecutive terms beginning with a summer term and concluding after a second summer term. This graduate program requires admission for the summer term. The M.S.T. program has an early admissions deadline of November 15. The M.S.T. spring application deadline to submit all materials, including relevant test scores, is February 15. Applicants applying for early admission must have an overall grade point average of 2.75 or higher. No applicant with an overall grade point average below 2.50 will be considered for admission. The M.S.T. program has a limited enrollment, contact the program advisor for further information concerning the available number of admissions into each track.

Additional Admission Requirements

In addition to those minimum requirements of the University for admission to graduate study, this program requires:

- 1. A baccalaureate or master's degree in the arts and sciences discipline relevant to the area of prospective teacher certification, which is a New Jersey Department of Education and certification approved major or coherent academic sequence. Students without the appropriate field of study may have to complete undergraduate courses prior to being eligible for admission into the graduate program.
- 2. Meeting the minimum New Jersey passing score (s) on the PRAXIS II Examination for the appropriate certification area.

- 3. Two or fewer pre-requisites to be taken concurrently with the M.S.T. program.
- 4. Submission of Graduate Record Examination general test scores. GRE is waived for those applicants holding a graduate degree.
- 5. Two recommendations which relate the applicant's interpersonal, academic and communication skills.

Course Requirements

M.S.T. in Elemtary/S	Secondary Education	
Summer		9 s.h.
CURR29.515	Introduction to Teaching and Planning	
READ30.515	Teaching Reading Across the Grades	
FNDS21.527	Historical & Philosophical Foundations of Education	
Fall	-	3 s.h.
EDUC01.603	Clinical Seminar I (2 s.h.)	
CURR29.580	Fundamentals of Curriculum Development	
OR	•	
CURR29.528	Curriculum & Methods in Subject Field	
EDUC01.601	Clinical Internship I (5 s.h.)	
EDST24.565	Analysis and Application of Research	
Spring		12 s.h.
EDUC01.605	Clinical Internship II (7 s.h.)	
EDUC01.607	Clinical Seminar II 1 s.h.	
SCPY25.516	Applied Tests and Measurements	
EDST24.602	Seminar on Development of Internship Project 1 s.h.	
Summer II		5 s.h.
ELEM02.511	Learning Community Classrooms	
EDST24.608	Internship Project Report 2 s.h.	
Total		39 s.h.

M.S., Teaching - Secondary

Jill A. Perry, Chairperson, Teacher Education Education Hall 856-256-4739 teachered@rowan.edu

This Master of Science in Teaching (M.S.T.) program offers the unique opportunity for students to pursue an initial New Jersey teaching certificate and a master's degree simultaneously. The program is designed to prepare individuals, with the appropriate undergraduate program, as certified elementary or subject matter. Students whose undergraduate degree is in a professional or technical area may need to take as many as 30 additional undergraduate credits to meet certification requirements before being accepted into the program. Questions about appropriate undergraduate majors, academic sequences or pre-requisites should be directed to the program advisor. The subject matter is presently designed for prospective social studies, English, mathematics, foreign language (Spanish and French) and science teachers. The elementary program is designed to prepare prospective teachers for kindergarten through grade five teaching in self-contained classrooms.

The M.S.T. program is both a cognitive and clinical program. The cognitive program is comprised of courses that offer the knowledge and skills necessary for beginning teachers. The clinical component is a supervised observation and internship sequence in public school classroom. The M.S.T. students form and function throughout the program as a cohort group.

The M.S.T. program is presently offered as a full-time program only. The program cycle includes four consecutive terms beginning with a summer term and concluding after a second summer term. This graduate program requires admission for the summer term. The M.S.T. program has an early admissions deadline of November 15. The M.S.T. spring application deadline to submit all materials, including relevant test scores, is February 15. Applicants applying for early admission must have an overall grade point average of 2.75 or higher. No applicant with an overall grade point average below 2.50 will be considered for admission. The M.S.T. program has a limited enrollment, contact the program advisor for further information concerning the available number of admissions into each track.

Additional Admission Requirements

In addition to those minimum requirements of the University for admission to graduate study, this program requires:

- A baccalaureate or master's degree in the arts and sciences discipline relevant to the area of
 prospective teacher certification, which is a New Jersey Department of Education and
 certification approved major or coherent academic sequence. Students without the appropriate
 field of study may have to complete undergraduate courses prior to being eligible for
 admission into the graduate program.
- 2. Meeting the minimum New Jersey passing score (s) on the PRAXIS II Examination for the appropriate certification area.
- 3. Two or fewer pre-requisites to be taken concurrently with the M.S.T. program.
- 4. Submission of Graduate Record Examination general test scores. GRE is waived for those applicants holding a graduate degree.
- 5. Two recommendations which relate the applicant's interpersonal, academic and communication skills.

Course Requirements

M.S.T. in Elemtary/Secondary Education Summer I		9 s.h.
CURR29.515	Introduction to Teaching and Planning	
READ30.515	Teaching Reading Across the Grades	
FNDS21.527	Historical & Philosophical Foundations of Education	
Fall		13 s.h.
EDUC01.603	Clinical Seminar I (2 s.h.	15 5.11.
CURR29.528	Curriculum & Methods in Subject Field	
EDUC01.601		
EDST24.565	Analysis and Application of Research	
Spring		12 s.h.
	Clinical Internship II (7 s.h.)	12 3,111
EDUC01.607	Clinical Seminar II 1 s.h.	
SCPY25.516		
EDST24.602	Seminar on Development of Internship Project 1 s.h.	
Summer II		5 s.h.
	Learning Community Classrooms	<i>5</i> 5.11.
EDST24.608	Internship Project Report 2 s.h.	
Total		39 s.h.
CURR29.580 OR CURR29.528 EDUC01.601 EDST24.565 Spring EDUC01.605 EDUC01.607 SCPY25.516 EDST24.602 Summer II ELEM02.511	Clinical Internship II (7 s.h.) Clinical Seminar II 1 s.h. Applied Tests and Measurements Seminar on Development of Internship Project 1 s.h. Learning Community Classrooms	12 s.h 5 s.h 39 s.h

M.S., Teaching -Collaborative Teaching

Jill A. Perry , Chairperson, Teacher Education Education Hall 856-256-4739 teachered@rowan.edu This Master of Science In Teaching - Collaborative Teaching (M.S.T.) program offers the unique opportunity for students to acquire an initial New Jersey K-5 teaching certificate, certification as Teacher of Students with Disabilities, and a master's degree simultaneously. The program is designed as the fifth year of a five year undergraduate/graduate teacher education program - the Collaborative Education program. The five year program is designed to prepare prospective teachers for kindergarten through grade five teaching in general education classrooms and K-12 teaching in special education placements(i.e. Inclusive classrooms, resource rooms, and self-contained classrooms).

The M.S.T. in Collaborative Teaching program is both an academic and clinical program. The academic program is comprised of courses that present the knowledge and skills necessary for beginning teachers. The clinical component is ongoing across the five years; however, the fifth graduate year includes a four day semester-long clinical practice in the fall semester and a five day semester long clinical student teaching experience in the spring semester. The students enrolled in the Collaborative Education program function throughout the program as a cohort group.

The M.S.T. in Collaborative Teaching program is presently offered as a full-time program only. The program cycle includes four consecutive terms beginning with a summer term and concluding after a second summer term. This graduate program requires admission for the summer term; undergraduate Collaborative Education teacher candidates must apply to the graduate school during the second semester of their senior year.

Additional Admission Requirements

In addition to those minimusm requirements of the University for admission to graducate study, this program requires:

- 1. A baccalaureate degree in American Studies and elementary education for admission into the graduate progam.
- 2. Meeting the minimum New Jersey passing score(s) on the PRAXIS II Examination for the appropriate certification area.
- 3. submission of Graduate Record Examinatino general test scores. GRE is waived for those applicants maintaining an undergraduate GPA of 3.5 or above.

Course Requirements

M.S.T. in Collaborat	ive Education	6 a h
Summer Spenoe 515	Cumicalana Instruction and Transistion Diameiro	6 s.h.
SPED08.515	Curriculum Instruction and Transistion Planning	
EDAM27.572	School Law and Public Policy	1.4 1
Fall		14 s.h.
SELN10.581	Teaching Strategies for Managing Behavior	
EDUC01.601	Clinical Internship	
EDUC01.603	Clinical Seminar I	
EDST24.502	Initiation of Internship Project	
EDST24.565	Analysis and Application of Research	
Spring	, , , , , , , , , , , , , , , , , , , ,	12 s.h.
READ30.530	Teaching Reading to the Exceptional Child	
EDUC01.605	Clinical Internship I	
EDUC01.607	Clinical Seminar II	
EDST24.602	Development of Internship Project	
Summer 2	·	4 s.h
FNDS21.504	Foundations of Cross Cultural Education	
EDST24.608	Internship Project Report	
Program Total		36 s.h

Certificate of Advanced Graduate Study in Principal Preparation

David C. Hespe, Chairperson, Educational Leadership Education Hall 856-256-4701 edleadership@rowan.edu This program meets the requirements specified by the state of New Jersey and is designed to serve the person who has already earned a master's degree in some field, and who wants to qualify as a principal in the public schools.

Requirements for Admission and Matriculation in the Principal Preparation Program:

- 1. A master's degree from an accredited college or university (institution to send official transcript to the Graduate School) or concurrently matriculated in a M.A. degree program at Rowan University (Submit copy to the Graduate School).
- 2. For Track 1 applicants only: a valid N.J. supervisor's certificate, and official documentation (e.g., a letter from the applicant's district superintendent) attesting that the applicant has a minimum of 5 years of full-time experience in a position that requires the supervisor's certificate (Submit copy to the Graduate School).
- 3. For Track 2 applicants only: a valid N.J. supervisor's certificate, and official documentation (e.g., a letter from the applicant's district superintendent) attesting that the applicant has successfully completed (a) a minimum of 5 years in full-time teaching, and (b) 0-5 years of full-time experience in a position that requires the supervisor's certificate (Submit copy to the Graduate School).
- 4. For Track 3 applicants only: official documentation (e.g., a letter from the applicant's district superintendent) attesting that the applicant has successfully completed a minimum of 5 years in full-time teaching, (Submit copy to the Graduate School.)
- 5. Two letters of recommendation from the candidate's superintendent, supervisor, or professional colleague attesting to his/her potential as a principal. (Submit to the Graduate School.)
- 6. A written statement outlining the candidate's professional objective and what he/she expects to achieve through enrollment in graduate studies. (Submit to the Graduate School.)
- 7. An interview with and/or positive recommendation of the program advisor.
- 8. Approval of department chairperson, dean of the College of Education, and dean of the Graduate School.
- 9. Upon receipt of the notification of an offer of admission from the Graduate School, candidates must formally accept the offer, by returning the matriculation card enclosed with the offer.

State Requirements for the Principal's Certificate

In order to qualify the New Jersey principal's certificate, candidates must fulfill the following conditions in at least one of the areas identified below:

A. Candidates who Hold a N.J. Supervisor's Certificate and 5 or More Years of Supervisory Experience

An candidate who holds a valid New Jersey supervisor endorsement and a master's degree or higher in a field other than school administration, school leadership, business or public administration, or curriculum and instruction will be eligible for a principal CE upon presenting the following:

- 1. Official documentation of 5 years of successful full-time experience as a supervisor of an instructional area or department related to the Core Curriculum Content Standards under a valid New Jersey supervisor certificate;
- 2. Official documentation evidencing completion of a New Jersey State-approved certification program in educational leadership offered by providers approved by the Department. This program shall include, but not be limited to:
 - (i) preparation for educational leadership through experiences related to the performance -based Professional Standards for School Leaders and the CCCS;
 - (ii) 225 clock hours of formal instruction in leadership and human resource management;
 communications; data-based research strategies for decision-making; finance and law; and
 (iii) a district internship providing professional experiences in school administration; and
- 3. Official documentation evidencing passage of the School Leaders Licensure Assessment that is acquired through study of the topics listed in item A.2(ii) above, aligned with the Professional Standards for School Leaders, and that is most directly related to the functions of principals as defined in N.J.A.C. 6A:9-12.3(b).

B. Candidates who Hold a N.J. Supervisor's Certificate and Fewer than 5 Years of Supervisory Experience

A candidate who holds a valid New Jersey supervisor endorsement and a master's degree or higher in a field other than school administration, school leadership, business or public administration, or curriculum and instruction, but who has 0-5 years supervisory experience will be eligible for a principal CE upon presenting the following:

- 1. Official documentation of 5 years of successful full-time teaching experience;
- 2. Official documentation evidencing completion of a New Jersey State-approved certification program in educational leadership offered by providers approved by the Department. This program shall include, but not be limited to:
 - (i) preparation for educational leadership through experiences related to the performance -based Professional Standards for School Leaders and the CCCS;
 - (ii) 275 clock hours of formal instruction in leadership and human resource management; communications; data-based research strategies for decision-making; finance and law; and
 - (iii) a 90 clock hour district internship providing professional experiences in school administration; and
- 3. Official documentation evidencing passage of the School Leaders Licensure Assessment that is acquired through study of the topics listed in item A.2(ii) above, aligned with the Professional Standards for School Leaders, and that is most directly related to the functions of principals as defined in N.J.A.C. 6A:9-12.3(b).
- C. Candidates Who Can Demonstrate 5 Years of Successful Full-Time Teaching Experience

A candidate who can provide documentation of at least 5 years of successful full-time teaching experience and a master's degree or higher in a field other than school administration, school leadership, business or public administration, or curriculum and instruction, will be eligible for a principal CE upon presenting the following:

- 1. Official documentation evidencing completion of a New Jersey State-approved certification program in educational leadership offered by providers approved by the Department. This program shall include, but not be limited to:
 - (i) preparation for educational leadership through experiences related to the performance -based Professional Standards for School Leaders and the CCCS;
 - (ii) 350 clock hours of formal instruction in leadership and human resource management; communications; data-based research strategies for decision-making; finance and law; and
 - (iii) a 120 clock hour district internship providing professional experiences in school administration; and
- 2. Official documentation evidencing passage of the School Leaders Licensure Assessment that is acquired through study of the topics listed in item A.2(ii) above, aligned with the Professional Standards for School Leaders, and that is most directly related to the functions of principals as defined in N.J.A.C. 6A:9-12.3(b).

Rowan University Requirements for the Principal's Certificate

- 1. A candidate must successfully complete an approved program of studies (i.e., Track 1, Track 2, or Track 3) with a grade-point average of 3.0 or above. A maximum of 6 s.h. of approved course work may be accepted in transfer from another institution. With the approval of the program advisor and department chairperson, courses taken in fulfillment of other graduate programs in educational leadership at Rowan University may be applied to the requirements of this program.
- 2. A candidate must complete the required program benchmarks.
- 3. A candidate must achieve a passing score on the School Leaders Licensure Assessment.
- 4. The program must be completed within a period of 6 years from the date of matriculation.

Program Description

The Principal's Certification Program is comprised of three different tracks. Applicants must select a track that best meets their needs at the time of admission. The three different tracks adhere to the requirements set forth in N.J.A.C. 6A:9-12.5(j)(k)(l).

Track 1 - Supervisor's Certificate and 5 Years or More of Supervisory Experience

ED AM27 506	Introduction to Cohool Londonship	2 a h
EDAM27.506	Introduction to School Leadership School Finance and Records	3 s.h.
EDAM27.535		3 s.h.
EDAM27.559	Law and Ethics for School Leadership	3 s.h.
EDAM27.510	Change for School Improvement	3 s.h.
EDSU28.523	Building Organizational Capacity	3 s.h.
EDSU28.602	Field Service in Education: District Internship	1 s.h.
Total Credits		16 s.h.
Track 2 - Superviso	r's Certificate and Fewer than 5 Years of Supervisory Experience	
EDAM27.506	Introduction to School Leadership	3 s.h.
EDAM27.535	School Finance and Records	3 s.h.
EDAM27.559	Law and Ethics for School Leadership	3 s.h.
EDSU28.522	Instructional Leadership and Supervision	3 s.h.
EDAM27.510	Change for School Improvement	3 s.h.
EDSU28.523	Building Organizational Capacity	3 s.h.
EDSU28.602	Field Service in Education: District Internship	2 s.h.
Total Credits	r	20 s.h.
Two olz 2 5 Voorg of	Full Time Teaching Experience	
	f Full-Time Teaching Experience	3 s.h.
CURR29.580	Fundamentals of curriculum Development	
EDSU28.546	Educational Organizations and Leadership Action Research in Education	3 s.h.
EDST24.504	Action Research in Education	3 s.h.
OR	Technology for Educational Landaushin	2 - 1-
EDAM27.632	Technology for Educational Leadership	3 s.h.
EDAM27.535	School Finance and Records	3 s.h.
EDAM27.559	Law and Ethics for School Leadership	3 s.h.
EDAM27.510	Change for School Improvement	3 s.h.
EDSU28.522	Instructional Leadership and Supervision	3 s.h.
EDSU28.523	Building Organizational Capacity	3 s.h.
EDAM27.600	Practicum/Seminar in Administration and Supervision	3 s.h.
Total Credits		27 s.h.

Certificates Of Graduate Study

Frank Orlando , Chairperson, Foundations of Education Education Hall 856-256-4755 foundations@rowan.edu

NOTE: These certificate programs are not designed for those who intend to matriculate in the master's degree program, although a student may elect to complete both areas of study. The certificate programs are not a State of New Jersey instructional certificate unless otherwise noted.

Certificates of Graduate Study in Computers in Education

Jill A. Perry , Chairperson, Teacher Education Education Hall 856-256-4739 teachered@rowan.edu

This program is not currently accepting applications. Please check with the foundations of Education department for updates on the program.

Certificate of Graduate Study in Early Childhood Education

Jill A. Perry, Chairperson, Teacher Education Education Hall 856-256-4739 teachered@rowan.edu

This program is not currently accepting applications. Please check with the department of Teacher Education for updates on this program.

Certificates of Graduate Study in Elementary School Mathematics

Jill A. Perry , Chairperson, Teacher Education Education Hall 856-256-4739 teachered@rowan.edu

This program is not currently accepting applications. Please check with the department of Teacher Education for updates on the program.

Certificates of Graduate Study in Elementary School Language Arts

Jill A. Perry , Chairperson, Teacher Education Education Hall 856-256-4739 teachered@rowan.edu

This program is not currently accepting applications. Please check with the department of Teacher Education for updates on this program.

Certificate of Graduate Study in Foreign Language Education

Jill A. Perry , Chairperson, Teacher Education Education Hall 856-256-4739 teachered@rowan.edu

This program is designed to provide foreign language educators with opportunities for continued professional development as they explore issues and innovations in the field. Participants will investigate the implications of recent developments in linguistics, culture, and communication as they impact upon curriculum and instruction in foreign languages. Emphasis is placed upon the use of national and state standards. Topics include research into second language acquisition, the development and use of print and non-print resources, and new ways of integrating language and content. This program is appropriate for teachers wishing to enhance their knowledge and skills at all levels, for secondary school teachers new to teaching at the elementary and/or middle school level, and for those responsible for the development and articulation of curriculum and instruction in grades K-12.

Required Courses

BLED40.512	Linguistics for Teaching Second Languages	3 s.h.
BLED40.515	Language, Culture and Communication	3 s.h.
BLED40.513	Extending the Foreign Language Sequence K-12	3 s.h.
BLED40.505	Issues and Innovations in Foreign Language Education	3 s.h.
Program Total		12 s.h.

Notes

- 1. Students may take the courses in any sequence, but those desiring the Certificate of Graduate Study must matriculate after 6 s.h.
- 2. Permission of the Program Adviser is required for each course.
- 3. The Certificate of Graduate Studies in Foreign Language Education is restricted to certified foreign (world) language teachers. N.B. The Certificate of Graduate Study is not a State of New Jersey instructional certificate.

Certificate of Graduate Study in Teaching and Learning

Jill A. Perry, Chairperson, Teacher Education Education Hall 856-256-4739 teachered@rowan.edu

This Certificate of Graduate Study is designed for teachers who wish to develop their leadership skills and remain in the classroom. The program approaches leadership from the perspectives of exemplary teaching and the importance of a peaceful existence in a diverse community of learners.

Teachers will enhance their abilities to lead not only in their classrooms, but also in the school at large by working with curriculum, becoming mentor/master teachers, developing new programs, as well as a variety of other school improvement initiatives.

LDTC18.510	Applied Theories of Learning	3 s.h.
ELEM02.511	Learning Community Classrooms	3 s.h.
EDST24.566	Researching Classroom Practice	3 s.h.
ELEM02.550	Analysis of Classroom Teacher Behavior	3 s.h.
EDST24.624	Educational Change	3 s.h.
CURR29.580	Fundamentals of Curriculum Development	3 s.h.

English as a Second Language and Bilingual Education Certification

Jill A. Perry, Chairperson, Teacher Education Education Hall 856-256-4739 teachered@rowan.edu

The English as a Second Language (ESL)/ Bilingual/Bicultural Education Certification Program is a non-degree program leading to a K-12 endorsement (second certificate) to standard New Jersey instructional certification in other teaching fields. (The bilingual/bicultural certificate is available only to individuals who hold standard New Jersey instructional certification for grade levels and subjects which can be taught in a bilingual setting; the appropriate instructional certificates are: elementary education; secondary education mathematics, science, social studies; and special education.)

Program Requirements

For the ESL certificate:

BLED40.510	Issues of Language and Cultural Diversity in ESL/Bilingual Programs
BLED40.512	Linguistics for Teaching Second Languages
BLED40.515	Language, Culture, and Communication
BLED40.517	Modern Developments in the Teaching of ESL/Bilingual Education
BLED40.520	Teaching ESL/Bilingual Education: Process & Practice
or	
BLED40.522	Integrating Language and Content in the ESL/Bilingual Education Classroom
Total	15 s.h.

For the Bilingual/Bicultural Education certificate:

BLED40.510	Issues of Language and Cultural Diversity in ESL/Bilingual Programs
BLED40.512	Linguistics for Teaching Second Languages
BLED40.517	Modern Developments in the Teaching of ESL/Bilingual Education
BLED40.520	Teaching ESL/Bilingual Education: Process & Practice

Total 12 s.h.

- This program requires matriculation after 6 semester hours of course work.
- Course BLED40.517 requires preceding courses in list. Course BLED40.520 or BLED40.522 requires Course BLED40.517.
- Proficiency testing will be required in English for the ESL certificate and in other languages, as appropriate, for the Bilingual/Bicultural Education certificate.

Supervisor's Certification Program

David C. Hespe , Chairperson, Educational Leadership Education Hall 856-256-4701 edleadership@rowan.edu

This program meets the requirements specified by the state of New Jersey and is designed to serve the person who has already earned a master's degree in some field, and who wants to qualify as a supervisor in the public schools; one who is charged with authority and responsibility for the continuing direction and guidance of the work of instructional personnel.

Requirements for Admission and Matriculation in the Supervisor's Certification Program:

- 1. A master's degree from an accredited college or university (institution to send official transcript to the Graduate School) or concurrently matriculated in a M.A. degree program at Rowan University.
- 2. A regular New Jersey or out-of-state instructional (i.e., teaching) certificate or educational services certificate, other than emergency or provisional. (Submit copy to the Graduate School.)
- 3. One year's successful teaching experience is required for admission and matriculation in the program (Submit your resume to the Graduate School.)
- 4. Two letters of recommendation from the candidate's superintendent, supervisor, or professional colleague attesting to his/her potential as a supervisor. (Submit to the Graduate School.)
- 5. A written statement outlining your professional objective and what you expect to achieve through enrollment in graduate studies. (Submit to the Graduate School.)
- 6. An interview with and/or positive recommendation of the program advisor.
- 7. Approval of department chairperson, dean of the College of Education, and dean of the Graduate School.
- 8. Upon receipt of the notification of an offer of admission from the Graduate School, candidates must formally accept the offer, by returning the matriculation card enclosed with the offer.

State Requirements for the Supervisor's Certificate

In order to qualify the New Jersey supervisor's certificate, candidates must fulfill the following four conditions:

- 1. Candidates must hold a master's degree in any discipline from a regionally accredited college of university.
- 2. Candidates must possess a valid New Jersey or out-of-state instructional (i.e., teaching) certificate or a New Jersey educational services certificate.

- 3. Candidates must demonstrate 3 years of successful full-time professional experience in teaching or in a position for which the New Jersey educational services certificate is held. (For a complete list of valid New Jersey educational services certificates, see N.J.A.C. 6A: 9-11.9).
- 4. Candidates must complete an approved program of studies including (a) a general principles P-12 course in staff supervision, (b) a general principles P-12 course in curriculum development and evaluation, (c) a graduate elective curriculum course in a specific content area or at a specific grade level range, and (d) a graduate elective course in either supervision or curriculum.

Rowan University Requirements for the Supervisor's Certificate

- 1. A candidate must successfully complete a minimum of 12 s.h. of approved courses, including approved transfer credits, with a grade-point average of 3.0 or above. A maximum of 3 s.h. of approved course work may be accepted in transfer from another institution.
- 2. The program must be completed within a period of six years from the date of matriculation.

Required Core		6 s.h.
Both of these courses	are required.	
CURR29.580 EDSU28.546	Fundamentals of Curriculum Development 1,3, 9 Educational Organizations and Leadership 1,2, 9	3 s.h. 3 s.h.
Restricted Electives Select two courses, at least one of which must be taken from the Curriculum Bank.		6 s.h.
Curriculum Bank CURR29.547 CURR29.550 CURR29.590 ELEM02.536 SPED08.515 ELEM02.538 ELEM02.540 ECED23.510 PHED35.592 HLTH37.525	Curriculum Theory (*) 3 Public School Curriculum 3 Curriculum Evaluation (*) 3 Elementary School Curriculum 4 Curriculum, Instruction, and Transition in Special Education 5 Contemporary Curriculum Processes/Elementary Science 3 Contemporary Curriculum Processes/Elementary Mathematics 3 Curriculum Development in Early Childhood Programs 3 Curriculum Construction in Health & Physical Education 6 Curriculum Strategies in Substance Awareness Education (*) 6	3 s.h. 3 s.h. 3 s.h. 3 s.h. 3 s.h. 3 s.h. 3 s.h. 3 s.h. 3 s.h.
Supervision Bank EDSU28.522 EDSU28.523 READ30.540 SELN10.578	Instructional Leadership and Supervision 2 Building Organizational Capacity 2 Administration and Supervision of School Reading Programs (*) 7 Administration and Supervision of Education for the Handicapped 5	3 s.h. 3 s.h. 3 s.h. 3 s.h.

(*) These courses may have departmental pre-requisites. Further, please note that these courses may not be offered on an annual basis.

3 s.h.

Administration and Supervision of Music Programs 8

Total Semester Hours Required for the Certification 12 s.h.

1. Required for state certification

EDSU28.501

- 2. This course is offered by the Educational Leadership Department
- 3. This course is offered by the Secondary Education/Foundations of Education Department.
- 4. This course is offered by the Elementary and Early Childhood Education Department.
- 5. This course is offered by the Department of Special Education Services/Instruction.
- 6. This course is offered by the Department of Health & Exercise Science.
- 7. This course is offered by the Department of Reading

- 8. This course is offered by the Music Department9. These courses should be scheduled during the first 6 semester hours of coursework, as they constitute prerequisite for other courses.

College of Engineering

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Steven Chin, Associate Dean Henry M. Rowan Hall 856-256-5301 chin@rowan.edu

M.S., Engineering

Robi Polikar, Coordinator Henry M. Rowan Hall 856-256-5372 polikar@rowan.edu

Mariano J. Savelski, Program Advisor, Chemical Engineering Henry M. Rowan Hall 856-256-5317 savelski@rowan.edu

William T. Riddell , Program Advisor, Civil and Environmental Engineering Henry M. Rowan Hall 856-256-5348 riddell@rowan.edu

Robi Polikar, Program Advisor, Electrical and Computer Engineering Henry M. Rowan Hall 856-256-5372 polikar@rowan.edu

Ralph A. Dusseau , Program Advisor, Engineering Management Henry M. Rowan Hall 856-256-5322 dusseau@rowan.edu

Krishan K. Bhatia , Program Advisor, Mechanical Engineering Henry M. Rowan Hall 856-256-5346 bhatia@rowan.edu

The Master of Science in Engineering program is designed to respond to the changing needs of today's engineers. The program aims to aid in the technological and economic development of southern New Jersey by providing post-baccalaureate educational opportunities for a diverse student body. The program was developed with the assistance of a National Advisory Council of internationally renowned leaders in engineering education and industry.

This degree program can be tailored to provide students with an opportunity to enhance the breadth of their education or to specialize in a technical area. The Master of Science in Engineering program will enable the student to:

1. have access to higher level study leading to a graduate degree or professional development

- 2. understand higher level technical principles, beyond the scope of a bachelor's degree, that can be used to identify and solve problems
- 3. increase the breadth of understanding and application of engineering principles.

Rowan University engineering graduates are eligible to apply for the five-year BS-MS Program which permits students to complete the M.S. program in Engineering in one calendar year following the awarding of the undergraduate degree. Accepted students begin the program on June 1 after their undergraduate graduation in May. These students are eligible to apply for a graduate assistantship for the full calendar year (June-May). Additional information can be obtained from the graduate program advisor.

In addition to the University requirements for entrance into a graduate program, the following are required:

- 1. A bachelor of science in engineering from a program accredited by the Accreditation Board for Engineering and Technology (ABET) or equivalent degree
- 2. Students holding a bachelor's degree in science or mathematics disciplines can be admitted into the program provided they have completed all the course requirements listed in Group A and any 6 courses from Group B.

Group A:

Chemistry I, Physics I, Calculus I-III Computer Programming Differential Equations

Group B:

Physics II, Statics, Solid Mechanics,
Engineering Materials, Dynamics,
Thermodynamics, Fluid Mechanics,
Chemistry II, Transfer Processes,
Chemical Process Principles,
Physical Chemistry I, Organic Chemistry I,
Reaction Engineering,
Electromagnetics, Separation Processes,
Network Theory, Digital Signal Processing,
Electronics, Communication Theory, Control Systems,
Data Communication & Networking,
Operating Systems, Digital Design,
Principles of Digital Computers,
Numerical Analysis,
Partial Differential Equations

NOTE: Students should review their transcripts with the graduate advisor to develop a course plan for the degree program.

General Requirements

The Master of Science in Engineering requires 30 semester hours of graduate level courses and independent study. Each student is assigned a graduate advisor who must approve the student's program, subject to the guidelines of the University and the College of Engineering. With the assistance of the advisor, students choose courses leading to one of six areas of specialization.

Required Common Core

6-9 s.h.

(Specializations in Chemical, Civil, Electrical, Environmental, and Mechanical Engineering)

MATH01.515 Engineering Application of Analysis

Engineering Applications of Computers (or equivalent level computational course in a specific field) One business course from those listed below:

Decision Making

ECON04.541 Managerial Economics

MGT07.430 Principles of Management Science MGT06.510 Strategic Engineering Management Students may substitute for required courses by demonstrating equivalent course proficiencies determined by the graduate advisor.

All technical electives must be approved by the student's graduate advisor.

Required Common Core

12 s.h.

(Specialization in Engineering Management)

Two graduate mathematics/computer applications courses will be required from the list below (or other graduate mathematics/computer applications courses approved by the student's graduate advisor):

ENGR01.511 Engineering Optimization

MATH01.515 Engineering Applications of Analysis

MATH03.511 Operations Research I MATH03.512 Operations Research II

Two graduate business courses will be required from those listed below (or other graduate business courses approved by the student's advisor):

ENT06.506 Corporate Entrepreneurship and New Venture Development

MGT06.510 Strategic Engineering Management

M.S. with Specialization

15 s.h.

(Specializations in Chemical, Civil, Electrical, Environmental, and Mechanical Engineering) Students must complete a minimum of 15 credits in one of the following specializations:

A. Chemical Engineering

Chemical Engin	cering
ENGR01.511	Engineering Optimization
CHE06.502	Special Topics in Chemical Engineering
CHE06.506	Process Heat Transfer
CHE06.508	Membrane Process Technology
CHE06.510	Biochemical Engineering
CHE06.512	Safety in the Process Industries
CHE06.514	Transport Phenomena for Engineers
CHE06.515	Advanced Reactor Design
CHE06.516	Advanced Separation Process Technology
CHE06.518	Polymer Engineering
CHE06.520	Green Engineering Design in the Chemical Industry
CHE06.528	Fluid Flow Applications in Processing and Manufacturing
CHE06.568	Electrochemical Engineering
CHE06.570	Air Pollution Control
CHE06.572	Biomedical Process Engineering
CHE06.574	Advances in Particle Technology
CHE06.576	Bioseparation Processes
CHE06.577	Advanced Engineering Process Analysis and Experimental Design
CHE06.579	Industrial Process Pathway
CHE06.580	Optimization of Engineering Projects
CHE06.581	Advanced Process Analysis
CHE06.582	Food Engineering Systems
CHE06.583	Engineering Exercise Dynamics

B. Civil Engineering

Finite Element Analysis
Engineering Optimization
Special Topics in Civil Engineering
Engineering Estimating
Foundation Engineering
Earth Retaining Systems
Advanced Transportation Engineering
Advanced Transportation Planning, Demand, and Data Analysis
Advanced Design of Elements of Transportation Engineering
Advanced Pavement Analysis and Evaluation
Advanced Structural Analysis
Prestressed Concrete

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CEE08.585
                    Advanced Reinforced Concrete
                    Bridge Engineering
   CEE08.586
                    Masonry and Wood Structures
   CEE08.587
Up to 3 courses from Environmental or Water Resources Engineering may be selected.
C. Environmental Engineering
   ENGR01.510
                    Finite Element Analysis
   ENGR01.511
                    Engineering Optimization
                    Special Topics in Chemical Engineering
   CHE06.502
   CHE06.506
                    Process Heat Transfer
   CHE06.508
                    Membrane Process Technology
   CHE06.512
                    Safety in Process Industries
   CHE06.516
                    Advanced Separation Process Technology
   CHE06.520
                    Green Engineering Design in the Chemical Industry
   CEE08.503
                    Special Topics in Civil Engineering
                    Advanced Environmental Treatment Process Principles
   CEE08.512
                    Site Remediation Engineering
   CEE08.522
   CEE08.531
                    Solid and Hazardous Waste Management
   CEE08.532
                    Pollutant Fate and Transport
   CEE08.533
                    Integrated Solid Waste Management
                    Advanced Water Resources Engineering
   CEE08.543
                    Hydraulic Design
   CEE08.544
                    Environmental Fluid Mechanics
   CEE08.545
                    Combustion
   ME10.511
D. Electrical Engineering
                    Engineering Optimization
   ENGR01.511
   ECE09.504
                    Special Topics in Electrical Engineering
   ECE09.551
                    Digital Signal Processing
   ECE09.552
                    Digital Image Processing
                    Digital Speech Processing
   ECE09.553
                    Theory and Engineering Applications of Wavelets
   ECE09.554
                    Artificial Neural Networks
   ECE09.560
   ECE09.571
                    Instrumentation
E. Mechanical Engineering
                    Finite Element Analysis
   ENGR01.510
                    Engineering Optimization
   ENGR01.511
                    Computer Integrated Manufacturing and Automation
   ME10.501
   ME10.505
                    Special Topics in Mechanical Engineering
   ME10.511
                    Combustion
                    Rocket Propulsion
   ME10.512
                    Energy Conversion Systems
   ME10.514
   ME10.521
                    Gas Dynamics
                    Computational Fluid Dynamics
   ME10.522
                    Advanced Mechanism Design
   ME10.541
   ME10.551
                    Mechanics of Continuous Media
   ME10.552
                    Structural Acoustics
   ME10.553
                    Analytical Dynamics
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NOTE: Additional courses are being developed in each of the specializations.

Fundamentals of Crash Safety Engineering

M.S. with Specialization

ME10.575

18 s.h.

(Specialization in Engineering Management)

Students will be required to complete a minimum of 18 s.h. credits (minus 6 to 9 s.h. for thesis or project) from the following courses:

ENGR01.501 Special Topics in Engineering (6 credits maximum)

ENGR01.511	Engineering Optimization
ENGR01.599	Masters Thesis Research (9 credits maximum)
CHE06.502	Special Topics in Chemical Engineering (6 credits maximum)
CHE06.577	Advanced Engineering Process Analysis and Experimental Design
CHE06.512	Safety in the Process Industries
CHE06.580	Optimization of Engineering Projects
CHE06.581	Advanced Process Analysis
CEE08.503	Special Topics in Civil Engineering (6 credits maximum)
CEE08.504	Engineering Estimating
CEE08.522	Site Remediation Engineering
CEE08.531	Solid and Hazardouse Waste Management
CEE08.563	Advanced Transportation Planning, Demand, and Data Analysis
ECE09.504	Special Topics in Electrical Engineering (6 credits maximum)
ME10.505	Special Topics in Mechanical Engineering (6 credits maximum)

M.S. without Specialization

21-24 s.h.

All courses must be approved by the student's graduate advisor.

Thesis/Project 6-9 s.h.

Students may participate in project work, choosing one of two options:

Option I: Thesis Research/Engineering Project (6 to 9 s.h.)

Research leading to a master's thesis is carried out under the supervision of a Rowan engineering faculty member. Successful completion of the thesis includes satisfactory oral and written reports to a thesis committee. The thesis committee may include members from industry or from other colleges in the University.

A project identified by a faculty member, a student or industry and approved by the graduate program advisor can fill the Option I requirement.

Option II: Leadership of Clinic Project (maximum of 6 s.h.)

Students, under the supervision of a faculty member, may serve as advisors in clinic projects. In addition to a clinic report to the client, the graduate student must present a satisfactory written and oral report to a Rowan University Graduate Committee chaired by the clinic faculty advisor.

Students who are excused from any of these options must take additional technical electives to complete the 30 semester hours required in the program.

Total 30 s.h.

College of Fine and Performing Arts

Jon R. Cart, Dean Wilson Hall 856-256-4548 cart@rowan.edu

College of Fine and Performing Arts

As a discipline with a long and significant tradition, the arts are uniquely positioned to impart the qualities of discernment and creativity that contribute to the development of the whole person. The College of Fine and Performing Arts fosters a dynamic intellectual and creative environment that produces transcendent experiences of discovery and expression. The College nurtures authentic learning communities through rigorous degree programs that educate artists of the future and provides classroom and applied arts experiences for non-majors and enriching programs for the public.

Accreditation

Art - National Association of Schools of Art & Design Music - National Association of Schools of Music Theatre - National Association of Schools of Theatre

Programs Offered

Master of Music
Master of Arts - Music Education
Master of Arts - Theatre

M.A., Theatre

Phillip Graneto, Coordinator Edgar F. Bunce Hall 856-256-4392 graneto@rowan.edu

The Master of Arts in Theatre is designed to balance scholarly inquiry in theatre history and criticism with study of practical theatrical technique. Graduates of this program gain a stronger foundation in theatrical history and criticism, and can choose to study all aspects of theatre practice, or focus on advanced study in a specific area of interest. While intended to provide enhanced theatre study for secondary school teachers this program also provides a strong foundation for doctoral study.

Additional Admission Requirements

The student must fulfill all the admission requirements for The Graduate School. In addition, the student must have an undergraduate degree in theatre or in another discipline with sufficient undergraduate course work and/or practical experience in theatre as determined by the department. Those with deficiencies may be admitted with the provision that they complete any undergraduate theatre course work deemed necessary.

Course Requirements

Required courses		14 s.h.
THD07.501	Introduction to Graduate Study in Theatre	
THD07.502	Studies in World Theatre History and Criticism	
THD07.503	Studies in American Theatre History and Criticism	
THD07.520	Thesis Research and Writing	
Electives	C	18 s.h.
12-18 s.h. from:		
THD07.504	Seminar in Contemporary World Theatre and Drama	
THD07.506	Scenography: Process and Product	

THD07.507	Challenges in Design and Technical Production	
THD07.508	Seminar in Directing: Working With the Actor	
THD07.509	Special Problems in Directing	
THD07.510	Musical Theatre Production	
0-6 s.h. from:		
THD07.505	Independent Graduate Study in Theatre	
THD07.511	Production/Performance Project	
THD07.515	Internship in Theatre	
Total	•	32 s.h.

To receive the degree, students must complete the 32 semester hours of course work with a G.P.A. of at least 3.0. They must also have completed a thesis approved by a committee composed of the student's advisor and two other faculty designated by the department.

Master of Music

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Bryan K. Appleby-Wineberg , Coordinator Wilson Hall 856-256-4556 applebywineberg@rowan.edu
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The Master of Music program provides for intensive development of performance skills, broad knowledge of the literature in the area of specialization and greater understanding of the musical profession. Graduates of the program may continue their performance studies on the doctoral level or find employment as performers or independent teachers.

Additional Admission Requirements:

The student must fulfill all the admissions requirements of The Graduate School. In addition, it is expected that the earned undergraduate degree will be in Music. If not, the student must satisfy the admission committee, through audition and interview, that he/she possesses the appropriate background for successful completion of the program. An audition is required for all applicants. Taped auditions are permissible only if the student lives more than 300 miles from Glassboro, New Jersey. Composition students must prepare and present a portfolio of their works in lieu of an audition. All students will be required to take theory and history placement exams the first week of classes.

Course Requirements

Total

Required Core	21-27 s.h.
MUS04	Graduate Applied Music
MUS04.560	Form and Analysis (except Vocal Specialization)
OR	
MUS04.540	Jazz Arranging and Composition
MUSG05.547	Music and the Related Arts
Elective: Music Elec	tive, Interdisciplinary course or foreign language
Ensemble experience	e (suitable to specialization), Guitar or Piano Accompanying Area of Specialization:
Instrumental/Keyboa	ırd
MUS04.536	Chamber Music I
MUS04.537	Chamber Music II
MUSG06.546	Development and Interpretation of Symphonic Literature
OR	
MUSG06.542	Opera Literature
Elective	
or	
MUSG06.509	String Instrument Literature
OR	
MUSG06.505	History and Literature of Guitar and Lute
MUSG06.510	Keyboard Literature
Guitar Pedagogy: Gu	iitarists
Piano Pedagogy: Pian	nists

34-38 s.h.

Composition MUS04.570 20th Century Literature and Techniques MUS04.50x **Applied Instrument** Music Theory/Pedagogy Music Elective 34-38 s.h. Total **Jazz Studies** MUSG06.503 Jazz History CD Project MUS04.575 MUS04.541 Jazz Piano (Non-Keyboard Spec.) Music Elective Total 31-37 s.h. Vocal Opera Literature MUSG06.542 MUSG06.506 Art Song Literature MUS04.551 Piano Accompanying Italian, German or French 34-38 s.h. Conducting (Instrumental or Choral) MUSG06.511 Survey of 20th Century Band Literature or MUSG06.546 Development and Interpretation of Symphonic Literature or Choral Literature MUS04.565 Seminar in Band Conducting MUSG06.542 Opera Literature Advanced Orchestration MUS04.557 French or German Score Reading I MUS04.561 Score Reading II MUS04.562 31-38 s.h.

Note: Specialization requirements may be modified only by permission of program advisor.

Certificate of Graduate Study in Theatre Practice

Phillip Graneto, Coordinator Edgar F. Bunce Hall 856-256-4392 graneto@rowan.edu

The Certificate Program in Theatre Practice provides students with advanced study designed to increase skill in practical aspects of theatre. This program seeks to increase student knowledge across a broad spectrum of theatrical techniques, and is primarily designed to enhance the skills of secondary school teachers actively involved in theatrical production. This program will also serve the beginning theatre professional seeking to improve staging and performance skill, the avocational theatre artist wanting additional training, or professionals in other related fields wishing to enhance their careers with training in theatrical staging and performance.

Required Courses THD07.508 THD07.506	Seminar in Directing: Working with the Actor Scenography: Process and Product	6 s.h.
Elective Courses		9 s.h.
THD07.509	Special Problems in Directing	
THD07.507	Challenges in Design and Technical Production	
THD07.510	Musical Theatre Production	
THD07.515	Internship in Theatre (3-6)	
THD07.511	Production/Performance Project (3-6)	

Total 15 s.h.

Graduate courses transferred from other schools are subject to review for their acceptability and applicability to Rowan's requirements. However, no more than 6 semester hours may be applied toward credit for earning this certificate.

College of Liberal Arts and Sciences

Jay Harper, Dean Robinson Hall 856-256-4850 harper@rowan.edu

Patricia Mosto , Interim Associate Dean Robinson Hall 856-256-4853 mosto@rowan.edu

Cindy Lynch , Assistant Dean Robinson Hall 856-256-4851 lynchc@rowan.edu

The College of Liberal Arts and Sciences celebrates and affirms the humanities, natural sciences, behavioral and social sciences as the core of liberal education and the basis for professional preparation. Committed to excellence in instruction and scholarship, its disciplines promote rigorous inquiry, analytical and integrative reasoning, and decision making skills. The College offers educational experiences designed to enhance the intellectual development, current and future careers, and the overall quality of life of our students. The various curricula in the College combine the richness of liberal arts and sciences theories and traditions with applications for the workplace in the new millennium. In all of its offerings, the College plays an essential role in Rowan's mission to educate students who remain life-long learners and responsible citizens of diverse communities.

Programs Offered

The College currently offers degree programs leading to a Master of Arts in Criminal Justice, a Master of Arts in Mathematics and a Master of Arts in Mental Health Counseling and Applied Psychology.

The College of Liberal Arts and Sciences significantly supports graduate degrees in the College of Education including School Psychology, Educational Services: School Psychologist Certification and Subject Matter Teaching in Mathematics, Biological Science and Chemistry and Physics.

M.A., Criminal Justice

Wanda D. Foglia, Coordinator Wilson Hall 856-256-4399 foglia@rowan.edu

This Master's degree in Criminal Justice focuses on the growing emphasis on research evidence in the justice system. Students will learn how to use research to evaluate the effectiveness of programs and policies aimed at preventing and controlling crime. While working alongside experienced faculty, students will earn credits for conducting original research and presenting a thesis.

This degree prepares students for professional careers by providing an understanding of the causes of crime, the impact of law on society and contemporary issues in policing, courts and corrections. Upon completion of the program, graduates will be able to conduct their own studies, evaluate current research and apply knowledge and skills to compete successfully for advanced positions. Graduates can pursue administrative or research positions in federal, state, county, city, non-profit and private research institutions and agencies that focus on criminal justice issues.

Students with diverse academic backgrounds can succeed in this program, but an introductory class in criminal justice, research methods or statistics may be required if these were not completed at the undergraduate level.

The M.A. in Criminal Justice requires a total of 36 semester hours. This includes six required and four elective courses, and six credits for original research and a thesis.

Six Required Courses:

CJ09.510	Contemporary Issues in Criminal Justice
CJ09.518	Contemporary Developments in Theory
CJ09.511	Research Methods I
CJ09.512	Research Methods II
CJ09.515	Law and Society
CJ09.517	Criminal Justice Policy Analysis

Four from the following list of electives:

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CJ09.516	Administrative Law/Ethics
CJ09.519	Seminar in Criminal Justice Planning
CJ09.520	Courts and Supportive Agencies
CJ09.521	Prevention and Rehabilitation
CJ09.522	Seminar in Violence
CJ09.524	Police and Society
CJ09.525	Altruism, Cooperation, and Criminal Justice
CJ09.526	Management of Criminal Justice Organizations
CJ09.528	Seminar in Juvenile Justice and Delinquency
CJ09.529	Community Justice
CJ09.530	International Criminal Law Seminar
CJ09.532	Race, Ethnicity, Class, & Justice

Two theses courses:

CJ09.601	Master's Thesis in Criminal Justice I
CJ09.602	Master's Thesis in Criminal Justice II

M.A., Mathematics

Hieu D. Nguyen , Coordinator Robinson Hall 856-256-4844 nguyen@rowan.edu

The Master of Arts in Mathematics program will provide an opportunity for individuals to pursue advanced study in mathematics and to develop skills that can lead to success in today's technologically oriented society. Whether the goal involves applying mathematics to solve problems in business and industry, teaching in higher education, or preparing for further graduate study in mathematics or related fields, this program enables each student to pursue a course of study that is appropriate for his or her interests. The program has been of special interest to high school teachers seeking to enrich their knowledge of mathematics. The graduate course work will fill gaps and broaden and extend the undergraduate mathematics background of each student. There is sufficient flexibility in the program for students to tailor their curriculum to meet their needs.

Additional Admission Requirements

In addition to the basic requirements for graduate admissions, the applicant for the Master of Arts in Mathematics will usually be expected to have completed a minimum of 30 semester hours of mathematics at the undergraduate level, including courses in calculus through vector calculus, linear algebra, and at least one upper-level abstract proofs course such as abstract algebra or real analysis.

Graduation Requirements

In addition to the course requirements outlined below, students will pass a comprehensive examination given by the Department of Mathematics.

Course Requirements

Students will complete a minimum of 30 semester hours of graduate credits in mathematics. Twelve semester hours will provide a core experience for all graduate students, including two courses in analysis, a course in linear algebra, and a course in abstract algebra.

Students will also complete 3-9 s.h. from Bank A, 6-12 s.h. from Bank B, and a minimum of 3 s.h. in Seminar and Research. Students should enroll in the required core courses first. The Mathematics Seminar is required and should be taken after most of the course work is completed. The comprehensive exam is usually taken during the Mathematics Seminar.

Required Core		12 s.h.
MATH01.502	Linear Algebra and Matrix Theory	
MATH01.510	Real Analysis I	
MATH01.512	Complex Analysis I	
MATH01.524	Abstract Algebra I	
Bank A	· ·	3-9 s.h.
MATH01.511	Real Analysis II	
MATH01.513	Complex Analysis II	
MATH01.527	Abstract Algebra II	
Bank B	-	6-12 s.h.
MATH01.500	Foundations of Mathematics	
MATH01.503	Number Theory	
MATH01.504	Introduction to Mathematical Logic	
MATH01.505	Probability & Mathematical Statistics	
MATH01.507	Differential Geometry	
MATH01.515	Engineering Applications of Analysis	
MATH01.520	Topics-Applied Mathematics	
MATH01.521	Non-Linear Differential Equations	
MATH01.522	History of Mathematics	
MATH01.525	Modern Geometry	
MATH01.526	Point Set Topology	
MATH01.529	Numerical Analysis	
MATH03.511	Operations Research I	
MATH03.512	Operations Research II	
MATH03.550	Topics in Discrete Mathematics	
Seminar and Resear	rch	3-6 s.h.
MATH01.533	Graduate Seminar in Mathematics (required)	
MATH01.550	Independent Study	
Total		30-33 s.h.

M.A., Mental Health Counseling and Applied Psychology

James A. Haugh , Coordinator Robinson Hall 856-256-4500 x3781 haugh@rowan.edu

The focus of the program is on preparing students to become mental health counselors who are involved in the prevention and treatment of a wide variety of mental health problems. Students will receive a comprehensive background in the psychological theories, empirical research findings, counseling skills, and treatment approaches necessary for the effective delivery of services in a variety of mental health settings. The program places a particular emphasis upon developing strong skills in differential diagnosis, conceptualization, development of treatment plans and the use of empirically supported treatment approaches. Students are also required to complete at least 600 hours of supervised practice in a mental health setting.

This program prepares students to become mental health counselors and provides the course work necessary to apply for certification as a Licensed Professional Counselor (LPC) in New Jersey and certification by the National Board of Certified Counselors (NBCC). However, completion of the masters' program course work is only one part of the requirements for the LPC and NBCC certifications. Specifically, the masters program consists of 48 credit hours with 12 hours of post-masters' credits available. Combining the 48 credits within the masters program with the 12 credits of post-masters' certification provides the 60 credits of graduate work required for the LPC and NBCC certification.

In addition to meeting the University requirements, this program requires completion of 12 s.h. of undergraduate psychology including at least one statistics and research methods course and one course in abnormal psychology. Some experience within a mental health setting is also strongly encouraged (e.g., field experience, volunteer work, employment).

Masters Program Coursework

PSY01.570	Research Methodology and Statistics in Counseling Psychology	
PSY01.610	Career and Lifestyle Development	
PSY01.611	Counseling and Psychotherapy	
PSY01.612	Group Counseling and Psychotherapy	
PSY01.620	Legal and Ethical Issues in Counseling	
PSY01.621	Psychopathology	
PSY01.650	Practicum in Counseling (3 credits)	
PSY01.650	Practicum in Counseling (6 credits)	
PSY01.685	Masters Thesis in Psychology I (3 credits)	
PSY01.687	Masters Thesis in Psychology II (3 credits)	
PSY05.501	Intervention Approaches in Psychology and Human Services	
PSY05.610	Social and Cultural Diversity	
PSY06.533	Tests and Measurements	
PSY09.560	Lifespan Development	
PSY09.595	Introduction to Counseling	
Total		48 s.h.

Certificate of Advanced Graduate Study in Mental Health Counseling

James A. Haugh , Coordinator Robinson Hall 856-256-4500 x3781 haugh@rowan.edu

This certificate program consists of 12 credit hours of advanced graduate study. The graduate certificate program is intended for individuals who have already completed a master's degree in counseling psychology and need additional graduate course work in order to qualify for state licensure and national certification. Additionally, the program is available for mental health professionals in the community seeking to enhance their professional development. The courses within the certificate are intended to be advanced courses within the profession that will allow students to improve their practical knowledge and skills. Completion of this program does not qualify one to conduct counseling or call themselves a counselor, as these practices and terms are regulated by the State of New Jersey and most other states. To obtain information about licensure, you should contact the state licensing board in the state where you are interested in practicing.

In addition to the minimum requirements of the University for admissions, this program requires a master's degree from an accredited institution in counseling psychology or a closely related field. In addition, applicants are required to submit their graduate transcripts and one letter of recommendation. Students may complete any of the four courses listed below:

PSY01.630	Family Systems and Family Therapy
PSY03.518	Psychological Evaluation and Counseling Service to Combat Alcohol and Drug
PSY03.620	Cognitive Behavioral Treatment Strategies
PSY03.624	Psychopathology of Childhood and Adolescence
PSY05.502	Fundamentals of Drug and Alcohol Abuse and Dependency Abuse
PSY10.610	Psychopharmacology

Total 12 s.h.

Certificate of Graduate Study in History/World History

Scott Morschauser, Advisor Robinson Hall 856-256-4500 x3993 morschauser@rowan.edu

The Certificate of Graduate Study (COGS) in History and World History provides an opportunity for elementary and secondary school teachers to study history on a graduate level for tenure, recertification, promotion, or professional development. Students enrolled in the College of Education's Master's of Education (M.Ed) in Standards-based Practice may also pursue a COGS as part of their M.Ed. The History Department will offer courses in American, Latin American, European, Russia, Asian, African, and/or Middle Eastern history; courses will familiarize students with relevant primary and scholarly sources and up to date historical interpretations and methodologies in the field. This program requires students to take 15 graduate credits in history. Students interested in earning a COGS in World History must take 12 graduate credits on areas of the world outside of the United States.

Certificate of Graduate Study in Middle School Mathematics Education

Janet Caldwell, Coordinator Robinson Hall 856-256-4500 x3871 caldwell@rowan.edu

The Certificate of Graduate Study in Middles School Mathematics Education provides an opportunity for NJ middle grades mathematics teachers to increase their mathematical knowledge and related pedagogical skills. The program is designed for those with NJ teaching certificates in disciplines other than mathematics and closely-related fields, who are teaching mathematics in the middle grades or preparing for such an assignment. The program provides teachers with a broad understanding of the conceptual foundation of school mathematics while making connections to the mathematics that they teach.

Students must complete a minimum of 18 semester hours of graduate credits in classes taught both by the College of Liberal Arts & Science's Mathematics Department (12 semester hours) and the College of Education (6 semester hours).

Mathematics core 12 s.h.

MATH01.523 Selected Topics in Mathematics

MATH01.528 Mathematical Modeling & Algebraic Reasoning

MATH03.600 Topics in Elementary Mathematics (Two different topics are required, such as

Geometrical Reasoning and Data Analysis/Discrete Math)

Mathematics Education 6 s.h.

ELEM02.552 Research in Children's Math Learning

SMED33.502 Processes and Principles in School Mathematics

Total 18 s.h.

Certificate of Graduate Study in Secondary Mathematics

Eric Milou , Coordinator Robinson Hall 856-256-4500 x3876 milou@rowan.edu The Certificate of Graduate Study in Secondary Mathematics will provide an opportunity for mathematics teachers to pursue advanced study in both mathematics and mathematics education. Goals will include: increasing teachers' mathematics content knowledge, increasing teachers' pedagogical knowledge, and increasing teachers' familiarity with current and historical research in mathematics education.

Additional Admission Requirements:

The applicant for the COGS in Secondary Mathematics will be expected to have completed a minimum of 30 semester hours at the undergraduate level of mathematics (or have a secondary mathematics teaching certificate). Enrollment in all COGS require eligibility for graduate study (i.e. attainment of a bachelor's degree). Matriculation must take place by the completion of 6 semester hours.

Students will complete a minimum of 15 semester hours of graduate credits in classes taught both by the College of Liberal Arts & Science's Mathematics Department (9 semester hours) and the College of Education's Secondary Education Department (6 semester hours).

Mathematics Core 6 s.h.

Select two courses from:

Foundations of Mathematics
Linear Algebra & Matrix Theory
History of Mathematics
Number Theory
Topics in Discrete Mathematics

Mathematics Requirement

3 s.h.

MATH01.561 School Mathematics from an Advanced Standpoint

Mathematics Education

6 s.h.

SMED33.502	Processes and Principles of School Mathematics
SMED33.600	Problems in Math Ed I

Total 15 s.h.

Substance Awareness Coordinator Certification

Hector M. Rios, Advisor Education Hall 856-256-4500 x3668 rios@rowan.edu

A state law passed in January 1988 requires school districts to set up substance abuse prevention, intervention, and treatment referral programs. The legislation also mandates that substance awareness coordinators be designated to serve school districts in all areas of the state. These individuals must:

- 1. assist with the in-service training of school staff concerning substance abuse issues and the district program to combat substance abuse
- 2. serve as an information resource for substance abuse curriculum development and instruction
- 3. help districts revise and implement substance abuse policies and procedures
- 4. provide counseling services to pupils regarding substance abuse problems
- 5. and, where necessary, cooperate with juvenile justice officials in offering substance abuse treatment services

Admission to the Program

In addition to the minimum requirements of the University for admission, this program requires a bachelor's degree from an accredited institution in health, psychology, human services, social work, or a field leading to teacher certification.

Students may complete only two courses in this program prior to acceptance as a fully matriculated student.

Course Requirements

In order to satisfy the academic requirements for State Substance Awareness Coordinator (SAC) certification, all of the following courses must be completed at Rowan University.

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PSY05.502	Fundamentals of Drug and Alcohol Abuse and Dependency
PSY09.512	Developmental Psychology of Drug and Alcohol Abuse
PSY03.518	Psychological Evaluation and Counseling Services to Combat Alcohol and Drug
	Abuse
HLTH37.525	Curriculum Strategies in Substance Awareness

Total 12 s.h.

Curriculum Description

The curriculum (above) for the SAC certification program are courses taught by faculty from the departments of Health/Exercise Science and Psychology.

The twelve semester hours are designed to be completed over two consecutive semesters. Students who take longer than one academic year to complete the certificate program must follow the specific course sequence prescribed by course prerequisites. Students have a maximum of four years from the date of matriculation to complete the program.

A state-approved school district-based residency is also required before the award of the SAC certificate. Details regarding this 300 hour requirement as well as other State requirements are available from the New Jersey Department of Education.

ACC 03.500: Managerial Accounting

3 s.h.

Prerequisites: BUS 01518

This course takes a managerial approach with emphasis on decision-making. It includes financial statement analysis and topics on determination of cost behavior using regression analysis and learning curves, activity based costing, cost allocation, performance measurement, and the decision-making process.

ACC 03.502: Advanced Managerial Accounting

Taking a managerial approach, this course examines decision making by management. It includes topics on activity-based cost allocation, determination of cost behavior using regression analysis and learning curves, cost allocation, the decision-making process and decision models under uncertainty, performance measurement and executive compensation.

ACC 03.503: Corporate and Partnership Taxes

This course presents an overview of the Federal Tax System relating to various business forms including corporations, partnerships and exempt entities. Students will examine major tax legislation and judicial precedents with a focus on current and pending legislation. Topics will include corporate organization, accumulations and liquidation, partnership formation, S corporations, exempt organizations, estate and gift taxation, including trusts. Research and preparation software will be used throughout the course.

ACC 03.504: Seminar in Auditing

3 s.h.

Students will develop an understanding of the judgmental issues faced in providing audit and assurance services. Further emphasis will be the application of underlying accounting concepts to solve these judgmental issues. In addition, an emphasis will be on the auditor's decision-making process and the nature and amount of evidence the auditor should accumulate given engagement circumstances.

ACC 03.505: Seminar in Business Law

3 s.h.

In this course, students study the legal aspects of sales, liability, secured transactions, commercial paper and consumer credit. In addition, the course will emphasize legal analysis and research.

ACC 03.506: Advanced Domestic & International Accounting

3 s.h.

This financial accounting course focuses on the accounting for corporate mergers and acquisitions, and the accounting and financial reporting requirements of corporations with both domestic and international subsidiaries. It includes coverage of international financial reporting comparability.

ACC 03.507: Government and Non-for-Profit Accounting

This financial accounting course focuses on the contemporary accounting issues of governmental and non-profit organizations. It includes: financial reporting, budgeting, forecasting and strategic planning in the environments of local, state, federal government, colleges and universities, hospitals, and voluntary health and welfare organizations.

ACC 03.508: Seminar and Research in Accounting

This seminar provides the opportunity for students to improve their professional research skills and advance their own scholarly development in the accounting field. Taken after five graduate accounting and busienss law courses, it provides a synthesis of prior learning. Students will work collaboratively with the professor and other enrolled students to develop and complete a major research project and other assignments. Topics may include financial, not-for-profit, managerial, auditing, or tax accounting.

ACC 03.509: Intermediate Financial Accounting

3 s.h.

This course will include a review of the accounting process, the conceptual framework, the preparation of financial statements and specific principles related to the accounting for current assets, property, plant and equipment, liabilities, leases, income taxes, pensions, and shareholders' equity. Research and empirical evidence will be emphasized. This course is restricted to students who have not taken Intermediate Accounting I and II at the undergraduate level.

ACC 03.510: Financial Statement Analysis

Prerequisites: ACC 03500 or ACC 03311
This course will take an expanded study of financial statement analysis from the point of view of the primary users of financial statements: equity and credit analysts. The analysis and use of financial statements will also emphasize the properties of numbers derived from these statements, and the features of the environment in which key decisions are made in using financial statement information. Research and empirical evidence will be emphasized.

ARHS 03.525: Graduate Problems in Art History

3 s.h.

Problems in Art History at the graduate level is an intensive investigation of a specific movement, style, medium, or major artist. Content will change each time the course is offered. Check the Schedule of Classes to determine specific area of study.

ART 02.523: Graduate Painting I

3 s.h.

Advanced graduate work in concepts, techniques and media appropriate to contemporary painting and individual expression.

ART 02.524: Graduate Painting II

3 s.h.

Further advanced work in painting.

ART 02.526: Graduate Sculpture I

3 s.h.

Advanced graduate work in concepts, techniques and media appropriate to contemporary sculpture and individual expression.

ART 02.527: Graduate Sculpture II

3 s.h.

Further advanced work in sculpture.

ART 02.532: Graduate Printmaking I

3 s.h.

Advanced graduate work in concepts, techniques and media appropriate to contemporary printmaking and individual expression. Permission of the instructor is strongly advised.

ART 02.533: Graduate Printmaking II

3 s.h.

Further advanced work in printmaking.

ART 02.535: Advanced Graduate Problems in Art

2 to 6 s.h.

Extensive in-depth work at the third or fourth graduate course level in a studies, art education or art history area arranged with permission of the appropriate professor, the graduate advisor and department chairperson.

ART 09.520: Jewelry I

3 s.h

Emphasis is on original metal design and construction, involving techniques and processes in the designing, forming and finishing of utilitarian and decorative hand-wrought products.

ART 09.521: Jewelry II

3 s.h.

Further advanced work. This course may not be offered annually.

ART 09.524: Ceramics I

3 s.h.

An intensified exploration of throwing, glazing, and firing processes as related to aesthetic consideration in contemporary art forms and past cultures. Permission of the instructor is strongly advised.

ART 09.525: Ceramics II

3 s.h.

Further advanced work. This course may not be offered annually.

ART 11.540: Still and Video Photography for Educators

3 s.h.

Prerequisites: SMED 33574 and SMED 33580

This course is designed to help the in-service educator accomplish two goals: (1) to plan and produce still and video photography, both analog and digital, so that they can (2) teach their students to take and make still and video photography part of their ongoing learning activities. In addition, the graduate student will learn a variety of ways to integrate the language arts and the visual arts as a means of self expression while actively creating still and video photography, an electronic portfolio which can be used as an end of year assessment, and for both the graduate student and their students.

ASTR 17.520: Selected Topics in Earth and Space Science

3 s.h.

A three-part course: (A) the importance of astronomy to society, (B) the climates of the Earth and the factors controlling them, (C) forces operating within and upon the surface of Earth. This course may not be offered annually.

BIOL 01.500: Evolutionary Theory

3 s.h.

Historical development of the principles of organic evolution; modern application of genetics and cytology to the understanding of the nature of this process. This course may not be offered annually.

BIOL 10.587: Animal Physiology

3 s.h

A study of physiological control systems and vegetative activities of animals in various invertebrate and vertebrate phyla relative to cellular regulation, osmo-regulation, ionic regulation, regulation of pH, blood flow regulation, nutritive requirements, feeding, digestion, absorption, body fluids, respiration, and intermediary metabolism. This course may not be offered annually.

BIOL 14.540: Introduction to Biochemistry I

3 s.h.

Prerequisites: BIOL 01100 and BIOL 01101 and CHEM 07201

This course is concerned with the chemical compounds and chemical reactions which are of paramount importance to the functioning of biological systems. The major metabolic pathways for energy production and biosynthesis are examined. The requirements include a research paper or individual project. Admission to the course is at the discretion of the Graduate Advisor. This course may not be offered annually.

BIOL 20.525: Environmental Toxicology

4 s.h.

This course covers topics related to the fate and impact of pollutants in the environment. This course deals with laws and regulations regarding pollutant discharges, the kinds of chemical pollutants, the transport and distribution of such chemicals into the environment, and their effect on population and communities as well as individual organisms. The acute and chronic effect of these pollutants, the principles of environmental monitoring and assessment, and special examples and case studies will be analyzed. Hands-on research will be carried out in toxicological testing during the semester.

BIOL 20.594: Advanced Ecology

3 s.h.

The relationships of plants and animals to measurable components of their physical, chemical and biotic environments; ecology, environmental concepts; physiochemical aspects of the atmosphere, soils and bodies of water, the species and interspecific relationships, community and succession, productivity. Lecture and laboratory. This course may not be offered annually.

BIOL 20.595: Pine Barrens Ecology

3 s.h.

Prerequisites: BIOL 20310 or BIOL 20594

Field-laboratory experience investigating the unique Pine Barrens of New Jersey to understand what it is, how it became what it is and conditions which tend to maintain it.

BIOL 22.598: Human Genetics

4 s.h

Patterns of transmission of single gene traits, human biochemical genetics, autosomal and sex-linked chromosomal anomalies, immunogenetics and blood groups, screening for genetic diseases and prenatal diagnosis. Lecture, laboratory sessions or the equivalent. This course may not be offered annually.

BIOL 27.503: Concepts of Comparative Embryology

4 s.h.

This graduate laboratory course focuses on the morphological and physiologic processes involved in embryogenesis of animals. The course includes the development of echinoderms, amphibians, birds, and mammals. Considerable emphasis will be placed on organogenesis and the development of organ systems.

BIOL 27.597: General Embryology of Animals

3 s.h.

This laboratory course focuses on morphologic and physiologic processes involved in the development of embryos from fertilization and the 1-cell stage to the newborn/newly-hatched. The course includes the development of invertebrates, amphibians, birds, and mammals.

BLED 40.505: Issues and Innovations in Foreign Language Education

3 s.h.

This course is designed for educators responsible for planning and supervising the foreign language curriculum K-12. The course deals with the issues of sequential curriculum development in foreign languages in keeping with state and national standards. Emphasis is placed on innovations resulting from implications of research in second language acquisition, the interrelationship of language and culture and models for foreign language curriculum development. Topics include modes of communication, aspects of culture, scope and sequence of content, and curriculum evaluation.

BLED 40.510: Issues of Language and Cultural Diversity in ESL/Bilingual Programs 3

This course focuses on the issues involved in the schooling of students of first languages other than English. Emphasis is placed on awareness of and sensitivity to the diverse values and behaviors of students learning English as a second language, and on classroom strategies to accommodate this diversity in a positive manner. Usually taught in Spring semester.

BLED 40.512: Linguistics for Teaching Second Languages

3 s.h.

This course deals with the components and characteristics of language as they impact on the acquisition of both first and second languages. A study of the language systems of English will provide a basis for the study of second language acquisition, and comparisons and contrasts will be made with English and representative languages.

BLED 40.513: Extending Foreign Language Instruction K-12

3 s.h

This course is designed for the certified foreign language teacher, as well as for candidates for conditional certification in foreign (world) language education as approved by the New Jersey State Department of Education. Emphasis is placed on contemporary methods and materials appropriate to age/grade levels in the elementary, middle, and secondary school, in keeping with state and national standards. A variety of activities integrating language and culture will be demonstrated and practiced. Topics include the use of thematic units, alternative assessment techniques, and the application of technology. Participants are encouraged to make practical application to their own teaching situations.

BLED 40.515: Language, Culture and Communication

3 s.h.

Prerequisites: BLED 40512

This course examines the ways in which people communicate both verbally and non-verbally in social interaction. The interdependence of language and culture in communication is a major focus. Emphasis is placed on the importance of successful intercultural communication, with practical application to second language teachers.

BLED 40.517: Modern Developments in ESL/Bilingual Education

3 s.h.

Prerequisites: BLED 40510 and BLED 40515

This course examines the implications of current theoretical positions regarding second language acquisition for program development and instruction. The course deals with a range of methodologies, the selection of content, instructional techniques, the selection and use of materials, and the development of alternative assessment measures.

BLED 40.520: Teaching ESL: Process and Practice

3 s.h.

Prerequisites: BLED 40517

This course concentrates on the development and presentation of language lessons which demonstrate the relationship of theory and practice. Classroom observations and experiences constitute an important part of this course. Micro teaching and peer coaching will be utilized to provide a basis for reflective teaching. This course is offered in alternate years to BLED40.522.

BLED 40.521: Teaching Bilingual/Bicultural Education: Process and Practice

3 s.h.

3 s.h.

Prerequisites: BLED 40517

The course examines current programs and available materials in bilingual education appropriate to a range of content areas and grade levels. Microteaching and peer coaching are practiced to provide a basis for reflective teaching. The course is open to candidaes who possess or are eligible for a standard or provisional New Jersey instructional certificate. State-approved examinations in oral and written English and the target language are required for certification.

BLED 40.522: Integrating Language and Content in the ESL/Bilingual Education Classroom

Prerequisites: BLED 40517

This course examines current programs and available materials in bilingual education appropriate to a range of content areas and grade levels. Field observations and experiences constitute an important part of the course. Micro teaching and peer coaching will be utilized to provide a basis for reflective teaching. This course is offered in alternate years to BLED40.520.

BUS 01.518: Integrative Managerial Skills

3 s.h.

This course serves as a keystone course for the M.B.A. program. Key skills, tools, and issues necessary for further study will be developed and extended. Course topics and techniques include information systems, financial ratios, behavioral, presentation, team building, quantitative analysis, critical thinking, written communication, legal and ethical issues, and library research including electronic data bases and internet research.

BUS 01.521: Integrative M.B.A. Seminar

3 s.h.

Prerequisites: MGT 07500 and MGT 06500 and MGT 06502 and MKT 09500 and (CS 02500 or MIS 02500) and BUS 01518 and FIN 04500

A capstone course for the M.B.A. program, it aids students in reinforcing and integrating core courses by studying strategic audits and process analysis techniques. Student projects will use teams to analyze how organizations use people, operational management, information systems and financial measurements to achieve strategic and operational effectiveness.

BUS 01.600: Special Topics in Business Administration

3 to 6 s.h.

Students will study advanced level topics in specific disciplines as identified through participation in indepth seminars on topics to be determined by faculty in consultation with the Graduate Committee of the College of Business. Students will complete research or projects on specialized topics in various disciplines in Business Administration. Students may take each topic only once. This course may not be offered annually.

CEE 08.503: Special Topics Civil Engineering

3 s.h.

Civil engineering topics related to recent developments in industrial practice or engineering research. May be repeated.

CEE 08.504: Engineering Estimating

3 s.h.

The course deals with the development of engineering estimates for civil engineering projects and project components including labor, materials and equipment. Total project costs including direct and indirect costs, field and home-office costs, and contingency are covered. Also covered are the various types of civil engineering estimates including piles and cofferdams, wellpoints and earthdrilling, water and sewer systems, road and highway pavements, concrete buildings and bridges, and steel buildings and bridges. The course includes appropriate computer applications.

CEE 08.512: Advanced Environmental Treatment Process Principles

3 s.h

Topics in Fundamentals of Physicochemical Processes in Environmental Engineering such as Adsorption, Coagulation/Flocculation, Filtration, Sedimentation, Disinfection, Ion Exchange, Chemical Oxidation, Corrosion and Membranes.

CEE 08.522: Site Remediation Engineering

3 s.h.

Topics in site remediation engineering, including site characterization, site safety, modeling site conditions, conducting feasibility studies, and designing remediation systems, such as pump and treat, stabilization, containment, treatment walls, natural attenuation, enhanced bioremediation, phytoremediation, oxidation, soil flushing, and soil vapor extraction.

CEE 08.531: Solid and Hazardous Waste Management

3 s.h.

The course deals with solid and hazardous waste sources, regulations and management; engineering principles, treatment and disposal methods; design of landfills; recycling; toxicology principles; and risk assessment. The course includes appropriate laboratory experiments and computer applications.

CEE 08.532: Pollutant Fate and Transport

3 s.h

Topics include Characteristics and Properties of Organic Pollutants, Aquatic Chemistry, Transport Mechanisms for Pollutants (Adsorption, Retardation, Attenuation, Volatilization, Biodegradation), Groundwater (Properties, Flow Equations, Transport in Porous Media) and Mathematical Modeling.

CEE 08.533: Integrated Solid Waste Management

3 s.h.

The course deals with the theories and principles of integrated solid waste management as applied to real-world analysis and design problems. The course covers the design of facilities and programs, such as landfills, composting facilities, transfer stations, collection programs, and drop-off centers, and planning of integrated systems for municipalities and counties. Computer applications are included.

CEE 08.543: Advanced Water Resources Engineering

3 s.h.

Prerequisites: CEE 08342

This course covers advanced topics in water resources engineering including the analysis and design of advanced hydraulic structures, hydraulic similitude and modeling, wave action, and advanced hydrology.

CEE 08.544: Hydraulic Design

3 s.h.

Prerequisites: CEE 08342

The course focuses on the design and analysis of structures for controlling and conveying water in both the built and natural environment. Topics covered vary from year to year based upon instructor and student interests. Past topics have included open channel flow design, dams and spillways, sanitary and storm sewers, culverts, pumping stations, turbomachinery, and hydraulic similitude and modeling.

CEE 08.545: Environmental Fluid Mechanics

3 s.h.

Prerequisites: CEE 08342

The course focuses on the engineering study of fluid flow in the environment. Advanced topics in water resources engineering are explored, with content varying based upon instructor and student interests. Past topics have included open channel flow, hydrology, fish passage at hydraulic structures, sediment transport, mixing in natural water bodies, and water quality modeling.

CEE 08.552: Foundation Engineering

3 s.h.

Prerequisites: CEE 08351

The fundamental theme of the course is the analysis and design of structural building and bridge foundations based on advanced principles of soil mechanics. These advanced principles of soil mechanics include compressibility, shear strength, and bearing capacity. The types of foundations analyzed and designed include spread footings and pile foundations. The course includes appropriate computer applications.

CEE 08.553: Earth Retaining Systems

3 s.h.

Prerequisites: CEE 08553

The fundamental theme of the course is earth retaining systems including advanced principles of soil mechanics and analysis and design of earth retaining systems. The advanced principles of soil mechanics include lateral soil pressure and slope stability. The analysis and design of earth retaining systems includes slopes, embankments, retaining walls and other systems. The course includes appropriate laboratory experiments and computer applications.

CEE 08.562: Advanced Transportation Engineering

3 s.h.

Prerequisites: CEE 08461

The fundamental theme of the course is the study of advanced topics in transportation engineering including advanced highway engineering and advanced mass transit systems. These advanced topics include the impact and interaction of sociological, economic, geographic and environmental factors on transportation systems. The course includes appropriate field measurements and computer applications.

CEE 08.563: Advanced Pavement Analysis and Evaluation

3 s.h.

Prerequisites: CEE 08461

The fundamental theme of the course is the engineering study of pavement response. The topics covered include non-linear behavior of pavement materials and interaction between tires and pavements. Modeling and analysis of pavement behavior will also be taught, with content varying based upon instructor and student interests. The course includes field experiments and computer applications.

CEE 08.564: Advanced Design of Elements of Transportation Engineering

3 s.h.

The fundamental theme of the course is the study of advanced topics in highway design and analysis, signalized and un-signalized intersection design, forecast travel demand modeling and transportation planning. Topics covered vary from year to year based upon instructor and student interests. This course also includes field measurements and computer applications.

CEE 08.573: Advanced Structural Analysis

3 s.h.

Prerequisites: CEE 08382

The course deals with the matrix method of structural analysis. The topics covered include structural members, member joints, member end conditions, local and global coordinate systems, coordinate transformation, member structural matrices, global structural matrices, condensation of global structural matrices, static structural analysis, and dynamic structural analysis. The course will include appropriate computer applications.

CEE 08.584: Prestressed Concrete

3 s.h.

Prerequisites: CEE 08481

The course focuses on analysis and design of prestressed concrete members for highway bridges, parking structures, office buildings and industrial buildings. Topics covered include prestressed construction applications and materials, flexural analysis of pretensioned and post-tensioning beams, bending and shear design, loss of prestress, deflection and composite beams. The course includes appropriate computer applications.

CEE 08.585: Advanced Reinforced Concrete

3 s.h.

Prerequisites: CEE 08481

The emphasis is the design of advanced reinforced concrete structures and structural components not covered in an introductory reinforced concrete design course. Topics include columns in bending, slender columns, slab systems, and other advanced topics in reinforced concrete.

CEE 08.586: Bridge Engineering

3 s.h.

Prerequisites: CEE 08382 and CEE 08383 and CEE 08481

The analysis and design of modern steel highway bridges utilizing the bridge code of the American Association of State Highway and Transportation Officials is emphasized. The topics covered include bridge loads, load combinations, design methods, reinforced concrete deck slabs, steel wide-flange stringer bridges, steel composite wide-flange stringer bridges, continuous bridge spans, steel composite plate-girder bridges, elastomeric bearing connections, steel fixed bridge connections, and steel roller bridge connections. The course includes appropriate computer applications.

CEE 08.587: Masonry and Wood Structures

3 s.h.

This course provides the fundamentals of structural design using masonry and wood. Topics include material properties, flexure, axial loading, lateral load resisting systems, and connections. This course builds upon previously acquired fundamental concepts of structural analysis and design. A design project is required.

CHE 06.502: Special Topics in Chemical Engineering

3 to 6 s.l

This course presents chemical engineering topics related to recent developments in industrial practice or research. May be repeated.

CHE 06.506: Process Heat Transfer

3 s.h.

Application of heat transfer to the process industries. Mechanisms of heat transfer; conduction, convection and radiation; Selection and design of heat exchanging equipment, e.g., double-pipe, shell and tube, plate and frame, extended fin heat exchangers. Design parameters for heat transfer with phase change.

CHE 06.508: Membrane Process Technology

3 s.h.

Principles of membrane processes: reverse osmosis, ultrafiltration, microfiltration, electrodialysis, pervaporation, gas permeation, and their application to traditional and emerging fields. Membrane materials and structure. Mass transfer and design aspects for both liquid and gas separation systems.

CHE 06.510: Biochemical Engineering

3 c h

The fundamentals and engineering of bioprocess engineering with emphasis on applying biotechnology to industrial processes. Essential aspects of biochemistry, microbiology and kinetics. Discussion of bioreactor engineering, and recovery and purification processes. Processing applications of engineering kinetics and enzyme technology. Laboratory experiments and demonstrations will be integrated throughout the course.

CHE 06.512: Safety in the Process Industries

3 s.h

This course presents the basic principles, guidelines, and calculations necessary for the safe design and operation of chemical plants and related manufacturing facilities. Topics include: toxics and human exposure, fires and explosions, vessel relief systems, hazard identification and risk assessment, source and dispersion models. Accident investigation is discussed along with a review of actual case histories.

CHE 06.514: Transport Phenomena for Engineers

3 s.h

This course will present the analogies among heat, mass, and momentum transfer. Governing differential equations and their uses in steady-state and unsteady-state systems will be described. Applications will be discussed for mass transfer coupled with heat transfer and/or chemical reaction. Numerical methods and computer applications will be integrated throughout the course.

CHE 06.515: Advanced Reactor Design

3 s.h.

Overview of chemical reaction types and ideal reactors. Catalysis and catalytic reactors; analogies for real reactors; fluid flow and heat and mass transfer effects on chemical reactions and reactor design; numerical analyses and simulation of reacting systems; applications in the chemical industry.

CHE 06.516: Advanced Separation Process Technology

3 s.h.

This course describes advanced separation processes such as: crystallization and precipitation; adsorption, chromatography and ion exchange; reverse osmosis, ultrafiltration, gas permeation and pervaporation. Commercial system design parameters and laboratory demonstrations will be included. An overview of other novel separation processes will be done.

CHE 06.518: Polymer Engineering

3 s.h

This course provides an introduction to the various aspects of polymer engineering starting with basic polymer properties, structure and function. The major topics covered are the formation of polymer systems and manufacturing techniques. Fabrication processes topics include coating, extrusion and foams. The production of thin-films and membranes will focus on stretching, phase inversion, and hollow fiber spinning. Students will study application of polymeric materials engineering to various industries.

CHE 06.520: Green Engineering Design in the Chemical Industry

3 s.h.

This course evaluates process design techniques to minimize waste and by-products in the processing and manufacturing industries. Topics include: mass and heat recycling processes; technologies for process steam renovation, material reuse and recycling methods. Case studies of industrial applications are utilized.

CHE 06.528: Fluid Flow Applications in Processing and Manufacturing

3 s.h

This course will cover the foundation principles of applied fluid mechanics with an emphasis on industrial applications. Topics in mixing, multi-phase fluid flow and processing, and fluidization will be covered. Key technologies from chemical, civil, and mechanical engineering applications will be used to illustrate concepts. The course will provide a strong background in the application of fluid mechanics principles to industrial processing and manufacturing operations.

CHE 06.568: Electrochemical Engineering

3 s.h.

This course will focus on the fundamental principles of process electrochemistry. Basic principles of thermodynamics, kinetics and mass transfer as applied to electrochemical systems will be presented. Modeling of electrochemical systems and application of electrochemical principles to corroding systems will be conducted by the students. Engineering case studies of commercial applications in energy conversion and storage and electrolytic processes will be presented.

CHE 06.570: Air Pollution Control

 $3 \, \text{s.h.}$

This course introduces students to air pollution control theory. Students design air pollution control processes and specify equipment related to the control of particulate, gaseous, and toxic air emissions. The chemistry required for pollution control process design is presented. The environmental impacts due both to controlling and not controlling emissions are considered. Students design control equipment, specify and troubleshoot control systems and predict the impacts for each major type of control system.

CHE 06.572: Biomedical Process Engineering

3 s.h

This course introduces students to applications of chemical engineering fundamentals to biomedical systems. Students analyze and design biomedical processes. The basic biochemistry and physiology required for understanding of biomedical systems are presented. Advanced principles of mass transfer, heat transfer, fluid flow and chemical reaction are used to analyze or design drug delivery systems, pharmacokinetic models, the circulatory system, transport across cell membranes, and human and artificial organs. Laboratory experiments and demonstrations will be integrated throughout the course.

CHE 06.574: Advances in Particle Technology

3 s.h.

This course introduces students to application of chemical engineering fundamentals in the particle processing industry. Processes involving particles are an important part of the chemical process industry. These processes range from fluidized catalytic cracking of oils to coating processes in the pharmaceutical industry. Students will use advanced principles in fluid flow, heat and mass transport, and kinetics to analyze and design particle manufacturing processes and chemical industry processes involving particles. Novel processes will also be discussed and analyzed.

CHE 06.576: Bioseparation Processes

3 s.h.

This course will focus on the fundamental principles of bioseparation processes. The characteristics of bioseparations will be presented as applied to downstream processing in the pharmaceutical/biotechnology and related industries. Theory and design of filtration, microfiltration, centrifugation, cell disruption, extraction, adsorption, chromatography, precipitation, ultrafiltration, crystallization, and drying will be presented as applied to biosystems. Commercial design considerations, such as sanitary design/sterilization, water quality, solvent recovery, waste disposal and biosafety, will be reviewed.

CHE 06.577: Advanced Engineering Process Analysis and Experiemental Design

3 s.h

This course exposes students to advanced engineering applications of process analysis and experimental design. The course includes a multidisciplinary approach with theoretical background to support the course applications. Students will use advanced statistical and optimization techniques for process analysis and experimental design, process monitoring and quality control presently used in industry. The analysis and experimental design techniques presented in this course serve to optimize complex industrially relevant processes and make engineering design and calculations more effective. Applications from a wide range of industries will be presented including pharmaceutical, food, bulk and specialty chemicals, and petroleum industry applications.

CHE 06.579: Industrial Process Pathways

3 s.h.

This course will study chemical reaction mechanisms that play crucial roles in the chemical industry. Fundamentals of reaction thermochemistry and reaction kinetics will be discussed. Students will learn to construct mechanistic models of complex, multi-reaction systems, and to apply these models to the solution of practical problems such as yield optimization.

CHE 06.580: Optimization of Engineering Projects

3 s.h.

This course will overview strategies for planning and directing long-term engineering projects. Topics will include project organization, project scheduling, allocation of resources, project optimization and financial analyses.

CHE 06.581: Advanced Process Analysis

3 s.h.

This course will examine advanced topics in process analysis including: process consistency, identification of optimal process based on economic analysis, process documentation including flowsheets and budgets, replacement analysis for processing equipment, and rationing limited resources between competing projects.

CHE 06.582: Food Engineering Systems

3 s.h.

This course introduces students to the application of fundamental and advanced chemical engineering fundamentals applied to food processing systems. Students analyze and design food engineering processes. The basic and advanced chemistry and biochemistry required for an in-depth understanding of food systems is presented. Basic principles of mass transfer, heat transfer, fluid flow, chemical reaction, process control, and mixing are used to analyze or design food production systems. Computer simulations will be used for the design of food processing systems. Laboratory experiments and demonstrations will be integrated throughout the course.

CHE 06.583: Engineering Exercise Dynamics

4 c h

This course introduces students to chemical engineering fundamentals applied to physiologic systems, primarily during exercise. The basic biochemistry and physiology required for understanding these systems is presented. Basic principles of mass transfer, heat transfer, fluid flow, thermodynamics, and chemical reaction are used to analyze the human metabolic system, respiratory system, cardiovascular system, and thermal system. The interrelationships of these systems will be investigated, and their dynamic response to exercise will be studied. Laboratory experiments will be conducted throughout the course. This course is jointly taught with the Department of Health and Exercise Science.

CHE 06.584: Controlled Release Theory, Technology and Applications

3 s.h

Controlled release systems are designed to provide delivery of an agent at a pre-determined rate for an extended period of time. Controlled release offers several advantages over traditional methods of formulation and administration: maintenance of effective concentrations for a sustained period, less total agent required, cost effectiveness, convenience and compliance. This course investigates controlled release technologies through the application of chemical engineering principles. Knowledge of materials, mass transfer, heat transfer, fluid flow and chemical reactions are used to analyze and design controlled release systems. Applications to pharmaceutical, agricultural, and food industries will be explored. Laboratory experiments and demonstrations will be integrated throughout the course. A project will focus on the development of an original design and fabrication for a controlled release application.

CHE 06.585: Engineering Quality Control

3 s.h

This course exposes students to the state of the art process and product control techniques. This course includes a strong foundation in the fundamentals of engineering quality control and its relevance to process optimization. Students will learn the theory and practical applications of control charting techniques used in industry. Process capability analysis, controller design and control systems architecture will also be included. Students will also be exposed to experimental design and process optimization techniques. The relevance of engineering process control in the safety and profitability of processes and products will be emphasized. Concepts introduced throughout the course will be illustrated with practical examples from a wide range of industries.

CHEM 05.530: Special Topics in Chemistry

3 s.h.

Selected topics in individual areas of chemistry (analytical, organic, inorganic or physical). Consent of the instructor is necessary. Prerequisites are determined by the nature of the topic. The requirements of this course include a graduate laboratory project and/or research paper. This course may not be offered annually.

CHEM 05.550: Advanced Seminar

1 s.h.

Oral presentation of scientific studies and data at the graduate level. The talks are accompanied by 35 mm slides prepared by the student. Attendance at South Jersey American Chemical Society meetings is required. This course may not be offered annually.

CHEM 07.531: Special Topics in Biochemistry

3 s.h.

This course covers special topics in individual areas of biochemistry. Specific prerequisites are determined by the nature of the course when it is announced.

CHEM 07.548: Biochemistry

4 s.h.

This course is concerned about Chemical compounds and chemical reactions which are of paramount importance to the functioning of biochemical systems. The major metabolic pathways for energy production and biosynthesis are examined. Laboratory experiments reinforce and expand the lecture material. The requirements of this course include a graduate laboratory project and/or research paper. Admission to the course will be at the discretion of the Graduate Advisor. This course is taught in the Chemistry and Biochemistry Department.

CHEM 07.558: Advanced Biochemistry

4 s.h.

Prerequisites: BIOL 14440 or BIOL 14548

This course provides an in-depth study of the principles involved in biological processes. It emphasizes the significance of biochemical reactions and regulations as well as mechanisms. A thorough elucidation of structure, function and mechanism will be presented. The overall strategy of living systems will be illustrated. Laboratory experiments will provide exposure to representative procedures and some important modern techniques. Students are encouraged to design their own molecular biology experiments using the facilities provided. A term project is incorporated into this course. Students are required to conduct an in-depth review of the literature regarding a topic.

CHEM 07.565: Organic Reactions and Mechanisms

3 s.h.

An advanced presentation of the major classes of organic chemical reactions, with the major emphasis being placed upon the detailed mechanisms of such reactions. Modern organic theory is included. The requirements of this course include a research paper or individual project. Admission to the course will be at the discretion of the graduate adviser. This course may not be offered annually.

CHEM 07.568: Medicinal Chemistry

3 s.h.

This course describes various topics related to the biochemical principles and metabolic pathways with particular emphasis on pharmaceutical applications and biotechnology. This course will focus on the molecular mechanisms of drug action and chemical basis for drug therapy. Current methods used to study medicinal chemistry including recombinant DNA, combinatorial chemistry and bioinformatics, will be reviewed. A 3-D molecular modeling of drug targets and drug design will be integrated throughout the course. Clinical trials of drug case study are included. A term project is incorporated into this course. Students are required to conduct an in-depth review of the literature regarding a topic.

CHEM 07.570: Organic Spectroscopy

3 s.h.

Prerequisites: CHEM 09250 and CHEM 07301 or CHEM 09250 and CHEM 07201

This is a laboratory course with class discussion on the separation and identification of organic compounds. Both classical and instrumental techniques are used in compound structure determination. Lecture emphasis is placed on interpreting IR, NMR, and mass spectra. The requirements of this course include a graduate laboratory project and/or research paper. Admission to the course will be at the discretion of the graduate adviser. This course may not be offered annually.

CHEM 07.580: Synthesis of Polymers

4 s.h.

This course provides an in-depth study of the procedures, techniques and theoretical aspects of polymer synthesis. Reaction mechanisms including kinetic and thermodynamic considerations will be studied. The topic of polymer synthesis will be examined from raw material sources through product usage. The laboratory experiments will provide exposure to representative procedures and techniques.

CHEM 07.582: Characterization of Polymers

4 s.h.

This course provides an in-depth study of the procedures, techniques and theoretical aspects of polymer characterization. Major topics include molecular weight determinations, polymer solutions, viscoelasticity and bulk properties. The laboratory experiments will provide exposure to representative procedures and techniques with emphasis on molecular weight determination and thermal methods.

CHEM 09.510: Instrumental Analysis

4 s.h.

Prerequisites: PHYS 08401 and CHEM 09250

The theoretical basis, construction, and data interpretation of most instruments used by chemist are studied. Among the instruments considered are visible, UV, IR, NMR, AA, fluorescence, flame emission, and mass spectrometers. Electroanalytical, potentiometric, conductometric, electrogravimetric, and voltametric methods of analysis are used. Laboratory experiments allow "hands-on" use of representative instruments. The requirements of this course include a graduate laboratory project. Admission to the course will be at the discretion of the graduate adviser. This course may not be offered annually.

CJ 09.510: Contemporary Issues in Criminal Justice

3 s.h.

This is a graduate level course focusing on understanding the criminal justice system both in terms of the uniqueness of each component (law enforcement, courts, and corrections) and in terms of the complementary nature of the whole, advances and emerging issues in each component of the criminal justice system and in the system as a whole, research related to contemporary issues and the practical applications of said research, and a critical assessment of both the research in the field and the issues facing the criminal justice system.

CJ 09.511: Research Methods I

3 s.h

This is a graduate level course focusing on understanding various research methods used in criminal justice, the advantages and disadvantages of different research methods (including the appropriateness for hypothesis testing), techniques for conducing research utilizing the appropriate method(s) given a particular question, the ability to critically assess research studies in the field, and the ability to conduct research for a Master's Thesis.

CJ 09.512: Research Methods II

3 s.h

This course will enable students to understand various statistics and statistical techniques used in criminal justice, to understand the advantages and disadvantages of different statistics, to be able to conduct research utilizing the appropriate statistic given a particular question and/or set of data, to be able to critically assess research studies in the field, and to be able to conduct research for a Master's Thesis.

CJ 09.515: Law and Society

3 s.h

This course will allow students to understand the basic process for law formation and the obvious and hidden influences on the creation of American law; to understand the role of laws in American society, in part as a reflection of needs, in part as a reflection of public/political desires, and in part as tools of the powerful; to understand how the complexities in law and its relationship to society impact on other aspects of the criminal justice system; and to be able to critically assess the formation of law, the interpretation of law, and the application of law in American socity.

CJ 09.516: Administrative Law/Ethics

3 s.h.

This course focuses on the relevance of administrative law and ethics as they relate to the decision making process in criminal justice. Administrative actions and ethical issues permeate the criminal justice system. As such, students will be exposed to Administrative Law, including discussion of key principles of Administrative Law, limiting doctrines, and particular agency rules. Students will also spend time studying ethics. Discussions may include police corruption, prosecutorial misconduct, ethical issues in sentencing, prison corruption, and ethics in the creation and implementation of crime control policy.

CJ 09.517: Criminal Justice Policy Analysis

3 s.h.

This course will enable students to understand the importance of program and policy evaluation, to understand how to evaluate programs and policies with several outcome measures, to be aware of the effectiveness of current criminal justice policies and procedures, and to be able to evaluate a current criminal justice policy or procedure using primary or secondary data.

CJ 09.518: Contemporary Developments in Theory

3 s.h.

This course will allow students to understand the modern development of criminal justice theory, to understand current approaches in theory, including strengths and weaknesses of various theoretical perspectives, to be able to conduct research guided by theory, and to be able to critically assess research studies in the field.

CJ 09.519: Seminar in Criminal Justice Planning

3 s.h.

This course focuses on the techniques of program and policy planning and evaluation. Students will focus on existing criminal justice programs and policies while at the same time learning the process of proper program and policy evaluation. Specifically, students will learn how to plan change through a series of steps: problem analysis, creating time-bound and measurable goals and objectives, designing a program or policy, developing action plans, developing a monitoring plan, developing an evaluation plan and instrument and finally how to initiate the program or policy. Where appropriate, students will conduct their analysis on existing and policies as well as creating their own plans as outlined above.

CJ 09.520: Courts and Supportive Agencies

3 s.h.

This course deals with cases that come from both juvenile and adult courts and which often result in referrals to supportive social agencies. Included are an analysis of the services provided by supportive agencies, such as foster home services, substance abuse services or anger management services, as well as witness decorum while providing reports to a court, such as presentence investigation reports.

CJ 09.521: Prevention and Rehabilitation

3 s.h.

Prerequisites: LAWJ 05510 and LAWJ 05518 and LAWJ 05511 and LAWJ 05512 or CJ 09510 and CJ 09518 and CJ 09511 and CJ 09512

This graduate seminar will include in-depth study of the theory and research on the causes of criminal behavior; the legal, ethical, and practical issues involved in working with offenders; and classification and treatment in the correctional context. Students will become familiar with the most widely used and effective correctional treatment approaches and empirical research evaluating programs and policies.

CJ 09.522: Seminar in Violence

3 s.h.

Prerequisites: LAWJ 05510 and LAWJ 05518 or CJ 09510 and CJ 09518

This graduate seminar will include an in-depth study of current theory and research on the biological, psychological, and sociological causes of violent behavior. It will examine the various types of violent offenses and the impact of these crimes. Students will learn to critically assess the empirical research on the causes and impact of violence, and understand the practical applications of this research.

CJ 09.524: Police and Society

3 s.h.

Prerequisites: LAWJ 05510 or CJ 09510

This course will focus on the theories and scholarly studies in policing and apply this knowledge to understanding police functions in society. The objectives of this course are to understand the police function both in terms of its nature and its relationship with society, to appreciate advances and emerging theories in policing, and to assess current research in the field and its implications for the police profession. Students are expected to follow the scientific research process to do research, write papers, and have informed discussion of current police policies and practices.

CJ 09.525: Altruism, Cooperation, and Criminal Justice

3 s.h.

Prerequisites: CJ 09510

This course examines the philosophical and empirical data of altruism and cooperation and relates these fields to the study of criminal justice organizations. Specifically, we examine whether it is necessary to "be nice" to work in the criminal justice field. We further examine whether those that are more cooperative and altruistic perform their jobs more effectively and how relationships between client and worker, and worker and supervisor are influenced by altruistic and cooperative tendencies of the individuals. Finally, students will collect, analyze, and summarize original data testing the hypotheses offered within the course.

CJ 09.526: Management of Criminal Justice Organizations

3 s.h.

Prerequisites: CJ 09510

The course focuses on diagnosing criminal justice organizations based on their: structure, purpose, leadership styles, rewards and motivations, relationships and communication theories, decision-making processes, goals and objectives. Students learn how to assess the effectiveness of various criminal justice agencies based on the aforementioned concepts and will also learn how to integrate planned change to a criminal justice organization. Criminal justice organizations exist in different political and legal environments than private, for-profit institutions and students learn how to assess these differences and gain an understanding of how criminal justice organizations work at the organizational and individual level.

CJ 09.528: Seminar in Juvenile Justice and Delinquency

3 s.h.

Prerequisites: CJ 09510 and CJ 09518 and CJ 09511 and CJ 09512 or LAWJ 09510 and LAWJ 09518 and LAWJ 09511 and LAWJ 09512

This course will examine the biological, psychological, and sociological factors that increase the risk of juvenile delinquency, and how the justice system has reacted to crime committed by young people. Topics such as early intervention, protective factors, diversion, gangs, research based rehabilitation programs, and transfer to adult court will be examined. Students also will learn to critically assess and design evaluations of prevention and rehabilitation programs designed for juveniles.

CJ 09.529: Community Justice

3 s.h.

Prerequisites: CJ 09510 and CJ 09518 and CJ 09511 and CJ 09512

This course will examine how the community can work with police, courts, and correctional agencies to prevent crime and rehabilitate and reintegrate offenders. It will examine the effect on implementing community programs of the organizational environment and effective recruitment, screening, and training of community members. Techniques such as participatory management, collaboration, problem solving, and mediation will be examined. Students also will learn to critically assess and design evaluations of community programs.

CJ 09.530: International Criminal Law Seminar

3 s.h.

Prerequisites: CJ 05510 and CJ 05515

This graduate course will include an in-depth study of international crimes and the international criminal process. It will examine the various types of international criminal offences, the impact they have on the international community, and the international legal consequence for such crimes. Students will learn to critically analyze historical international cases and understand case precedents and their future impact on international criminal law.

CJ 09.601: Master's Thesis in Criminal Justice I

3 s.h.

Prerequisites: CJ 09510 and CJ 09518 and CJ 09511 and CJ 09512

This course requires students to design and begin implementing their own research project to be used to satisfy the program's thesis requirement. Under the guidance of a member of the Law and Justice Department faculty who agrees to serve as Thesis Advisor, the student will develop a Research Proposal that will consist of an introduction and Statement of the Problem, a Literature Review, a Data and Methods Section, and a brief summary of the proposed research. The student will defend this Research Proposal in front of the Master's Thesis Committee, and will begin implementing the research after obtaining the Committee's approval.

CJ 09.602: Master's Thesis in Criminal Justice II

3 s.h.

Prerequisites: CJ 09510 and CJ 09518 and CJ 09511 and CJ 09512 and CJ 09601

This course requires students to complete the research project they began in Master's Thesis in Criminal Justice I in order to satisfy the program's thesis requirement. Under the guidance of a member of the Law and Justice Department faculty who has agreed to serve as Thesis Advisor, the student will collect their data or obtain secondary data, analyze the data, and write the results, discussion and conclusion, and references section. They will combine their work from Master's Thesis I and II into a completed thesis which they will present to the Master's Thesis Committee for approval.

COUN 26.509: Group Counseling in Educational Settings

3 s.h.

Corequisites: COUN 26510 Prerequisites: COUN 26526

Emphasis is placed in the design, planning and facilitation of a group. The focus of the class is experiential whereby students learn group facilitation skills while being part of a group process. The course covers basic skills for group leaders, introducing, conducting and processing exercises, kinds of counseling and therapy groups, dealing with problem situations, and multicultural considerations.

COUN 26.510: Group Counseling in Educational Settings Lab

1 s.h.

Corequisites: COUN 26509

This course will provide students with formative experiences in teambuilding and human relations skills. Students will participate in team-building activities, focusing on interpersonal and intra-personal processes; will have opportunities to give and receive feedback; will have opportunities to experience and process positive interdependence and group processing; and have opportunities to apply group leadership skills.

COUN 26.520: Design and Administration of Developmental Counseling Programs 3

This course provides a thorough exploration of developmental counseling programs, and of how such programs are integral to school educational programs collectively. Topics include: design and administration, consultation skills, comprehensive program components, developmental curriculum, program evaluation, and counselor orientation.

COUN 26.526: Individual Counseling Procedures

3 s.h.

Corequisites: COUN 26528

Coverage of all major counseling theories is provided with an emphasis on developing one's personal counseling philosophy and an integrative approach. Using assigned readings, discussion, and interactive counseling situations, students are provided with opportunities to refine their counseling skills; the "theory to practice" approach is utilized.

COUN 26.527: Practicum in Counseling in Educational Settings

3 s.h.

The purpose of this course is to help each student develop effective individual counseling skills which can be used in a multiplicity of settings. Students enrolled in this course will study and apply various contemporary theoretical approaches to counseling through role playing and video taping techniques. A field-based experience of 100 clock hours is required.

COUN 26.528: Individual Counseling Procedures Laboratory

1 s.h.

Corequisites: COUN 26526

This course will provide students with formative experiences in basic (micro-counseling) skills. Students will receive supervision in conducting simulated peer-counseling that relates to the theory-based Individual Counseling Procedures Course, to be taken concurrently. Students will learn how to use various basic interviewing skills according to different scenarios and client populations. Students will have opportunities to give and receive feedback based on individual interviewing skills performances.

COUN 26.529: Practicum Lab/Counseling in Educational Settings

1 s.h.

Corequisites: COUN 26527

This course will provide students with information and the technical resources to further develop interviewing skills, as well as to produce educational materials such as videos and audiotapes of simulated counseling sessions to be used in class discussion.

COUN 26.582: Career Counseling in Educational Settings

3 s.h.

This course seeks to develop a conceptual framework of the career development process throughout the life span as well as practical knowledge of the information system in counseling and career counseling procedures. The course covers the major theories of career development, the structure of the world of work, testing and assessment, computer assisted career guidance systems and systematic career development programming.

COUN 26.597: Relations of the Public School with the Institutions and Agencies of New 3 s.h. Jersev

Particular attention is directed to the problem of caring for atypical children, the work of prevention of delinquency and maladjustment and the methods which may be used by administrators, supervisors, and teachers to avail themselves of greater assistance with problems surrounding the teaching of atypical students.

COUN 26.601: Internship in Counseling in Educational Settings

1 to 4 s.h.

Corequisites: COUN 26603 Prerequisites: COUN 26509 and COUN 26526 and COUN 26582

Internship I in Counseling/Student Personnel Services is one of the culminating field-based experiences for matriculated students taken during the final Fall semester of one's program. Students spend a minimum of 300 clock hours throughout the semester at their selected Internship Site. Emphasis is placed upon gaining direct experiences and actually participating in all phases of student services. Internship students work under the direction of an on-site mentor, and a college-faculty supervisor. Internship students attend topical seminars on campus.

COUN 26.603: Research I in Counseling in Educational Settings

3 s.h.

Corequisites: COUN 26601

Research I in Counseling/Student Personnel Services will provide opportunities for students to conduct focused inquiry and to generate knowledge around those factors germane to the field of counseling. During Research I students will begin an action research thesis project focusing on school-counseling program reform, with emphasis on systems change processes, needs assessment, goal setting, and data gathering processes.

COUN 26.604: Research II in Counseling in Educational Settings

3 s.h.

Prerequisites: COUN 26602

Research II in Counseling/Student Personnel Services is the second phase of students' action-research thesis project. During Research II the focus will be in areas such as collecting and analyzing data, program evaluation, developing rationale for proposed program changes, and preparing the final thesis and publication of research information.

COUN 26.605: Advanced Workshop/Counseling in Educational Settings

1 s.h

The course is designed to develop awareness, knowledge and skills pertaining the unique challenges and opportunities when counseling diverse and exceptional clients. Students will learn the appropriate background factors impacting diverse clients as well as develop the necessary sensitivity to be effective with this client population.

CS 01.561: Advanced Computer Environments

3 s.h.

This is an advanced applications course in which the student will learn the effective use of various computer applications for organizing and managing their professional duties, including functioning in computer-supported collaborative work groups. Some specific skills that will be covered include the use of desktop publishing to prepare business plans, advertising copy, etc., the creation and maintenance of World Wide Web pages, the use of presentation packages, the integration of graphics into traditional or multimedia documents, and the use of Internet and commercial data bases (including analysis of data using spreadsheet tools). Students will report on emerging trends in hardware and software and will review issues relating to data security and ethics.

CS 04.530: Advanced Database Systems: Theory and Programming

3 s.h.

This course focuses on the design of DBMS and their use to create databases. The course covers both the theoretical concepts and the implementation aspects of database systems with a special emphasis on relational database systems, SQL, programming (in a modern programming language such as C++ or Java) using a real database Application Programming Interface (such as JDBC or ODBC).

CS 04.548: Programming Languages: Theory, Implementation and Application

3 s.h.

Prerequisites: CS 04542

An intermediate course intended to acquaint the student with the major categories of programming languages and to familiarize the student with one or two languages in each category. The student will complete programming projects in the languages studied. In addition, the student will learn formal mechanisms for specifying the syntax and semantics of languages and techniques for implementing data and control structures.

CS 04.564: Compiler Design Theory

3 s.h.

Prerequisites: CS 04542 and CS 04548

The course centers on the design and use of compilers, the sophisticated computer programs whose function is to translate high-level code to machine language. The following topics are covered: Compiler models, finite state machines, the lexical box, context free grammars, translation grammars, pushdown machines, the syntax box, the code generator.

CS 04.565: System Programming

3 s.h.

This course covers the internal structures and algorithms of the system kernel of a modern operating system as well as the system call interface to the kernel. Students will gain hands-on experience in system level programming in a modern operating system environment. The emphasis will be on interprocess communications and concurrency. The concept of distributed and client/server computing will also be introduced.

CS 04.570: Advanced Object Oriented Design

3 s.h.

This course will introduce important concepts such as inheritance and polymorphism, which are crucial tools needed for crafting object-oriented solutions to real-world problems. Design patterns that commonly occur in design situations will be covered. A formal notation for describing and evaluating object-oriented designs such as the Unified Modeling Language (UML) will be taught. Students will apply the concepts to design and implement object oriented solutions to one or more reasonably sized real-world problems.

CS 06.505: Wireless Networks and Systems

3 s.h.

Prerequisites: CS 06410

This course prepares students to understand wireless networks and systems, and the underlying communications technologies that make them possible. The course covers descriptive material on wireless communications technologies, and important deployed and proposed networks and systems. Wireless system performance and Quality of Service capabilities are addressed. Students will prepare and deliver technical presentations on state-of-the-art topics in wireless networks and systems.

CS 06.510: Computer Networks

3 s.h.

Prerequisites: CS 07340 and STAT 02360

Students in this course study how computer networks work and why they have been designed as we know them. The course covers descriptive material on network architectures and protocols, as well as network performance evaluation and protocol implementation. The course topics include important examples of local, metropolitan and wide area networks; telephone, cellular and wireless networks; the Internet; network security; and design tradeoffs in network systems and their implementations.

CS 06.515: Embedded Systems Programming

3 s.h.

Embedded software is used in almost every electronic device. This course deals with software issues that arise in embedded systems programming. Important concepts covered in this course will include device programming interfaces, device drivers, multi-tasking with real-time constraints, task synchronization, device testing and debugging, and embedded software development tools such as emulators and debuggers. These concepts will be applied to design and implement embedded software for one or more modest-sized embedded systems.

CS 06.520: Topics in Computer Architecture

3 s.h.

Students in this course will study the various performance enhancement techniques and more advanced architectural features of modern computer systems. The topics include DMA, I/O processor, RAID, cache memory, virtual memory, pipelining, RISC, superscalar processors and various advanced parallel architectures such as array processors, vector processors, shared-memory multiprocessors, and message-passing multicomputers. Students will complete independent research projects that may include detailed examination of one or two contemporary computers.

CS 07.510: Mathematical Foundations of Computer Science

3 s.h.

This course provides a graduate-level introduction to the theoretical foundations of computer science, including finite automata, context-free grammars, Turing machines, and formal logic.

CS 07.522: Advanced Theory of Computing

3 s.h.

This course builds on the introduction to the theory of computing provided in the course Foundations of Computer Science. It discusses finite automata, formal languages, Turing Machines, and computability theory at an advanced level.

CS 07.530: Computer Science Thesis I

In consultation with the instructor, students will identify and research a specific area of computer science or computer science education. Students will define a thesis project and develop a formal specification of their intended project for completion in Computer Science Thesis II.

CS 07.531: Computer Science Thesis II

3 s.h.

Prerequisites: CS 07530

Students will follow their formal project specification developed in Computer Science Thesis I to research a specific area of computer science or computer science education and produce a written thesis.

CS 07.540: Advanced Design and Analysis of Algorithms

Students in this course will study efficient algorithms for sorting, searching, graphs, sets, matrices, and other applications, and will learn to design and analyze new algorithms. Students will also learn to recognize and prove NP-Completeness.

CS 07.545: Advanced Robotics

3 s.h.

This course provides an introduction to the fundamentals of robotics. Students study robot manipulators and mobile robots, robot sensors and robot cognition. Students will also gain experience programming in small groups, and programming in a domain where noisy and imprecise data is commonplace. Familiarity with matrix multiplication and inversion is expected for this course.

CS 07.550: Concepts in Artificial Intelligence

3 s.h.

Prerequisites: CS 04222 and CS 07210 and MATH 03150

This course surveys methods for programming computers to behave intelligently. Topics include knowledge representation methods, heuristic search, theorem-proving, puzzle-solving, game-playing, natural language processing, and expert systems.

CS 07.555: Natural Language Processing

3 s.h.

This course presents methods for allowing computers to understand and generate sentences in human languages (such as English) and prepares the student to do research in natural language processing. Topics include syntax, semantics, pragmatics, and knowledge representation.

CS 07.556: Machine Learning

This course presents problems and solution methods for machine learning in a variety of contexts, such as inductive inference, statistical learning, explanation-based learning, genetic algorithms, and neural networks, and prepares the student to do research in this field.

CS 07.560: Computer Graphics

3 s.h.

Students will study the use and implementation of graphics packages. Techniques and algorithms for implementing graphics systems will be covered. They include drawing of 2-D primitives; 2- and 3-D transformation and viewing; representing curves and surfaces; hidden line and surface removal; illumination and shading; and animation. Programming projects on writing graphics applications and implementing graphics algorithms will be assigned.

CS 07.565: Computer Vision

3 s.h.

This course examines the fundamental issues in computer vision and major approaches that address them. The topics include image formation, image filtering and transforms, image features, mathematical morphology, segmentation, and object recognition. More advanced topics such as camera calibration, stereopsis, dynamic vision, and computer architectures for vision will also be covered. Independent projects on these advanced topics will be required.

CS 07.575: Advanced TCP/IP and Internet Protocols and Technologies

3 s.h.

This is an advanced computer networking course that will expand students knowledge received in the Data Communications and Networking course. This course will examine operation of the TCP/IP protocol as well as design and architecture of the Internet. This course will cover such topics as: medium access protocols, address resolution protocols, Internet routing, Internet Protocol (IP), Quality of Service, Transport Protocol, and congestion control mechanisms. This course will also include selected topics on network security and network management. Students will prepare and deliver technical presentations on state-of-the-art research topics in the Internet.

CS 07.595: Advanced Topics in Computer Science

1 to 4 s.h.

This course enables the faculty to offer courses in advanced topics which are not offered on a regular basis. Prerequisites will vary according to the specific topic being studied.

CURR 29.503: Teaching Adult Learners

3 s.h.

The general purpose of the course is to help participants become better instructors of adults. The course focuses on proven methods and techniques for teaching adults in a variety of settings. Special attention will be paid to the individualizing instruction process. Course participants will strengthen both theoretical and practical understandings of the adult learning process, study methods and techniques for teaching adults, and critically reflect on their own instructional efforts.

CURR 29.504: Understanding Adult Learning and Development

3 s.h

The general purpose of the course is to introduce participants to the processes of adult development and learning. The course examines the social, psychological, economic, and cultural dimensions of learning in adulthood as well as the application of theory and research findings to adult learning situations. Special attention will be paid to the concept of learning how to learn. Course participants will be invited to undergo a series of thinking style and learning style profile tests and then analyze the results in an effort to improve learning performance.

CURR 29.515: Introduction to Planning and Teaching

4 s.h.

Students will begin their development of the skills necessary to enhance the planning, teaching, and learning processes. Students will be expected to ground their future classroom practice in a strong research base through a study of planning and teaching models and the latest literature on effective teaching.

CURR 29.528: Curriculum and Methods in Subject Field

3 s.h.

This course provides students with the opportunity to apply the latest principles and practices of secondary education to their major subject field. The newer techniques and materials are considered in light of their contribution to purposeful learning. This course may not be offered annually.

CURR 29.529: Analysis of Current Research in Science Education

3 s.h

Concerned with the role of the science teacher in the classroom, laboratory and other school situations. Considers the changes which have been made and which are still occurring in the field of science education. This course may not be offered annually.

CURR 29.540: Strategies of Planned Curriculum Change

3 s.h.

This graduate seminar course is designed to enable a student to identify, explore, and apply selected strategies of planned curriculum change. Barriers to, and constraints limiting, curriculum change at the national, state, and local level will be examined. Students will be expected to exhibit a knowledge base in curriculum theory and development. Within the scope of the course, students will be expected to select and research a curriculum change problem. Teams from school districts are encouraged to enroll. This course may not be offered annually.

CURR 29.547: Curriculum Theory

3 s.h.

An introductory examination of the problems involved in the generation of curriculum theory. Emphasis is placed on the analysis of the constraints within which theoretical frameworks are developed and their implications for curriculum designs K-12. Selected contemporary curriculum theorists will be introduced and their views examined. Prerequisites for this course are Fundamentals of Curriculum Development and Public School Curriculum K-12.

CURR 29.550: Public School Curriculum K-12

3 s.h.

A course that deals with a critical appraisal of current public school curriculum practices. Emphasis will be placed on the following aspects of the K-12 curriculum: the subject matter curriculum, the humanistic curriculum, role of subject matter specialist, the nature of the disciplines, the taxonomies of educational objectives (affective, cognitive, psychomotor). This is a basic course which is a prerequisite for any further study in curriculum. This course may not be offered annually.

CURR 29.562: Motivational Techniques Workshop

3 s.h.

Current stimulating strategies for establishing and maintaining high student interest levels will be explored and generated by instructor and group participants. Workshop members will be expected to develop and share a variety of motivational techniques. This workshop is designed to demonstrate to teachers that instruction need not be confined to a single method, single subject, or the single room. Motivation is an essential element of any successful learning climate. This course may not be offered annually.

CURR 29.563: Junior High/Middle School Curriculum

3 s.h.

The course will be directed in a practical sense to an analytical study of the junior high/middle school concept. Attention will be directed to curriculum development, implementation, and evaluation in relations to the nature of the learner. Teams from schools are encouraged to enroll. This course may not be offered annually.

CURR 29.580: Fundamentals of Curriculum Development

3 s.h.

This course provides background in goals, objectives, assumptions, values, issues, and theory related to modern curriculum. Topics include learning and curriculum, the nature and structure of knowledge and curriculum design, criteria for staff, lay advisers, committees, and consultants for the purpose of curriculum planning. This is a basic course which is a prerequisite for further study in curriculum.

CURR 29.590: Curriculum Evaluation

3 s.h

Emphasis will be on identification, organization, and practical applications of selected curriculum evaluation models. This course is designed to enable a student, or a team of students, to determine what and when to evaluate, whom to evaluate, and how to evaluate. Students will be expected to demonstrate a knowledge base in curriculum theory and development. A curriculum evaluation project is required. This course may not be offered annually.

CURR 29.600: Specialization Seminar and Investigation I

3 s.h.

The student must complete a special project in the field of specialization which demonstrates his ability to apply theory and research. Focuses upon applying general and specialized knowledge to the examination of proposals and research on the processes of change and innovation.

CURR 29.601: Specialization Seminar and Investigation II

3 s.h.

The student must complete a special project in the field of specialization which demonstrates his ability to apply theory and research. Focuses upon applying general and specialized knowledge to the examination of proposals and research on the processes of change and innovation.

ECE 09.504: Special Topics in Electrical and Computer Engineering

1 to 3 s.h.

This course covers timely topics in electrical and computer engineering related to engineering practice and/or research.

ECE 09.551: Digital Signal Processing

3 s.h.

This is a first level graduate course that covers the fundamentals of digital signals, systems, transforms and filters. Systems concepts taught include linearity, time-invariance, stability, causality, difference equation representation, impulse response and convolution. The issue of frequency response and sampling is covered. The z-transform is introduced. Design methods and structures of digital filters are discussed with the exposure to do software design. Random digital signals are also covered.

ECE 09.552: Digital Image Processing

3 s.h.

Digital image processing covers the analysis and contemporaneous applications of the enhancement, restoration, compression and recognition of monochromatic images. Both classical and state-of-the-art algorithms will be employed in conjunction with appropriate software for analyzing real-world images.

ECE 09.553: Digital Speech Processing

3 s.h.

This course covers the fundamentals of digital speech signals and processing and simultaneously stresses real-life engineering aspects from a systems perspective. An overview of the different branches of speech processing are covered, namely, speech production, vocal tract modeling, speech coding, speech recognition, speaker recognition and speech synthesis. The building blocks of such applications, namely, linear predictive analysis and quantization (scalar and vector) are taught.

ECE 09.554: Theory and Engineering Applications of Wavelets

3 s.h.

The theory of wavelets gave rise to a substantial number of applications in many areas including various fields of engineering, making it one of the most popular research areas of all times. In this class, the theory of wavelets will be carefully developed from the ground up, with an emphasis on engineering applications. Starting with a review of Fourier based signal analysis methods, short time Fourier transform, continuous wavelet transform, discrete wavelet transform, fast wavelet algorithms, wavelet packets, wavelet networks will be discussed. Applications of wavelets such as image and audio compression, biological signal analysis, feature detection, signal denoising will also be explored.

ECE 09.555: Advanced Topics in Pattern Recognition

3 s.h.

This class will introduce a broad spectrum of pattern recognition algorithms along with various statistical data analysis and optimization procedures that are commonly used in such algorithms. Although mathematically intensive, pattern recognition is nevertheless a very application driven field. This class will therefore cover both theoretical and practical aspects of pattern recognition. The topics discussed will include Bayes decision theory for optimum classifiers, parametric and nonparametric densityestimation techniques, discriminant analysis, basic optimization techniques, introduction to basic neural network structures, and unsupervised clustering techniques. As a graduate level course, several advanced and contemporary topics will also be covered, including fuzzy inference systems, support vector machines, adaptive resonance theory, incremental learning and online learning and particle swarm optimization. Students will be expected to conduct independent research for possible publications, as part of the class project.

ECE 09.560: Artificial Neural Networks

3 s.h

Artificial Neural Networks covers the design of a variety of popular neural network architectures and their contemporary engineering applications. Neural network architectures that will be studied in detail include the multilayer perceptron, radial basis function, and the Hopfield networks. State-of-the-art software will be used for network design. VLSI implementations of neural networks will be discussed.

ECE 09.571: Instrumentation

3 s.h.

Elements of instrumentation systems are treated including transducers, signal conditioning, and signal processing. Elements of modern instrumentation systems including standards (IEEE-488, SCPI) and smart sensors are considered.

ECED 23.510: Curriculum Development in Early Childhood Programs

4 s.h.

This course is focused on the content and characteristics of developmentally appropriate curriculum to support growth, development, and learning of young children. Factors that influence early childhood curriculum development, the important role of family and culture, the integration of play, literacy, and assessment are studied. Students learn to apply the recommended standards for developmentally appropriate practices and curriculum. This course also includes a field experience with visitations to early childhood classes/programs.

ECED 23.525: Play and the Learning Environment

3 s.h.

This course provides in-depth study of current research to build increased understanding of the nature and the development of play and the interface of the play phenomena and learning in young children. Play and the curriculum, the role of adults and culture in enriching children's play, and planning the learning environment with strategies that accommodate individual needs are important course topics. Observing and assessing play are also included.

ECON 04.502: Current Economic Issues for the Classroom

3 s.h.

Course is targeted for elementary and secondary teachers. The course will focus such timely issues as the global economy, the federal deficit, the monetary system, the environmental problem, and a survey of the recent performance and problems of the American economy. Course will feature several speakers, for example, from the New Jersey Council on Economic education.

ECON 04.541: Managerial Economics

3 s.h.

Prerequisites: ECON 04101 and ECON 04102

This course integrates economic theory and methodology with analytical tools for application to decision making about the allocation of scarce resources in public and private institutions. Topics covered include: decision analysis, forecasting, demand analysis, production, cost analysis, profit measurement and pricing.

EDAM 27.505: Selected Topics in Educational Leadership

1 to 6 s.h.

This course explores one or more topics of importance in the field of educational leadership. The focus will be different each time that the course is offered.

EDAM 27.506: Introduction to School Leadership

3 s.h.

This course provides an introduction to the theory and practice of leading a school and district as a human organization. It deals with problems of K-12. The latest research and practices are reviewed regarding team management, organizational theory, and management skills.

EDAM 27.510: Change for School Improvement

3 s.h.

Prerequisites: EDSU 28522

This advanced course in school leadership enables students to better understand the change process, further developing their analytic skills for improving the teaching and learning process. This course is offered annually and includes a field experience component.

EDAM 27.521: The Principalship

3 s.h.

Prerequisites: EDAM 27559 and EDSU 28546 and CURR 29580

Students learn and demonstrate the ability to apply behavior management strategies, create an effective school climate, manage the school plant, comply with state, federal and contractual requirements, obtain and monitor personnel, manage change and coordinate community and service agencies. Effective communication skills are emphasized.

EDAM 27.534: School Plant Planning and Management

3 s.h.

Prerequisites: EDSU 28546

School building problems, public relations, finance, school enrollment forecasts, planning and supervising building construction and the choice of equipment and materials are dealt with. This course is a practical course; visits will be made to newly constructed facilities and written critiques will be completed.

EDAM 27.535: School Finance and Records

3 s.h.

Prerequisites: EDSU 28546

Students learn and demonstrate the ability to develop budgets, apply principles of financial management, budget management. Students study how schools are supported financially. This course includes a field experience component.

EDAM 27.536: Financial Accounting for School Systems

3 s.h.

Prerequisites: EDAM 27535 and EDSU 28546

This course will provide students with the knowledge and skills required to initiate and maintain a school district accounting program. The course will emphasize--but not be restricted to--the laws and procedures relative to New Jersey school accounting. This course includes a field experience component.

EDAM 27.538: School Business Management

3 s.h.

Prerequisites: EDSU 28546

This course is designed to provide graduate students with an introduction to the skills, concepts, and insights necessary for the school business administrators to manage, as members of the administrative team, increasingly complex schools to obtain the greatest educational return for each tax dollar expended. This course includes a field experience component.

EDAM 27.559: Law and Ethics for School Leadership

3 s.h.

Prerequisites: EDSU 28546

Students study and understand and demonstrate the ability to identify legal issues involved in personnel administration, school district government and operation, state aid, handicapped children and student rights. Includes a study of the legal structure of the New Jersey school system.

EDAM 27.559: Law and Ethics for School Leadership

3 s.h.

Prerequisites: EDSU 28546

Students study and understand and demonstrate the ability to identify legal issues involved inpersonal administration, school district government and operation, state aid, handicapped children and student rights. Includes a study of the legal structure of the New Jersey school system. This course includes a field exprience component.

EDAM 27.569: The Law, the Courts, and the Public School

3 s.h.

Prerequisites: EDAM 27559 and EDSU 28546

This course is designed to provide in-depth basic knowledge of the law directly affecting education in the United States. It is all-inclusive in content, analyzing and synthesizing judicial interpretations of the federal and state constitutions, statutes, rules and regulations and the common law in an objective manner.

EDAM 27.572: Rights and Responsibilities of the Educational Professional

3 s.h.

Students will examine the development of school law and public policy in the United States, especially as law and public policy legally "touch" formal schooling. Students will review the many ways laws and policies affect the school community: students, teachers, administrators, and parents. The comprehensive nature of this course will increase the students' awareness of the theories, assumptions, ideas, events, laws and policies that influence formal education, how these influences occur, and how they will impact on future school law and public policy.

EDAM 27.580: Research Proposal Development for the Practicum and Seminar in School 2 s.h. Administration/Supervision I and II

This course focuses on the design and development of a research proposal for use in the Practicum/ Seminar in Administration/Supervision I and II. Students will engage in constructing a formal research proposal for their required internship. The research proposal will include strategies for solutions to five separate field projects. Satisfactory completion of this course will require formal acceptance of the intern's research proposal by the intern's university mentor and the administration of the intern's field site.

EDAM 27.600: Practicum/Seminar in Administration/Supervision I

3 s.h

An administrative internship to reinforce and practice administrative and supervisory competencies, in cooperation with a school district, is required. Students apply human relations skills, apply decision-making skills, articulate ethical beliefs and values and apply various leadership theories. Students also demonstrate group process abilities such as shared decision-making, group motivation, conflict resolution, and planning and conducting effective meetings. A project report is required integrating research findings with selected field projects. Written and oral communication and community relations skills are emphasized.

EDAM 27.601: Practicum/Seminar in Administration/Supervision II

3 s.h.

Prerequisites: EDAM 27580

An administrative internship to reinforce and practice administrative and supervisory competencies, in cooperation with a school district, is required. Students apply human relations skills, apply decision-making skills, articulate ethical beliefs and values and apply various leadership theories. Students also demonstrate group process abilities such as shared decision-making, group motivation, conflict resolution, and planning and conducting effective meetings. A project report is required integrating research findings with selected field projects. Written and oral communication and community relations skills are emphasized.

EDAM 27.610: Human Resources for School Systems

3 s.h.

Prerequisites: EDSU 28546

Analyzes the legal developments and trends in collective negotiations in the public sector. Topics to be developed are the process of effective negotiations, organization rivalries, grievance procedures, the impasse and the comprehensive agreement. This course may not be offered annually. It includes a field experience component.

EDAM 27.620: Legal Issues in Higher Education

3 s.h.

This course examines the legal principles that guide the administration of higher education. Students will study current and emerging legal issues in higher education, focusing primarily on student rights, student life, and general administration legal concepts.

EDAM 27.621: Student Services in Higher Education

3 s.h.

This course traces the historical development of student services and examines the philosophy and rationale for current student services. Reflecting upon the demographic trends affecting higher education, students consider the extent to which the nature, scope, and delivery of services should be changed to meet emerging needs.

EDAM 27.622: Planning and Resource Allocation in Higher Education

3 s.h

This course will teach students practical approaches to strategic and operational planning in higher education, as well as how to develop budgets that are driven by institutional mission and that support the institutional plan.

EDAM 27.625: Change in Higher Education

3 s.h.

This course will focus on the change process both theoretically and practically. Each student will undertake an action research project that will serve as the basis for the thesis. A complete first draft of the thesis will be required by the end of this course.

EDAM 27.626: Practicum in Higher Education Administration

3 s.h.

Prerequisites: 27 hour prerequisite General Requirements: 00000 to 99999 Required Credits: 27.000. Students will utilize their workplace as the laboratory to apply theory and to consider issues of organizational

culture and professional practice.

EDAM 27.627: Higher Education Administration Capstone Seminar

3 s.h.

Prereauisites: EDAM 27625

The seminar will provide the opportunity for integration, synthesis, and reflection. Students will complete the master's thesis and will prepare an educational leadership platform.

EDAM 27.628: Seminar/Internship in Higher Education Administration I

This course is the first of a two course sequence which is intended to serve as the capstone experience for the M.A. program in higher education. Students will utilize a workplace in a higher education setting as a laboratory to study the application of higher education administrative theory to practice and to begin work on a major capstone research project.

EDAM 27.629: Seminar/Internship in Higher Education Administration II

This course is the second of a two course sequence which is intended to serve as the capstone experience for the M.A. program in higher education. Students will utilize a workplace in a higher education setting as a laboratory to study the application of higher education administrative theory to practice and to complete work on a major capstone research project.

EDAM 27.632: Technology for School Leadership

3 s.h.

In this course, students identify and use current technologies to assist with delivery and administration of educational programs, including how to employ technology as a tool in action research, how to apply strategies for the disaggregation of data for decision making purposes, how to use technology for administrative and instructional support, and how to apply technology for the understanding of teaching, learning, and school and community relations.

EDAM 27.637: Higher Education Administration

This course introduces students to the fundamentals of administration in the higher education setting. Topics include authority and power, implementation of institutional policy, decision-making in higher education, conflict resolution, staff supervision, and program assessment.

EDAM 27.701: Organizations as Cultures: Theory and Applications

3 s.h.

This course develops the necessary leadership skills to identify, understand, and analyze the overt cultural artifacts and espoused values, as well as the covert underlying basic assumptions which are embodied in an educational organization's culture.

EDAM 27.704: Changing Organizations

This course focuses on the development of leadership skills that will provide students with the ability to implement change in schools and colleges. Specific topics will involve students in the study of organizational and social change, intervention theory, organizational design, group dynamics, interpersonal communication, and the use of self in leadership.

EDAM 27.706: Negotiating

This course focuses on the leadership role of creating mutual understanding and agreement among people and groups who may have fundamental differences of opinion. Students will learn the dynamics of the formal and informal negotiation processes, as well as what constitutes a good agreement.

EDAM 27.707: Planning

3 s.h.

This course teaches students to set organizational direction with specific goals and objectives to produce an integrated system of decisions regarding strategies, sub-strategies, programs, budgets, etc., that will accomplish the goals and objectives. Students will also focus on the planning of new programs and policies as strategic implementation approaches. A simulated strategic planning process utilizing information from a hypothetical school system or college will be undertaken.

EDAM 27.708: Organizational Communications

3 s.h.

In this course, students analyze the dynamic interaction processes that affect how people think and behave in educational organizations. Students study the nature of effective organizational communication and strategies to remove the communication barriers that constrain the achievement of individual and organizational goals.

EDAM 27.709: Leadership Challenges

3 s.h.

Students will examine the major issues that require leadership in the educational setting. Focus will be on the innovative approaches being undertaken across the nation to meet these challenges.

EDAM 27.713: Forces of Change in American Society

3 s.h.

This course teaches educational leaders to examine the complex demographic, social, political, and economic forces at work in society as they effect education and to explore alternative responses to issues that arise.

EDAM 27.733: The Policy Environment

3 s.h.

Educational leaders must understand the policy environment within which they operate in order to equip them to resolve goal conflicts between education and its environment. This course teaches the skills to develop alternative choices to advance education. Topics include economic, political/legal, social, and science/technology policy, as well as cross-cutting issues such as entitlements, privatization, decentralization, deregulation, use of incentives, and funding of mandates.

EDAM 27.735: Promoting Effective Learning

4 s.h.

This course focuses on the best ways to facilitate learning for the diverse range of students, e.g., typical, atypical, at risk, disadvantaged, gifted and talented, young, and old. It examines issues such as how the educational environment can be organized to maximize learning, whether the manner in which students are grouped contributes to improved learning, how an individual's learning and behavior styles may be taken into account when planning instruction, the effectiveness of peer learning and mentoring, etc. The course also provides insight on the use of instructional technology to improve learning outcomes.

EDAM 27.737: The College Student: Issues and Support Programs

3 s.h

This course includes the study of student development and academic support in different types of institutions of higher education. Emphasizing the role of the leader, the course studies the rationale, goals, objectives, policies and organizations of selected programs of student services, as well as models for program development and assessment.

EDAM 27.739: Current Issues in Education

3 c h

This course will have a changing focus that will permit faculty to offer specialized seminars on various themes: new developments in the field, issues of significance where advanced specialization would be helpful to educational leaders, areas of faculty research and scholarship, or areas of student request. Multiple sections of this course, each focused on a different topic, may be offered during a semester. Students may take this course for elective credit more than once, as long as the theme of the course is different each time that the student enrolls.

EDAM 27.741: Current Issues in Higher Education

3 s.h.

This course will have a changing focus that will permit faculty to offer specialized seminars focusing on new developments in the field, on issues of significance where advanced specialization would be helpful to educational leaders, on areas of faculty research and scholarship, or in response to student requests. Multiple sections of this course, each focused on a different topic, may be offered during a semester. Students may take this course for elective credit more than once, as long as the theme of the course is different each time that the student enrolls.

EDAM 27.742: The Curriculum of Higher Education

s.n.

This course will examine differences of mission and resulting curricular offerings between types of higher education institutions, external and internal influences that influence the curriculum, the components of curriculum, the curriculum development process, appropriate strategies for curriculum assessment, and contemporary curricular issues.

EDAM 27.744: Future Studies

3 s.h.

This is an introduction to the field of future studies, including its concepts and methodologies. Students will study trends and forecasts in areas that are reshaping America and the world, including population, science and technology, information and communications, the physical environment, geo-political factors, and socio-economic trends. The effect on the individual, families, communities, and institutions will be studied with an emphasis on the implications for education. Students will utilize futures methodologies in a research project on futures in education.

EDAM 27.746: Higher Education Governance

3 s.h.

This course will examine the layered approach to institutional governance, focusing on existing federal higher education policy, the various models of state-level higher education coordination, the function of boards of trustees, and the process of campus decision-making. Students will analyze the role of federal, state, county (if applicable), and campus policy-makers on a specific campus program.

EDAM 27.748: Human Resource Development

3 s.h.

This course focuses on improving the performance of the organization through a proactive human resource development effort. It will stress the responsibility of leaders to assist staff through coaching, appraising performance, providing advice, and eliminating barriers to development.

EDAM 27.749: Issues in School Governance

3 s.h

This course identifies current issues in school governance and provides students with the understanding of how the issue develops, those instrumental in promoting the issue, and the ramifications of the issue could have for the educational systems and its leader. It will focus in part on the relationships among the educational leader, the school, and state-level authorities. The course will help students to develop their understanding of the role of the educational leader as spokesperson seeking to influence the resolution of issues of school governance.

EDAM 27.750: Applied Ethics of Educational Leadership

3 s.h

This course will enable students to examine multiple thical paradigms, to understand the Professional Code of Ethics for educators, to determine one's own code of ethics, and to develop a model for ethical decision-making.

EDAM 27.752: Advanced Leadership

3 s.h.

Prerequisites: EDST 24720

This course provides students enrolled in the doctoral program with a capstone seminar experience that is designed to synthesize the various facets of leadership, organizations and change in a way that will enable students to view issues related to these topics at a critical/deeper level of analysis while working on the dissertation. Specifically, students will be able to formulate, articulate and design a method to study their personal theory of leadership in action. The course will place special emphasis on issues of contemporary leadership in times of organizational and social turbulence.

EDST 24.501: Procedures and Evaluation in Research

3 s.h.

The course helps students develop an understanding of research and statistics sufficient to enable them to read and evaluate research, and develop and carry out full scale research projects.

EDST 24.502: Initiation of Internship Project

1 s.h.

see EDST24.608

EDST 24.503: Quantitative Analysis in Educational Research

3 c h

This introductory course is designed to assist educators in the design and implementation of research projects using quantitative methods of analysis. Using a decidedly applied approach, educators will learn how to use computerized statistical analysis programs in conducting quantitative data analyses. Further, they will learn how to compute and interpret statistics of varying types, including t-tests, F tests, r tests, chi-square and other assorted parametric and non-parametric tests of significance.

EDST 24.504: Action Research in Education

3 s.h.

This introductory course introduces students to the cyclical and recursive approaches to action research. Student will engage in reflective practice and will complete an action research project in an appropriate educational setting.

EDST 24.561: Statistics in Educational Research

1 s.h

This is an introduction to the use of statistics in educational research. Topics will include: measures of central tendency and variability; probability; binomial, normal, chi square and F distributions; point and interview estimation; hypothesis testing; power functions; zero order correlation and regression; and introduction to analysis of variance.

EDST 24.565: Analysis and Application of Research

3 s.h.

Students will develop skills necessary to critically analyze and interpret educational research. Interpretation of statistics, analysis of research design, and the use of educational data bases will be components of the course. Emphasis will be on the application of educational research to actual classroom problems through a case study method as well as student-designed projects.

EDST 24.566: Research in Classroom Practice

3 s.h.

Prerequisites: ELEM 02511

None

EDST 24.602: Development of Internship Project

1 s.h.

See EDST24.608

EDST 24.608: Internship Project Report

Students will design and complete an individual internship project applying scientific inquiry and research methodology to an identified problem of interest in an area related to instructional practice, curriculum development and/or learning. These courses, Initiation of Internship Project (1 S.H.), Development of Internship Project (1 S.H.) and the Internship Project Report are completed during Phases II, III and IV of the Master of Science in Teaching Program.

EDST 24.624: Educational Change

3 s.h.

Prerequisites: ELEM 02550 and READ 30566

To assume leadership roles and to become change agents in their respective schools, teachers will analyze the influences, trends, social and political forces that generate and impact educational change at varying levels, i.e., at the classroom, school, community, state and national levels. They will develop knowledge of the stages of systemic educational change and strategies to achieve and sustain momentum for change.

EDST 24.703: Research for Educational Leadership I

This course focuses on two broad areas: issues of validity and reliability in methodological inquiry and approaches in educational evaluation and assessment. This course provides practical knowledge for use by educational leaders to support administrative decisions.

EDST 24.705: Research for Educational Leadership II

1 s.h.

Prerequisites: EDST 24703

This course emphasizes qualitative research with emphasis on policy research, analysis, and assessment. This course provides practical knowledge for use by educational leaders to support administrative decisions.

EDST 24.707: Applied Analysis for Educational Leadership

3 s.h.

This is an intermediate course in quantitative (statistical) analysis with emphasis upon three broad areas: applying correct statistical procedures for data analysis; using automated approaches to hypothetical testing and quantitative analysis, and using intermediate-level statistical procedures in educational inquiry. The course is expected to provide practical knowledge for use by educational leaders to support administrative decisions.

EDST 24.709: Issues in Survey Research

4 s.h.

This course teaches methods for designing and implementing survey research, including how to choose a valid sample, handcraft survey instrumentation, avoid non-response bias and other threats to the validity of the survey, and analyze and communicate survey results validly and effectively.

EDST 24.720: Leadership, Applications, Fieldwork, and Seminar I and II Sequence 9 s.h.

The Leadership Applications, Fieldwork and Seminar I & II sequence will enable students to experience the process of doing a research study from the inception of the idea to its implementation or recommended changes. For many students, this sequence will result in a pilot study for the dissertation.

EDST 24.722: Research Literature Analysis and Writing in Educational Leadership

This course is designed to assist students in reading, interpreting, understanding and digesting research literature as well as to assist students in basic academic writing skills and APA style. Students will learn the function of a literature review in the research process and will learn to synthesize a body of research and write a cohesive literature review.

EDST 24.723: Conducting and Analyzing Survey Research in Educational Leadership 3 s.h.

Prerequisites: EDST 24722

The ability to carry out, interpret, understand and digest research in diverse contexts and with diverse populations is critical for successful educational leaders. The course provides learning experiences to understand survey research methodologies, data collection techniques, analysis and communicating results, with a particular focus on utilizing survey research within action research projects.

EDST 24.724: Conducting and Analyzing Qualitative Research in Educational Leadership 3 s.h.

The ability to carry out, interpret, understand and digest research in diverse contexts and with diverse populations is critical for successful educational leaders. The course provides learning experiences to continue to understand qualitative research methodologies, data collection techniques, analysis and communicating results, particularly in relation to action research.

EDST 24.790: Dissertation Proposal

3 s.h.

This course assists the student in preparing an acceptable dissertation proposal. Topics include alternative approaches to conducting dissertation research, designing an effective study, and recognizing and avoid common difficulties encountered in dissertation research.

EDST 24.795: Dissertation Research

1 to 12 s.h.

This is a 12 credit independent research project to be conducted in conformity with the student's dissertation proposal that has been approved by the student's doctoral committee. Students may register for all 12 credits at once or may register in four credit increments for three consecutive semesters including summer. Dissertations must be completed within three years of passage of the second benchmark.

EDSU 28.501: Administration and Supervision of Music Education

3 s.h.

This course is a study of current practices and techniques of supervision with emphasis placed on the problems relating to specific administrative positions and to most music programs. This course may not be offered annually.

EDSU 28.503: Leading the Learner Centered School

3 s.h.

This course is designed to explore the best ways to facilitate learning for students and to examine how the educational environment can be organized to maximize learning for all.

EDSU 28.522: Instructional Leadership and Supervision

3 s.h.

Prerequisites: EDSU 28546

In this course, students focus on the knowledge, skills, and dispositions essential for instructional leadership and the supervision of educational activities and programs. Topics include program planning, staff selection and mentoring, curriculum development and evaluation, analyzing teaching and interpersonal supervisory strategies, collaborative program development, practicing value-added leadership and supervision, reflective practice, understanding the need for diversity in teaching and learning, and communication. This course also includes a field experience component of approximately 25 clock hours in which students apply theory to practice.

EDSU 28.523: Building Organizational Capacity Through Leadership and Supervision 3 s.h.

Prerequisites: EDAM 27510 and EDSU 28522

This advanced course in school leadership enables students to practice the cyclical and recursive approached to action research. Student will engage in reflective practice and will complete an action research project in an appropriate educational setting related to the teaching and learning process. This course is offered annually and includes a field experience component.

EDSU 28.546: Educational Organizations and Leadership

3 s.h.

Prerequisites: FNDS 21502 and CURR 29580 and EDST 24504 and EDAM 27632

In this course, students will demonstrate an understanding of organizational theory that underlies effective leadership and supervisory behaviors in P-12 environments. Students will further demonstrate that they can analyze and supervise school and programmatic activities, nurture and supervise a vision for improvement in teaching and learning, lead and supervise change, support staff development, and use effective supervisory skills. Other topics include the history and philosophy of school leadership and supervision, effective schools, effective teaching, and the future of school leadership and supervision.

EDSU 28.598: Observational Skills for Supervisors

3 s.h.

Prerequisites: EDSU 28546

Emphasis is on the observation and evaluation of teaching performance using research/measurement based assessment instruments and techniques. Research on teaching and effective schools forms the theoretical basis for performance appraisal.

EDSU 28.602: Field Service in Supervision: District Internship

1 to 6 s.h.

Prerequisites: EDSU 28546

This course is designed to respond to the needs of school administrators and supervisors for developing effective supervisory skills. The content for each course offering will be determined after a local analysis of needs has been conducted. Semester hour credit will be assigned prior to registration.

EDSU 28.605: Field Experience Administrative-Supervision

4 s.h.

Prerequisites: EDSU 28546

None

EDSU 28.706: Diversity and Educational Leadership

3 s.h.

This course deals with diversity both among the student body and the workforce. It addresses the ways that people are alike and explores issues of difference. It focuses on the power that valuing difference can have in establishing quality interpersonal relations, in taking advantage of the cultural richness that can result from diversity, and in creating mutual respect among groups. It examines how the educational leader might overcome resistance to change in this regard.

EDSU 28.710: Leadership Seminar I

3 s.h.

The Leadership Seminar series spans each stage of the doctoral program, serving throughout the seven semesters as a focusing technique to forge the cohort into a defined community of learners and scholars. While its primary function is to serve as a vehicle for self-reflection, group reflection, and the integration of course work with professional concerns, the Leadership Seminar also provides the opportunity for the cohort to tailor the program to meet specific professional concerns and developmental needs as they emerge.

EDSU 28.715: Leadership Theory

3 s.h.

The course is the foundation course for the Doctoral Program in Educational Leadership. Leadership will be defined, demystified, and distinguished from management and administration. The roles and expectations of leaders will be explored, and the competencies required for leadership will be identified. Issues of power, authority, and ethics are studied.

EDSU 28.716: Leadership Seminar VI

2 s.h.

Prerequisites: EDSU 28714 See Leadership Seminar I

EDSU 28.718: Seminar on the Psychology of Leadership

3 s.h.

This course develops student's understanding of the psychological needs of persons who seek leadership roles, human nature in the work place, the psychological factors that underpin decision-making and acceptance of change, and utilizing psychology to create a more supportive, empowering, and effective work place.

EDSU 28.721: Special Topics in Leadership

3 s.h.

This course will have a changing focus that will permit faculty to offer specialized seminars focused on new developments in the field, issues of significance where advanced specialization would be helpful to educational leaders, areas of faculty research and scholarship, or in response to student requests. Multiple sections of this course, each focused on a different topic, may be offered during a semester. Students may take this course for elective credit more than once, as long as the theme of the course is different each time that the student enrolls.

EDSU 28.724: Leadership Problems I: Field Studies

4 s.h.

Prerequisites: EDAM 27704

The first of a two-course sequence, this course will structure students into leadership teams that will be assigned to work with specific schools and colleges to assist in the development of a plan for the solution of a significant organizational problem or program development need.

EDSU 28.725: Leadership Problems II: Field Applications

3 s.h.

Prerequisites: EDSU 28724

The second in a two-course sequence, this course will employ the leadership teams, previously established in Leadership Problems I, to develop a final action plan for the solution of a significant organizational problem or program development need, and to participate in the implementation of the change.

EDSU 28.726: Leadership Problems

7 s.h.

This is a field-based course that involves students in a major collaborative effort to address a complex problem or opportunity in an educational setting. Students engage in analytical and design activity, as well as develop a comprehensive implementation plan. Focus is on both the substance of the problem/opportunity and the process of change.

EDSU 28.728: Leadership and Educational Philosophy

3 s.h.

This course focuses on the democratic ideals that underpin educational philosophy in America, formal schools of educational philosophical thought, problems in educational philosophy, and the implications of educational philosophy for educational leadership.

EDUC 01.601: Clinical Internship I

None

5 s.h.

EDUC 01.603: Clinical Seminar I

2 s.h.

Students will complete a field experience focusing on sequenced observations and supervised beginning teaching experiences in a variety of school settings. Specific competencies shall be developed in: 1) teaching and learning, 2) curriculum, 3) pupil guidance, and 4) classroom organization and management. Concurrent seminar study will focus on knowledge of the special needs of students, applications of educational technology and student assessment and evaluation.

EDUC 01.605: Clinical Internship II

7 s.h.

None

EDUC 01.607: Clinical Seminar II

1 s.h.

Students will complete a supervised semester-long teaching internship in an assigned classroom and school setting. They will research and apply general and specialized knowledge to the processes involved in full-time classroom teaching and other teacher responsibilities. Seminar study will emphasize effective teaching practices that extends their previous learning and current intern teaching.

ELEM 02.511: Learning Community Classrooms

3 s.h.

This course focuses on identifying the characteristics of a learning community classroom, the propensities of learning community teachers, and the stages of group development in establishing a learning community. Course activities include study of personal planning, implementing, and reflecting strategies for establishing a learning community classroom.

ELEM 02.517: Clinical Experiences in Elementary School Mathematics

3 s.h.

Prerequisites: ELEM 02556

The graduate student will use current assessment instruments and plan strategies for diagnosing and improving the mathematics skills and concepts of an elementary school child who is deficient in mathematics and has enrolled in the clinic. This course consists of both formal classwork and working with a child enrolled in the clinic. This course may not be offered annually; usually offered in the summer.

ELEM 02.532: Contemporary Elementary Education/Special Topics

1 to 6 s.h.

Considers the principles and practices of special topics in elementary education. This course provides in-depth development of special topics in elementary education.

ELEM 02.536: Elementary School Curriculum

3 s.h.

The major focus of this course is to have early childhood and elementary grade teachers examine the school curriculum in the role of curriculum designers as they review and reevaluate the current curriculum in their schools, using criteria from research available in the current knowledge base of the profession. Most of the presentations of material in class will be accomplished through committee structures based upon the learning community model.

ELEM 02.537: Contemporary Curriculum Processes/Social Studies

3 s.h.

This course is designed to acquaint the student with current global, national and local school-based programs in social studies with emphasis on those of a multi-cultural, multi-ethnic nature. Criteria will be developed for the selection and use of curricula materials and equipment in the field, and the latest evaluation techniques will be considered. Course may not be offered annually.

ELEM 02.538: Contemporary Curriculum Processes/Science

3 s.h.

This laboratory oriented course dealing with inquiry through the use of process skills. Original investigations are carried out, and techniques are developed to prepare the teacher to guide children in the use of these skills. S-APA, SCIS, ESS and subsequent programs are examined and evaluated.

ELEM 02.539: Contemporary Curriculum Processes/Elementary Language Arts

3 S.n.

This course examines current theory and practice in the teaching of all of the language skills of the elementary school. Criteria are developed for evaluating teaching practices in terms of today's demand for improved and expanded communications skills. This course may not be offered annually.

ELEM 02.540: Contemporary Curriculum Processes/Elementary Mathematics

3 s.h.

The primary purpose of this course is to examine and evaluate practices of teaching and criteria of evaluating mathematics in the elementary grades. Criteria will be obtained by studying research findings and examining the recommendations of authorities in the field. Courses of study will be evaluated using established criteria. This course may not be offered annually.

ELEM 02.541: Practices in Elementary Education (Art)

3 s.h

Emphasizes analysis of trends, objectives, methods and materials in art education in terms of underlying assumptions about learning and experience. Attention is given to developing practices in art education that are based on sound theory of art and education.

ELEM 02.542: Linguistic Emphasis of Language Arts Teaching

3 s.h

This course in the teaching of language arts is designed to provide teachers with a balanced view of experiences children need to learn the structure and use of language. It is also intended to provide a foundation for a linguistic emphasis on language learning.

ELEM 02.550: Analysis of Classroom Teacher Behavior

3 s.h.

Through a review of the literature and self-analysis, students will examine relationships between teacher personality characteristics, classroom processes, and pupil achievement. All students will have opportunities to identify variables which research reveals as significantly correlated with pupil growth. Ample opportunity will be provided for students to develop expertise in the use of a low-inference, relatively objective, and highly reliable system of analyzing classroom interaction. This course may not be offered annually.

ELEM 02.551: Diagnostic Teaching and Evaluation of Basic Language Arts Skills

3 s.h.

This course will explore and examine various diagnostic processes and evaluational techniques as they relate to the Language Arts. Concepts related to diagnostic teaching procedures (based on the study of standardized language tests and formal and informal assessment techniques) for the underachiever, the gifted and the language disabled child will be developed. This course may not be offered annually.

ELEM 02.552: Research on Children's Mathematical Learning

3 s.h.

This course introduces the graduate student to theories of how elementary and middle-school students learn mathematics and to current research on children's thinking and learning of mathematics. It surveys research findings on the child's understanding of mathematical concepts such as number, operations, fractions and proportions, measurement, and space. The focus of the course is how children learn mathematics, and it will enable the graduate student to see mathematics from the standpoint of the elementary and middle school child. This course will aid the teacher in discerning a child's understanding of mathematics as a basis for determining the type of mathematics instruction for which he/she is ready.

ELEM 02.553: Use of Communications Media to Teach Elementary Language Arts Skills 3 s.h.

This course introduces the student to the basic production processes utilized by various communication media, e.g., television, radio, print, and theater. The student will learn how to work with children to stage production in each of these media as a means of teaching basic language arts skills. The student will also learn how to manage the product of the media as a vehicle to teach children to receive and interpret communications. A fee is required for laboratory materials. This course may not be offered annually.

ELEM 02.554: Measurement and the Metric System in Elementary School Mathematics 3 s.h.

This course is designed to equip the student with knowledge of measurement theory and the metric system of measurement through the laboratory approach. Teaching methods will be stressed, and a variety of metric lab equipment and materials will be examined and evaluated. This course may not be offered annually.

ELEM 02.556: Principles of Identification and Treatment of Mathematics Deficiencies 3 s.h.

This course introduces the student to the principles of identifying, prescribing, planning and teaching for mathematics deficiencies in elementary school children. Students have the opportunity to design a diagnostic instrument and plan an individualized instructional program based upon findings. This course may not be offered annually.

ELEM 02.558: Principles of the Math-Lab/Learning Center Approach in Elementary School Mathematics 3 s.h.

This course will familiarize the student with many different manipulative devices used in elementary mathematics programs, suggest appropriate methods for use, provide opportunities to gain experience in their use, aid in developing the ability to relate mathematics symbols and vocabulary to physical modules and drawings. This course may not be offered annually.

ELEM 02.560: Research Seminar in Elementary Mathematics Education

3 s.h

This course provides an opportunity for the student to locate, read, analyze, and discuss research in the field of mathematics education and to develop skills in research design. Procedures used in research involving elementary mathematics will be investigated. Various research procedures will be studied to develop ability to interpret and understand current research in mathematics. Students will design an investigation of a topic in elementary mathematics. This course may not be offered annually.

ELEM 02.600: Seminar in Elementary Teaching

3 s.h.

Each student is expected to conceive, conduct and report an investigation that will display sound knowledge of educational theory, appropriate research procedures and skill in communication.(ELEM02.600 offered in fall only; ELEM02.601 offered in spring only.)

ELEM 02.601: Seminar in Elementary Teaching

3 s.h.

Each student is expected to conceive, conduct and report an investigation that will display sound knowledge of educational theory, appropriate research procedures and skill in communication.(ELEM02.600 offered in fall only; ELEM02.601 offered in spring only.)

ENGL 05.501: Teaching American English Grammar

3 s.h.

Teaching American English Grammar provides an introduction to the history of the English language, including a short history of grammar instruction; a review of traditional grammar, along with an overview of other grammatical approaches to English; and the opportunity to explore strategies of teaching grammar to both native and non-native speakers of English, with attention to how grammatical choices affect rhetorical style and effectiveness.

ENGL 05.501: Teaching American English Grammar

3 s.h

Teaching American English Grammar provides an introduction to the history of the English language, including a short history of grammar instruction; a review of traditional grammar, along with an overview of other grammatical approaches to English; and the opportunity to explore strategies of teaching grammar to both native and non-native speakers of English, with attention to how grammatical choices affect rhetorical style and effectiveness.

ENGR 01.501: Special Topics in Engineering

1 to 3 s.h.

This course is designed to introduce students to emerging topics in the engineering field. Consent of the instructor is necessary, and prerequisites are determined by the nature of the topic.

ENGR 01.510: Finite Element Analysis

3 s.h.

Fundamental concepts for the development of finite element analysis are introduced. The element stiffness matrices are developed using shape functions defined on the elements. Aspects of global stiffness formation, consideration of boundary conditions, and nodal load calculations are presented. Mesh division and problem modeling considerations are discussed in detail. Topics of scalar field problems and natural frequency analysis are covered. Computer applications are included.

ENGR 01.511: Engineering Optimization

3 s.h.

The formulation and modeling aspects of engineering optimization problems are presented. These steps involve setting up of the objective function to be minimized and the resource and system constraints to be satisfied. Solution techniques using gradient based methods, zero order methods, and penalty techniques are discussed.

ENGR 01.599: Master's Thesis Research

1 to 6 s.h.

This course will provide a meaningful one-on-one research experience under the direction of an engineering faculty advisor. The research topic will be chosen by mutual agreement of the student and his or her adviser. The course will include a thorough literature search and review, the development of a clear and concise problem statement, consultations with other faculty and professional experts, and the derivation of publishable results. The research will culminate in a comprehensive master's thesis. A final oral presentation and defense are required.

ENT 06.504: Strategic Project-Based Experience

3 s.h.

This course is designed to provide strategic focused field based project learning experiences and opportunities for graduate students by affording them the opportunity to work with a wide variety of public and private organizations. The course uses a team-based approach to offer consulting advice to organizations with the goal of improving their performance. The emphasis in the course is on experiential approaches that provide a participative type of learning about the crucial issues faced by organizations. This course is interdisciplinary in nature and open to all graduate students.

ENT 06.505: Entrepreneurship and Innovation

3 s.h.

This course provides a broad framework for understanding the nature of entrepreneurship in multiple organizational settings. The course introduces students to the innovation and idea generation process and helps students apply an alternative way of "thinking" to assist in solving difficult issues for government, business, and the non-profit sector.

ENT 06.506: Corporate Entrepreneurship and New Venture Development

3 s.h

This course provides an overview of the potential for innovation and entrepreneurial opportunities or new ventures within a corporate environment. The course covers various aspects of corporate entrepreneurship and new venture development. Major topics include understanding the corporate entrepreneurial revolution, learning about the nature of entrepreneurship within established organizations, understanding the requirements for setting up an environment conducive to new ventures within a corporate setting, and learning about the entrepreneurial direction of firms as they grow and evolve. Among the issues discussed are application of entrepreneurship to established firms, the disparity between start-up and corporate entrepreneurship, the role of creativity within corporate entrepreneurship, the relation to product innovation and technology, the importance of corporate strategy within an entrepreneurial framework, and what it takes to create an entrepreneurial culture.

FIN 04.500: Financial Decision Making

3 s.h.

Prerequisites: BUS 01518 and ACC 03500 and MGT 07500

Students in this course will learn valuation techniques including adjusted present value, equity cash flows, and real-option valuation. In addition to comparing alternative valuation techniques and the assumptions and limitations underlying each, students explore the technical difficulties and incentive effects caused by high leverage, the relation between capital structure and capital costs, the interaction between a firm's financial structure and its business strategies, the conditions contributing to potential under or over-valuation of a firm's prospects by the market, and the managerial consequences of such mis-valuation.

FIN 04.512: Capital Budgeting

3 s.h.

Prerequisites: FIN 04500

This course includes the following topics: estimation of project cash flows, interest, annuity, and present value calculations, evaluation of projects under conditions of certainty and risk, strategic planning in capital budgeting, and leasing. This course may not be offered annually.

FIN 04.516: Issues in Finance

3 s.h.

Prerequisites: FIN 04500

This course includes the following topics: mergers and acquisitions, financial structure analysis, cost of capital analysis, capital budgeting, portfolio management, financial institutions, money and capital markets, and international finance. This course may not be offered annually.

FIN 04.600: Investments/Portfolio Analysis

3 s.h.

Prerequisites: BUS 01518 and MGT 07500

Students will analyze and develop an ability to deal with the following topics: investment values and market price with regard to risk, return, portfolio diversification, taxes and inflation. They will also examine the role of fixed income securities versus common stock prices, yields, returns and valuations; warrants, options and future contracts, U.S. and foreign securities markets, and the rapidly developing science of portfolio management as it applies to both the firm and the individual. This course may not be offered annually.

FNDS 21.502: Foundations of Education

3 s.h.

In this course, an examination is made of the complexity and variety of factors influencing contemporary education in order to have an adequate explanation of school policies and practices and the process of change. Some factors to be considered are political structures, social class structures, the impact of traditional values, mass media, demographic factors, economics, and ideology.

FNDS 21.504: Foundations of Cross Cultural Education

2 s.h.

Students will examine the many ways that cross-cultural education is being dealt with in grades K-12. Students will: 1) acquire information on trends and problems in multi-cultural environment; 2) understand the economic and political forces interacting with the multi-cultural environment; 3) critically investigate and analyze contemporary issues; and 4) assess present conditions in cross-cultural environments, suggesting remedies to problems that have been identified.

FNDS 21.527: Historical and Philosophical Foundations of Education

 $3 \, \text{s.h}$

Emphasis is upon twentieth century education in the United States and attention is given to contributions of selected thinkers from Plato to Dewey. The nature and functions of educational theory are also of special concerning this course and students are to analyze educational practices for implied or stated philosophical assumptions.

FNDS 21.530: Foundations of Multi-Cultural Education

3 s.h.

This course is designed to focus on the key relationships between formal education as a social and cultural institution in American society and multicultural education as a response to contemporary societal needs. The course examines the areas of curriculum, pedagogy and evaluation in multicultural education as they affect and are affected by the education professional. The course requires empirical investigation and subsequent analysis through selected topics in research in Intercultural Education.

FNDS 21.540: Computers and Related Technologies in the Secondary Classroom

3 s.h.

This course is designed to assist secondary teachers in the successful integration of computers and related technologies into the secondary classroom curriculum. The student will develop computer and technology skills enabling them to select, interpret, and evaluate computer applications in the math, science, social studies, reading and language arts curriculum. The student will be exposed to a large variety of educational software.

GEOG 06.553: Workshop in Geography

1 to 3 s.h.

This course is designed for in-service teachers who wish to further develop their competencies in new teaching techniques and technologies in geography, including computer-assisted instruction and computer cartography. Contemporary geographic topics will be explored within a regional context of each major world region. Students will actively participate in applying new concepts, current data, and innovative techniques in geography by designing and presenting sample lessons at their grade level. (Summer only)

GEOG 06.555: Geographic Information Systems (GIS) Topics and Applications

Geographic Information Systems (GIS) Topics and Applications provides an extended exploration into Geospatial science and analysis at the graduate level. Students develop advanced GIS skills through a project-based approach culminating in a final project and presentation. The course deepens the understanding of raster and vector data structures as well as the ability to work with computational algorithms used in GIS analysis. Students learn through lectures, demonstrations, computer laboratory sessions and a project paper and presentation.

GEOG 06.555: Geographic Information Systems Topics and Applications

Geographic Information Systems Topics and Applications provides an extended exploration into Geospatial science and analysis at the graduate level. Students develop advanced GIS skills through a project-based approach culminating in a final project and presentation. The course deepens the understanding of raster and vector data structures as well as the ability to work with computational algorithms used in GIS analysis. Students learn through lectures, demonstrations, computer laboratory sessions and an intensive project. Students are evaluated by their performance on examinations and a project paper and presentation.

HIED 06.603: Seminar/Internship in Higher Education Instruction

4 s.h.

The goal of this seminar is to prepare students to teach in a higher education setting in selected areas by engaging them in a comprehensive instructional internship in a cooperating institution of higher education. The seminar will provide the opportunity to explore best practices in instruction and to reflect on the internship experience.

HIED 06.605: Higher Education in America

3 s.h.

This course focuses on issues and trends within higher education regarding institutional mission, the student body, curriculum, faculty, student services, governance, administration, finance, and community service (including economic development). The course will examine the challenges and opportunities confronting higher education.

HIED 06.606: Selected Topics in Higher Education

3 s.h.

This course explores a topic of importance in the field of higher education. The focus will be different each time that the course is offered. Examples of courses that might be offered include: New Directions in Financial Aid; Outcomes Assessment; Distance Learning; State Higher Education Systems; Federal Policy and Higher Education; Student Activism.

HIST 05.500: Colloquium in American History

3 s.h.

This course introduces students to in-depth historical analysis of a selected theme in American history, including work with historical sources, critical reading of historians' accounts, intensive research and writing, and class discussion. Proposed topics include American Immigration History, Colonial North America (1500-1775), The American Revolution and Early Republic (1763-1820), Comparative History of the Americas, and Modern American and European Women in Historical Perspective.

HIST 05.504: Colloquium in European History

3 s.h.

This course introduces students to in-depth historical analysis of a selected theme in European history, including work with historical sources, critical reading of historians' accounts, intensive research and writing, and class discussion. Proposed topics include Ancient Historians, The French Revolution, The Holocaust in Europe, Popular Culture in Early Modern Europe, Social History of Early Modern Europe, 20th Century War and Society, Women in Early Modern Europe, and Modern American and European Women in Historical Perspective.

HIST 05.505: Colloquium in Global History

3 s.h.

This course introduces students to in-depth historical analysis of a selected theme in global history, including work with historical sources, critical reading of historians' accounts, intensive research and writing, and class discussion. Proposed areas of specialization include Africa, Asia, Eastern Europe, Latin American, and the Middle East.

HLTH 37.510: Selected Topics in Health

3 s.h.

This course provides students with the opportunity to identify causes, effects, prevention and intervention techniques of current health problems of students in the schools. The graduate student will have the opportunity to investigate a variety of strategies utilized by schools, communities, and the medical world to solve the problem. Curriculum development will also be included. This course may not be offered annually.

HLTH 37.525: Curriculum Strategies in Substance Awareness Education

3 s.h.

Prerequisites: PSY 05502

This course provides students with the knowledge, resources and skills needed to plan and organize curricula in chemical health education which meet the needs of students in school and non-school based settings. Students evaluate the nature and scope of the substance abuse problem in order to make informed decisions in the development, organization, implementation and evaluation of substance abuse programs. Special attention is given to program and policy development, instructional strategies, program evaluation, staff development, and the dynamics of school culture.

HLTH 37.540: Current Advances in Health Sciences

3 s.h

Examines the latest developments and studies research finding which pertain to both personal and community health problems and issues. This course may not be offered annually.

HRM 06.605: Strategic Human Resource Management

3 s.h

Strategic Human Resource Management consists of planned organizational activities designed to increase organizational effectiveness and equity. This course outlines the transformation of HRM from a clerical function to an important strategic partner of top management. It focuses on the ability of HRM to provide a source of competitive advantage to forward-thinking organizations.

INTR 01.503: Seminar on Integrating Mathematics and Science

3 s.h.

This interdisciplinary seminar is designed for advanced graduate students with some background in teaching mathematics and/or the sciences at the elementary and/or middle school level. Students in the course will examine a number of current scientific issues from the perspective of different sciences and develop and pilot instructional activities relating to those issues.

INTR 01.505: Workshop in Mathematics and Science

1 to 6 s.h.

Students in this course will be involved in hands-on workshops designed to address individual interests and needs with respect to both content and pedagogy. In addition, students will study the identification and selection of appropriate instructional materials for teaching mathematics and science. Also included in the course is planning, implementing, and evaluating field trips in science and mathematics.

INTR 01.507: Facilitating Change in Mathematics and Science

3 s.h.

Students in this interdisciplinary course will review recent developments in the sciences and mathematics that affect the importance of specific topics. In addition, they will examine and apply the research on facilitating change in the schools.

LDTC 18.503: Foundations of Learning Disabilities

3 s.h.

A general introduction to learning disabilities, with emphasis upon remediation of basic skills and pedagogical rationale. Students will become familiar with the various types of disorders encountered in pupils with learning disabilities and with appropriate instructional techniques and materials.

LDTC 18.504: Assessment of Learning Disabilities

3 s.h.

Prerequisites: LDTC 18503

In this two semester sequence, emphasis will be on evaluation and remediation of learning disorders in school age children. A case study is required. Enrollment limited to students matriculated in the Learning Disabilities program. (LDTC18.504 is offered in the fall semester and LDTC18.505 is offered in the spring semester.)

LDTC 18.505: Correction of Learning Disabilities

3 s.h.

Prerequisites: LDTC 18504

In this two semester sequence, emphasis will be on evaluation and remediation of learning disorders in school age children. A case study is required. Enrollment limited to students matriculated in Learning Disabilities program. (LDTC18.504 is offered in the fall semester and LDTC18.505 is offered in the spring semester.)

LDTC 18.510: Applied Theories of Learning

3 s.h.

Educators will develop and articulate their own theories of learning after examining carefully and critically the prevalently existing and competing theories of learning. The study of motivation and its effect on learning including the use of rewards and incentives will be covered as well.

LDTC 18.520: Neurological Bases of Educational Disorders

3 s.h.

The student will study the nature of physiological readiness for learning with regard to the various disabilities. The varieties of physical, mental, and learning disabilities will be related to the neurophysiological basis for learning.

LDTC 18.525: Advanced Assessment Techniques

3 s.h.

Prerequisites: LDTC 18504

This course is designed for the advanced graduate student in learning disabilities. It provides for the development of competence in a variety of assessment instruments useful in differential diagnosis of complex learning problems. This course may not be offered annually.

LDTC 18.540: Motor Development in Young Children with Disabilities

3 s.h.

The course investigates motor development resulting in disabling conditions in young children. Major theorists and research are an integral part of the course work. Assessment options and research-based interventions are explored. This course may not be offered annually.

LDTC 18.545: Language Development in Young Children with Disabilities

3 s.h.

The course investigates language acquisition and the physiological, environmental and psychological factors which may influence that development in the young children. This course may not be offered annually.

LDTC 18.550: Foundations in Early Childhood Special Education

3 s.h.

The course surveys the bases of disabilities in young children. Diagnostic techniques, materials and methods are explored. Classic studies and current research will be studied.

LDTC 18.600: Seminar and Research in Learning Disabilities

3 s.h.

This course considers current issues, trends, problems, and research of significance to learning disabilities. Students complete a thesis/project which evidences capacity for research and independent thought. Registration by permission of the program advisor only. The comprehensive examination is taken during LDTC18.601.

LDTC 18.601: Seminar and Research in Learning Disabilities

3 s.h.

This course considers current issues, trends, problems, and research of significance to learning disabilities. Students complete a project which evidences capacity for research and independent thought. Registration by permission of the program advisor only. The comprehensive examination is taken during LDTC18.601.

LDTC 18.650: Clinical & Field Experiences in Learning Disabilities

3 to 6 s.h.

Students engage directly in supervised case work with children demonstrating learning disorders. Assessment and appropriate, research-based remediation of learning problems, consultation skills and in-service program design are required in a 120-clock hour clinical and field setting. Only matriculated students may register for this course.

LDTC 18.655: Colloquium in Learning Disabilities

6 c h

The course includes study and discussion of components of the Learning Consultant role based upon consideration of research and case material related to the externship experience. The externship component is a 360-clock hour supervised experience in a public school setting.

LIBR 01.502: Survey of Children's Literature

3 s.h.

The course surveys literature for children from birth to age 14, including genre study, major authors and illustrators, current trends in publishing, issues in criticism, electronic resources related to children's literature, methods of promoting reading, teaching children's literature to children, and using multicultural children's literature in classrooms and libraries.

LIBR 01.503: Survey of Young Adult Literature

3 s.h.

Students will consider the reading and media interests of young people ages 12-18 in view of current information about adolescence in the United States. Topics covered include major genres, authors, literary qualities, criticism and reviewing, awards, selection principles, censorship, and promotional techniques for classrooms and libraries.

LIBR 01.505: Reference Resources and Services I

3 s.h.

Students focus on the provision of reference services as well as the evaluation and use of reference sources in schools and libraries. Topics covered include characteristics and use of information sources and systems, policies and procedures, basic reference sources in both print and electronic formats, and skills and attitudes needed to assist diverse individuals in meeting their information needs.

LIBR 01.506: Foundations of Librarianship

3 s.h.

This course introduces the field of librarianship and is the first course students should take in the program. Includes: the roles of libraries and librarians in society, the history of libraries and communications, models of library service, professional ethics, and contemporary issues in school and public libraries.

LIBR 01.507: Managing Library Programs

3 s.h.

The management of school and public library services is the focus of this course. Students learn and apply principles of library organization, personnel administration, budgeting and finance, facilities and equipment, public relations, policies and procedures, accountability and evaluation.

LIBR 01.510: Library Collections and Resources

3 s.h.

The course focus is on issues, practices, and policies in the selection of print, nonprint, and electronic resources in school and public libraries. Emphases include: intellectual freedom, effective communication through policies, technology applications, bibliographic aids and review practices, and collection evaluation and maintenance.

LIBR 01.511: Organization of Library Resources

3 s.h

The course studies the library's responsibility to provide physical and intellectual access to print, nonprint, and electronic resources. Topics include: cataloging and classifying resources according to national standards; use of current technology resources; evaluating commercial and network sources; and understanding of theories and issues related to the organization of knowledge.

LIBR 01.516: School Media Centers for Teaching and Learning

3 s.h.

Focus is on the relationship of the library media program to the school curriculum with emphasis on library/media, information, and computer skills in the pre-K-12 instructional program. Students observe library media services in school settings.

LIBR 01.521: Design and Production of Educational Media

3 s.h

Focus is on new and emerging electronic technologies in libraries and media centers. Students use a variety of software to create such products as databases, library web pages, spreadsheets, presentations, and curriculum and public relations products. The course includes video technology, Internet searching, copyright and equity issues, and reflective writing.

LIBR 01.525: Reference Resources and Services II

3 s.h

Building on previous coursework, this course is devoted to understanding and serving the information needs of the general adult public. Reference skills, resources, and materials in a variety of disciplines will be studied. Students will observe at a library reference desk for 10 hours during the semester.

LIBR 01.528: Workshop in Library Services

1 to 6 s.h.

This course is designed for in-service media specialists and librarians. Topics will be selected to meet continuing and emerging needs in professional practice, combining hands-on activities with theory to allow students to develop and increase skills.

LIBR 01.530: Library Technology

3 s.h.

Focuses on planning for school and library technology, funding for technology, system selection, and current issues in school and library media technology. Study of the role of the library staff in the creation of information and its flow to users.

LIBR 01.531: Serving the Library's Publics

3 s.h.

Students examine the role of the public library in its community beyond the provision of materials and information. Students learn to plan, design, implement, and evaluate programs of service and activities for identified and diverse clienteles; create community information databases; and collaborate with other agencies. Ten hours of field observation are required.

LIBR 01.532: Library Materials for Adults

3 s.h.

This course focuses on library materials to meet the demands of adult patrons for popular reading, listening, and viewing. Topics include: methods of identifying and selecting recreational and cultural materials for various audiences of adult public library users, including new readers and minorities; trends in publishing and distribution of popular materials; and using recreational resources for programming and promotion.

LIBR 01.550: Independent Study in Library Services

1 to 6 s.h.

This course is designed for an individual who wishes to study a topic or subject in library and information science not included in the listed offerings of the program. The student undertakes an independent study under the supervision of a faculty member in the Program in School and Public Librarianship. May not be offered every semester.

LIBR 01.570: Selected Topics in Librarianship

1 to 6 s.h.

Designed for in-service school media specialists and public librarians, this course focuses on specific topics or issues affecting the profession and permits students to explore emerging thinking in the field. Topics vary each time the course is taught.

LIBR 01.580: Practicum in Library Services

1 to 3 s.h.

Focus is on observation and participation in important aspects of library operations, including selection and organization of materials; reference and bibliographic services; curriculum development; and techniques of teaching library media use. This course must be pursued at an approved site under the supervision of an appropriately certified school or public librarian and a college supervisor.

LIBR 01.600: Graduate Thesis in Library Services I

3 s.h.

Students select and justify a topic for a research project to be completed as a graduate thesis, including a comprehensive literature search and selection of the research methodology. Students also complete their Program Portfolio as a capstone experience.

LIBR 01.601: Graduate Thesis in Library Services II

3 s.h.

Prerequisites: LIBR 01600

Completion of the research project selected in Graduate Thesis in Library Services I.

MAPR 01.500: Working with Printers, Clients, and Colleagues to Produce an Effective .5 s.h. Publication

Students will learn how to establish rapport with printers and clients so the best printing can be delivered for the lowest price. Students will learn to plan publications schedules and how to anticipate and overcome deadline challenges. Writing specifications for bids will be covered.

MAPR 01.501: Basic Typography and Design

.5 s.h.

Students will learn the basics of typography and design. How to use type effectively and how to design a functional page for various kinds of readers will be emphasized.

MAPR 01.502: Advanced Typography and Design

1 s.h.

Prerequisites: CMS 01501 or MAPR 01501

Students will learn how to locate and evaluate research on typography and design. They will learn how to apply research findings regarding type size, line length, headlines, white space, color, photos, etc. to prepare outstanding publications.

MAPR 01.503: Getting the Most out of Art and Photography in Your Publication

.5 s.h.

Students will learn how to use photographs, clip art and other artwork to make a publication effective. Choosing the right art and knowing when to use which kind will be emphasized, as will computer use.

MAPR 01.504: Copyfitting and Paste-up

1 s.h.

Students will learn how to count copy so they can fit copy on a page. Students will learn how to paste up pages for the printer and for the camera. Hands-on experience will be offered, emphasizing the use of Quark Express.

MAPR 01.505: Publications Potpourri: What the Professionals Do to Assure Publication .5 s.h. Effectiveness and Award-winning Publications

Students will learn publication trends as determined from award-winning efforts nationally. They will also learn how to determine audience reaction to publications and how to evaluate their effectiveness.

MAPR 01.506: Newswriting

1 s.h

Students will learn journalistic style and how to prepare effective news releases. Selecting news topics and writing succinctly will be emphasized.

MAPR 01.507: Tigtening Writing and Translating Jargon to Comfortable Language .5 s.h.

Students will learn to edit the way professional writers do, getting the most from every word. Emphasis will be placed on writing so lay readers can understand. Students will learn how to use the fog index to help themselves and others write better.

MAPR 01.508: Writing Effective Newsletter and Brochure Copy

.5 s.h.

Students will learn how to write copy that commands the attention of different types of newsletter and brochure readers. Writing for the client and for the reader will be emphasized.

MAPR 01.509: Writing Leads That Get Attention

.5 s.h.

Students will learn how to gain readers' attention by writing effective leads. Emphasis will be placed on writing the first paragraph or two of news stories, reports and memos.

MAPR 01.510: Writing Reports, Letters and Memos

.5 s.h.

Students will learn how to write reports, memos and letters that communicate effectively with various kinds of readers. Informative and persuasive writing efforts will be emphasized.

MAPR 01.511: Writing Speeches

1 s.h.

Students will learn how to research the audience, how to locate information and how to write various kinds of speeches. Evaluating the effectiveness of a written speech will be covered.

MAPR 01.512: Interviewing Techniques and Research Organization

.5 s.h.

A short-term course designed to familiarize students and practitioners with a variety of ways to conduct interviews and organize research. Students will be able to develop stories through proven interviewing techniques. Professors will give helpful hints on how to organize and outline data. Creative writing and overcoming writers' block will also be explored.

MAPR 01.518: Publications Layout and Design

3 s.h.

This course stresses skill in the development and supervision of brochure layout, typography, and editing methods, and the preparation of professional publications of various kinds. Included in this course are these five publications modules: MAPR01.500, MAPR01.501, MAPR01.503, MAPR01.504 and MAPR01.505.

MAPR 01.519: Using Audio/Visuals in Public Relations

.5 s.h

This module will assist students and practitioners with a print background to make the electronic leap to contemporary Public Relations practices. The course will help make practitioners more comfortable with various audio-visual tools.

MAPR 01.520: Preparing Effective Displays and Exhibits for Public Relations

.5 s.h

The course will show students how to plan, set up, and evaluate effective exhibits and displays for public relations purposes. As part of this, students will study the importance of exhibits and displays, as well as the types that would be most effective in communicating with various audiences.

MAPR 01.523: How Polls and Surveys Work: How to Conduct Them

1 s.h.

The course will cover the work of famous pollsters such as Gallup, Harris, Roper and Yankelovich. Featured will be the steps necessary to conduct a valid poll such as non-probability and probability sampling, the importance of representative sampling, questionnaire development, how to write proper questions, tabulation of the results of a poll, and the interpretation of data.

MAPR 01.524: Fundraising and Development

2 s.h.

Students will learn how fundraising and development offices are organized, what research and case studies say about fundraising and development and how to plan and evaluate campaigns.

MAPR 01.525: Making Effective Presentations

.5 s.h.

Students will learn how to prepare effective presentations. Included will be knowing and involving the audience, pacing the presentation and using audio/visual materials and handouts.

MAPR 01.528: Communicating With Special Publics

1 s.h.

This course will show students how to recognize the characteristics of special publics such as blacks and other minorities, women, senior citizens, youth influentials and the community power structure. Featured will be communication methods and strategies of communicating effectively with these special publics.

MAPR 01.530: Internal Communications in Organizations

1 s.h

Both lateral and vertical communications will be studied in various organizations. The importance of good internal communications on effective external communications will be highlighted. Ideas, plans and methods of initiating and maintaining an effective internal communications program will be emphasized.

MAPR 01.531: Media Planning and Buying

1 s.h.

Students will learn how to devise a media plan that will most effectively carry their message to the target audiences. They will gain practice identifying audiences, developing a media budget, devising a media work plan and buying media.

MAPR 01.532: Media Relations

.5 s.h.

Students will learn how the various media are organized and what kinds of news the media representatives seek. Knowing what news is and delivering it to the right people will be emphasized. Conducting a news conference and the importance of accessibility will be covered.

MAPR 01.533: Crisis Public Relations

1 s.h.

Students will learn how to anticipate crises and how to plan a communications program that works during a crisis. Working with internal and external audiences before, during and after a crisis will be covered.

MAPR 01.534: Small Group Communications

1 s.h.

Addressed in this course will be the definition of small group communication; why to study small group communications; and communication factors such as group size, spatial arrangement in face-to-face groups, status, rank, and power; leadership; group climate; cooperation, competition, and conflict in group climate; and communication networks.

MAPR 01.535: Interpersonal Communications

1 s.h.

Considered in this course will be communication between two people. Models of communications developed by authorities in the field will show how the communications process works. Featured will be the concepts of communications such as the frame-of-reference, empathy, authenticity, interpersonal trust, and feeling content. The course will help students understand some of the communication barriers encountered in day-to-day work.

MAPR 01.536: Public Relations Law and Ethics

1 s.h.

The course will acquaint students with the substance and interpretation of the "Code of Professional Standards for the Practice of Public Relations," which is the official code of the Public Relations Society of America. During the course students will become familiar with the major laws governing broadcasting, publishing and speaking. A key ingredient of the course will be the opportunity for students to develop personal ethical stances about communications and to refine their skills at judging ethically unclear situations in communications.

MAPR 01.537: Contemporary Public Relations Challenges

1 s.h

This course will mix lecture with seminar discussions on key issues of the day affecting the practice of public relations. Classic problem-solving and decision-making designs will be part of the discussion about the contemporary events. Individual, on-the-job problems from class participants will be discussed and solved in case study fashion. (Using the computer for PR purposes will be stressed.)

MAPR 01.538: Legislative Liaison for Public Relations Practitioners

1 s.h

From this course students will learn how to identify from government officials and records information that affects organizations; to work effectively with government officials at all levels, local, state and federal; to promote legislation that would be helpful to an organization; and to obtain cooperation from government officials and groups.

MAPR 01.539: Client Relationships

1 s.h.

Students will study how to obtain and keep clients in the highly competitive field of public relations. They will be shown how to develop effective techniques to assure that the relationship between client and agency is a mutually beneficial one.

MAPR 01.541: Understanding and Writing Grants and Proposals

1 s.h.

Students will learn where to get grants, how proposals are evaluated and how to write and present proposals.

MAPR 01.544: Public Relations Planning

2 s.h.

This course will cover the classic ways to construct a public relations plan, including writing goals and objectives, establishing campaign themes, and strategies, developing PERT and GANTT charts, specifying plan details and learning how to monitor and evaluate the plan. Students will also learn how to write a proposal, how to identify the real communications problem, and how to counsel management about policy related to the success of the plan.

MAPR 01.546: Contemporary Rhetoric

3 s.h.

Contemporary Rhetoric introduces students to rhetorical theory and its applications. Students will be exposed to a brief history of rhetorical thought, the contributions of major theorists and movements, the practical implications of rhetorical theory, and the ways in which different groups use rhetoric. Contemporary perspectives on rhetoric will be emphasized. In addition to responses to theoretical works, students will produce an analysis of a text or texts from their own area of interest, investigating the application of rhetorical theories in a variety of environments.

MAPR 01.547: Techniques in Communication

3 s.h.

This course consists of five writing modules with varying credits: MAPR01.506-Newswriting, MAPR01.507-Tightening Writing and Translating from Jargon to Comfortable Language, MAPR01.509-Writing Leads That Get Attention, MAPR01.510-Writing Reports, Letters and Memos, and MAPR01.513-Feature Writing. Instruction is given in the five modules in journalistic writing and editing. Students will learn how to prepare effective news releases, to edit the way professional writers do, to gain readers' attention by writing effective leads, to write reports, memos and letters that communicate effectively, and to prepare and place feature stories for newspapers, journals and magazines. Description of individual modules is given under each respective number.

MAPR 01.548: Graduate Writing Basics

1 s.h.

In todays fast-action world, you are required to write accurate, hard-hitting communication at a moments notice. This course provides proctical guidelines for students who need to write with speed, precision and power.

MAPR 01.550: Introduction to Communication Research

3 s.h.

A study of the research process as it relates to the task of writing a communication thesis. Emphasis will be placed on the four standard, accepted types of research. Students will examine the unique purposes, features, procedures and uses of each research type, using the information as the basis for creating a thesis proposal.

MAPR 01.551: Public Relations Overview

3 s.h

This is an overview of the relationships between an organization and its publics. Development of understanding among them is stressed. The course presents the theoretical foundation of public relations and outlines techniques of structured communications between an organization and its publics.

MAPR 01.552: Organizational PR and Management

1.5 s.h.

Students will learn methods of informing the public about the function of the public relations office and practitioner in an organization, and the relationship of executives, middle managers and other employees to the public relations program. In addition, students will analyze all phases of public relations management, including determining and writing a budget, in-service training, agency service pricing and discounts, working with clients, and complying with SEC regulations on financial disclosures.

MAPR 01.553: Graduate Case Studies in Public Relations

1 s.h

This course reviews and predicts how organizations solve their PR challenges. Through case studies, students evaluate issues, audiences and strategic elements of each situation. Students work through problems in seminar situations and write position papers.

MAPR 01.554: Planning Special Events

1 s.h

This course will survey the problems and solutions surrounding the staging of special events and workshops in the practice of public relations. events like ground-breaking news conferences, dignitary visits, seminars, anniversary celebrations and many more pose planning and implementation problems for the practitioner. Students will anticipate and solve these problems and have the option to make plans of their own for upcoming events. Included will be budgeting, involving the audience in planning, choosing sites, working with speakers and evaluating the event workshop.

MAPR 01.555: Persuasive and Feature Writing

1 s.h.

Students will learn in this module additional technical skills in modifying opinion through writing. Students will receive a personal checklist of their persuasive writing needs during the course. In addition, students will learn how to prepare and place feature stories for newspapers, journals, and magazines.

MAPR 01.556: Organizational Public Relations Management & Counseling

3 s.h.

This three credit course will acquaint students with many aspects of the public relations profession (or review for some). Students will learn about the composition of PR departments, the steps necessary to manage a public relations department and accepted methods to establish budgets in a public relations shop. Students will be expected to analyze the economic realities surrounding the practice of public relations in a variety of settings. For the first time, there will be a concentration on public relations counseling, media training and rehearsal, and media relations.

MAPR 01.557: Using Electronic Media In Public Relations

2 s.h.

This course will acquaint students with the techniques of producing video for electronic media and its proper use in a public relations program within a given budget. They will become familiar with the different requirements for electronic media production. Students will also study the steps involved in applying this method: choosing appropriate film subjects and film principles, properly conducting the planning of a story and performing the right production practices.

MAPR 01.558: Integrated Marketing Communication

1 s.h

The relationship of marketing, public relations and advertising will be explored. Marketing, PR and advertising techniques-including cost-effective ways of reaching key audiences-will be discussed, as will positioning, testing and evaluating.

MAPR 01.559: Strategic Public Affairs

3 s.h.

The course examines theory and practice of strategic political communications, including depth study of persuasion campaigns, use of propaganda in public affairs, and the role of communicators in engaging the public in the critical public policy issues.

MAPR 01.560: Public Affairs Overview

3 s.h.

This course is an overview of the ethical and legal means used by public affairs representatives in influencing the political, legislative, and regular process of government. Emphasis is placed on demonstrating strong writing and research skills, as well as developing effective communication plans.

MAPR 01.610: Internship in Public Relations

3 to 6 s.h.

This course requires on-the-job apprenticeship in a public relations program that involves a wide variety of tasks. The internship is overseen by a public relations professional on the job and by a PR professor.

MAPR 01.620: Seminar in Public Relations

3 to 6 s.h.

Each student will be required to develop a major communication project or thesis on any phase of educational or corporate communications. The project or thesis will display appropriate research procedures and skill in communications. Some seminar sessions will be used to provide additional communications background for students. Students are required to complete both the fall and spring seminars for the program. The fall semester is a prerequisite for the spring semester. The student must have completed or be enrolled in Public Relations Overview, Techniques of Communication, and Communications Research.

MAPR 06.505: Special Topics in Public Relations

1 s.h.

Special topics provide an opportunity for graduate students to explore an emerging issue in the field of public relations in a timely fashion. The course presents an opportunity to study the topic under the guidance of an expert in the particular field or issue.

MAPR 06.510: Special Topics in Public Relations

3 s.h.

Special topics provide an opportunity for graduate students to explore an emerging issue in the field of public relations in a timely fashion. The course presents an opportunity to study the topic under the guidance of an expert in the particular field or issue.

MAPR 06.515: Online Public Relations

3 s.h

Public relations has moved to the Internet, and in the process online communication skills have become essential to online and offline public relations practice. Online public relations explores the practical tools necessary for using the internet in public relations and provides a broad overview for creating an online newsroom.

MAPR 06.516: Global Public Relations

.5 s.h.

In the era of global commerce and the World Wide Web, this course looks at how organizations communicate their messages around the world effectively, efficiently and consistently. Students will study current examples of how global organizations, both large and small, deal with differences in language and culture when operating on a global stage.

MAPR 98.503: School Public Relations

3 s.h.

This is an overview of the relationships of the school and its various publics. The public character of the school and the need for public understanding of the school are considered. Development of understanding between the school and the community is stressed.

MAPR 98.504: School Public Relations Workshop

3 s.h

Emphasis is placed on school communications and public relations ideas that can be effectively used in various education institutions. Guest experts join workshop directors in offering public relations techniques and situations. Practical experiences that help prepare the student to handle public relations responsibilities are part of the workshop. May be offered during the summer or on some Saturdays during the regular semesters.

MAPR 99.521: How Media Affect Us

3 s.h

Addressed in this course will be the effect the mass media have on companies, businesses, and organizations and the development of practical strategies of working with the media. The press, radio, TV, magazines, and books will be reviewed from the perspective of their impact on organizations.

MAPR 99.522: How Opinions and Attitudes are Formed and Changed: Persuasion 1 s.h. Techniques

Students will study the difference between an attitude and opinion, the roots of opinions, the intensity, stability, and form of an opinion, the role of opinion leaders, and the nature of propaganda. Persuasive techniques of working with informed, educated, uneducated, uninformed, and hostile audiences will be covered.

MATH 01.500: Foundations of Mathematics

3 s.h.

Strategies and tools for problem solving, including computer use, will be applied to specific problems from number theory, geometry, analytic geometry, algebra, discrete mathematics, logic, and calculus.

MATH 01.502: Linear Algebra and Matrix Theory

3 s.h.

This course includes linear systems, linear dependence and independence, linear transformation theory, multilinear forms, matrices, determinants, inner product spaces.

MATH 01.503: Number Theory

3 s.h.

This course includes divisibility properties of integers, mathematical induction, modular congruence, linear congruences and diophantine analysis, congruences of higher degree, quadratic residues, famous problems of number theory.

MATH 01.504: Introduction to Mathematical Logic

3 s.h.

This course includes intuitive set theory, relations and functions, sentential calculus, predicate calculus, mathematical systems, axiomatic theories.

MATH 01.505: Probability and Mathematical Statistics

3 s.h.

This course includes probability for discrete sample spaces, probability distributions, Chebyshev's theorem, moment generating functions, continuous random variables, sampling distributions, point and interval estimation, theory of hypothesis testing, regression and correlation, introductory analysis of variance. Other than on the recommendation of the adviser, this course should not be chosen if a corresponding similar course has been part of the student's undergraduate study.

MATH 01.507: Differential Geometry

3 s.h

This course explores the application of calculus towards the study of higher-dimensional surfaces and their geometry. Topics include geodesics, tangent space, directional derivative, Riemannian metrics, isometrics, Gaussian curvature, first and second fundamental forms, Gauss-Bonnet Theorem, minimal surfaces, differential manifolds, connections, and Riemannian curvature tensors. Special topics (at the discretion of the instructor) may include Lie groups, symmetric spaces, general relativity, cohomology, and complex geometry. Students will be required to use a computer algebra system to gain geometric intuition.

MATH 01.510: Real Analysis I

3 s.h

The theoretical treatment of the foundations of calculus covering the real and complex number systems, elementary set theory, number sequences and series, topological treatment of the real line, continuity and differentiation.

MATH 01.511: Real Analysis II

3 s.h.

The continuation of Real Analysis I covering Riemann-Stieltjes integration, sequences and series of function, functions of several variables, elements of measure theory and Lebesgue integration.

MATH 01.512: Complex Analysis I

3 s.h.

The elementary theory of the functions of a complex variable covering operations with complex numbers, graphing on the Argand-Gauss-Wessel plane, analytic functions, complex integration. Cauchy's theorem and its applications, poles and residues, power series and conformal mapping are studied.

MATH 01.513: Complex Analysis II

3 s.h.

The continuation of Complex Analysis I covering Riemann-Stieltjes integration, meromorphic functions, conformal mappings, analytic continuation, fractional linear transformations and periodic functions.

MATH 01.515: Engineering Applications of Analysis

3 s.h.

This course will cover various techniques for solving linear and nonlinear partial differential equations (PDEs) arising from physical and engineering applications; this includes both analytical and numerical methods. More specifically, students will learn the method of separation of variables for solving multi-dimensional problems, Fourier/Laplace transforms for solving infinite-domain problems, numerical methods (finite-difference, finite-element, Monte-Carlo), Green's functions, method of characteristics, and inverse scattering. Basic applications include a vibrating membrane (wave equation), heat flow along a metal plate (heat equation), steady-state fluid flow (Laplace's equation), traffic flow (shock waves), and solitary waves (solitons). Students will be required to use a computer algebra system, e.g. Mathematica, to solve problems.

MATH 01.520: Topics in Applied Mathematics

3 s.h.

This course provides an overview of the mathematical modeling process and includes applications to optimization, dynamical systems, and Stochastic processes. Models of specific real world systems will be developed and studied using analytical and numerical methods.

MATH 01.521: Nonlinear Differential Equations

3 s.h.

This course examines analytic and computer methods for the solution of ordinary differential equations which are of interest in applications. Topics are selected from differential equations in the phase plane, geometrical and computational aspects of the phase plane, averaging methods, perturbation methods, stability, Liapunov methods, existence of periodic solutions, bifurcations and chaos. Applications are also included that are of use in science and engineering.

MATH 01.522: History of Mathematics

3 s.h.

Topics will include: Babylonian, Egyptian and Greek mathematics. Attention will be given to the development of trigonometry, algebra, analytic geometry and the calculus.

MATH 01.523: Selected Topics in Mathematics

1 to 6 s.h.

This course provides students with the opportunity to explore current issues in mathematics. The course will have a changing focus that will permit faculty to offer specialized seminars focused on new developments in the field, issues of significance, areas of faculty research, or in response to students' requests. Students may take this course for credit more than once (limit: 9 s.h.), as long as the focus of the course is different each time the student enrolls.

MATH 01.524: Abstract Algebra I

3 s.h.

This introduction of abstract algebra will include the construction of number systems, theory of groups, rings, integral domains and fields. Other than on recommendation of the adviser, this course should not be chosen if a corresponding similar course has been part of the student's undergraduate study.

MATH 01.525: Modern Geometry

3 s.h.

This course provides an overview of the field of geometry by studying selected geometries in depth, both Euclidian and non-Euclidian. Indicative exploration and the axiomatic method, as well as synthetic and algebraic approaches to problems, are examined. Unless recommended by the adviser, this course should not be chosen if a similar course has been part of the student's undergraduate program.

MATH 01.526: Point Set Topology

3 s.h.

An introduction to one of the major branches of modern mathematics covering axiomatic development of topological spaces and metric spaces, and the concepts of convergence, continuity, separation, compactness and connectedness.

MATH 01.527: Abstract Algebra II

3 s.h.

The continuation of Abstract Algebra I covering advanced material from group theory, ring theory and field theory.

MATH 01.528: Mathematical Modeling & Algebraic Reasoning

3 s.h

Students in this course will learn about polynomial, rational, and exponential functions by building and analyzing mathematical models for a variety of situations. Using algebraic representations, problem solving, using technology, connecting abstract algebra with middle grades mathematics, and fluency with algebraic procedures will be stressed.

MATH 01.529: Numerical Analysis

3 s.h.

This course examines the theoretical foundations of numerical methods and studies in detail existing numerical methods for solving many standard mathematical problems in analysis and algebra. Error analysis will be developed for all methods. Some recent advances in the theory of chaos and nonlinear dynamics will also be presented.

MATH 01.533: Graduate Seminar in Mathematics

3 s.h.

Students will be introduced to mathematics not found in textbooks. They will learn how to read journal articles and analyze them. An emphasis will be placed on communication skills, both oral and written. Students will be required to give both oral and written analysis of their readings.

MATH 01.550: Independent Study

3 s.h.

This course is designed for an individual who wishes to study a mathematical subject or topic not included in the listed offerings of the program. The student undertakes independent study under the supervision of a mathematics staff member. Registration by permission of the department chairman and the supervising department member.

MATH 01.561: School Mathematics from an Advanced Standpoint

3 c h

This course is to develop a deeper understanding of mathematics and a new appreciation of its beauty, its logical structure and its applicability. The course will take into account not only the many interconnections among school mathematics topics but also their relationship to higher mathematics.

MATH 03.511: Operations Research I

3 s.h.

This course is an introduction to mathematical modeling, analysis, and solution procedures applicable to decision-making problems in deterministic environment. Methodologies covered include the simplex and interior point methods of solving linear programming models, project planning, network optimization, assignment and transportation problems, dynamic programming and game theory. Solutions will be obtained using theoretical methods and software packages.

MATH 03.512: Operations Research II

3 s.h.

Prerequisites: MATH 03511

This course is an introduction to mathematical modeling, analysis, and solution procedures applicable to decision-making problems in an uncertain (stochastic) environment. Methodologies covered include dynamic programming, simulation, Markov chains, queuing theory, decision analysis, dynamic programming, system reliability and inventory theory. Solutions will be obtained using theoretical methods and software packages.

MATH 03.550: Topics in Discrete Mathematics

3 c h

This course provides an advanced approach to topics in discrete mathematics for persons with substantial backgrounds in traditional mathematics. Selected topics are explored in depth and related to concepts from other areas of mathematics. Topics normally included are logic, combinatorics, number systems, data structures and representations, Boolean algebra, induction, graphs and trees.

MATH 03.600: Topics in Elementary Mathematics

3 s.h.

This course is designed to improve the understanding and attitudes of practicing elementary teachers (K-8). Specific topics to be addressed include quantitative reasoning, spatial reasoning, inductive and deductive reasoning, mathematical systems, and communication in mathematics. Students are expected to engage in some independent work.

MAWR 01.549: Issues in Composition Studies

3 s.h.

Issues in Composition Studies examines the dominant theories, texts and ways of knowing that are fundamental to the discipline of composition/rhetoric. Topics include current and historical perspectives on the composing process, the formation and functions of discourse communities, writing as a social process and methods of assessment. The course will demonstrate various avenues for research and teaching in composition and rhetorical studies, will provide students with knowledge necessary to construct a theoretical model for the everyday teaching of writing and will assist students in applying and refining that model.

MAWR 01.554: Core I: Theories and Techniques of Writing

3 s.h.

Core I offers an indepth examination of theories of composing, focusing on the interdisciplinary nature of writing through inquiry into rhetorical elements common to all writers, for example, genre, tone, audience, point of view, and voice. It also considers basic principles and techniques of writing, including narration, dialogue, exposition and style. Students will examine many genres of writing and compare and contrast the application of techniques to the differing genres.

MAWR 01.555: Writing for Electronic Communities

3 s.h.

This course presents the rhetorical, social, and practical dimensions of writing in electronic (cyber) contexts. Students focus both on the various roles an individual creates and maintains when writing for different cybermedia formats and the kinds of conventions, concerns and grammars that exist in discrete electronic systems like the World Wide Web, listservs, distribution lists, the Intranet, e-mail, and hypertext. Seminar presentations and a semester-long project in a concentrated area of writing for a particular electronic community demonstrate students' ability to communicate on-line.

MAWR 01.556: Assessment of Writing

3 s.h.

Assessment of Writing examines the dominant methods, issues and concerns that are central to the discussion and evaluation of students' written work. Topics include current and historical perspectives on writing assessment, the use of various models of writing assessment, the political and legal issues connected to writing assessment, and the validity and reliability of assessment models. The course will introduce students to the types of assessment models used in the field of composition, will explore the effectiveness of comments on papers, and will examine how to assess errors in writing. This class will also provide students with knowledge necessary to apply a range of assessment models in the application of writing across multiple workplace situations, and will assist students in applying and refining those models to new developments in computer-assisted writing.

MAWR 01.557: Advanced Feature Writing for Print Media

3 s.h

Students in this graduate level writing workshop will report and write eight publishable-quality features on varied topics. They will learn how to write feature leads and 'nut grafs' and how to structure long stories. They will also learn how to develop and present story ideas to editors and how to submit completed work for publication.

MAWR 01.558: Fiction Workshop

3 s.h

Students will complete, through the composition of a first draft and revision, works of literary fiction with emphasis upon the short story. In addition, students will read a body of published stories that illustrates such elements of fiction as setting, point of view, characterization and dialogue. Students will develop an analytical vocabulary that enables them to read, interpret, and evaluate the work of other fiction writers. A major portion of this class will be given over to workshop sessions during which students share and evaluate each other's work.

MAWR 01.559: Core II: Research Methods for Writers

3 s.h.

Core II surveys non-quantitative research methods writers use. This class examines techniques of print and on-line research, interviewing, and case studies to develop the ability to weigh and assess the reliability and relevance of information. Students will learn to identify and present problems in writing using different perspectives and learn how these research styles guide a writer's interpretation of information. The course prepares students to develop their own descriptive research projects.

MAWR 01.560: Managerial Communication

3 s.h.

Managerial Communication introduces students to the theoretical and practical insights of corporate communication. The course helps students develop leadership communication skills and is designed to improve communication skills for managers, information workers, and other professional writers. Students will learn about rhetorical theories and rhetorical strategies for responding to communication situations, current forms of corporate communication, effects of technology and globalization on corporate communication, and guidelines for ethical communication. Students will prepare a variety of professional quality documents in response to real world, case-based assignments.

MAWR 01.561: Seminar I

3 s.h.

Prerequisites: CMS 01554 and CMS 01559 or (MAWR 01554 and MAWR 01559)

Seminar I addresses the "professionalizing" aspects of writing and demystifies the publication process; students will learn how to negotiate contractual agreements, how to prepare writing for publication, how to handle publishers' copy editing tactfully, whether to use a literary agent, and the publishing differences across the writing markets (scholarly versus trade, specialized trade publications, textbooks, creative outlets, Internet publishing, and so on). In addition, the class will have a short unit on grants and funding, as many writers need external financial support for their work. Students will explore the benefits of joining writers' associations and guilds and the types of responsibilities writers take on when writing for publication. Seminar I also introduces students to the thesis or project requirement for graduation and all students are expected to complete a written prospectus and begin the preliminary stages of their thesis or project.

MAWR 01.564: Information Architecture

Information Architecture explores the connections among web site usability, interactivity, design, and navigation principles as each relate to the written content. Students investigate how written content influences the look and user-friendliness of web sites. Specific issues addressed in the course include presenting content for audiences with disabilities or for non-English speakers; privacy and security concerns; and the rise of information anxiety in the general public.

MAWR 01.565: Technical Writing

3 s.h.

Technical Writing introduces students to the rhetorical, ethical, and professional issues associated with technical communication. It focuses on the rhetorical principles behind standard formats and styles of technical documents. It explores topics such as, document design; ethics (including issues of product liability); editing, style, and mechanical correctness; the role of technology; and the impact of the global marketplace.

MAWR 01.566: Editing the Literary Journal

3 s.h.

This course provides hands-on experience with the editorial and managerial processes involved in publishing a literary journal (Asphodel). Students will study other successful journals and the basic reference guides to determine the criteria for success. Working with the instructor and various section editors, students will evaluate submissions; communicate with contributors, participate in soliciting submissions, distribute the journal and involve themselves with aspects of layout and design. They will be exposed to matters of budget and funding as well. Because the syllabus complies with the Asphodel publishing process, contact hours are distributed over two semesters.

MAWR 01.571: Seminar II

3 s.h.

Prerequisites: CMS 01561 or MAWR 01561

Seminar II prepares students to complete the required thesis or project to receive the Master's degree in Writing. Students will develop their thesis or project from the prospectus created in Seminar I, select an Academic Thesis Advisor, and write the rough drafts of the first three installments of their thesis or project under the guidance of the Graduate Program Coordinator. Students will then work with their Academic Thesis Advisor to revise and polish their thesis or project to present to the faculty and students in a symposium format.

MAWR 01.618: Special Topics

3 to 6 s.h.

None

MAWR 01.630: Writing Difference

3 s.h.

Prerequisites: CMS 01554 or CMS 01559 or MAWR 01554 or MAWR 01559

This course contrasts writing in academic genres against a variety of other forms, such as personal, imaginative, and popular writing. Students examine perspectives on language difference from sociolinguistic, literacy, feminist and composition studies perspectives, and produce writing in hybrid, multigenre or mixed-genre styles.

MAWR 02.505: Poetry Workshop

3 s.h

This class will provide a forum for students to explore the strategies poets use in creative expression. The students will develop an analytical vocabulary that allows them to read, interpret, and evaluate the work of other poets. A major portion of the class will be given over to workshop sessions, where students can share and evaluate each other's work. Students will also become familiar with a body of published poetry that illustrates techniques of expression, especially those that can be applied, not only to poetry, but to other genres of creative writing.

MAWR 02.510: Writing for Broadcast

3 s.h

This course teaches students how to write scripts and script segments for radio, TV and documentary film. Exercises include use of broadcast style, writing for audio and video, dialogue, narrative, attribution, and structure. The goals of this class are to expose students to techniques common in all news and documentary writing and to integrate the use of cameras and microphones with the spoken word.

MAWR 02.515: Creative Nonfiction Workshop

3 s.h.

Teaching students the form, structure and techniques of creative nonfiction, this workshop-style course addresses the issues of style, point of view, narrative and dramatic coherence as it applies to personal essay, the treatment of memory data, the use of detail in scene-setting and the connection between fictional and poetic strategies in nonfiction writing. In addition to their own work, students read and analyze contemporary creative nonfiction and classics in the genre; these texts serve as models for students to help them locate themselves within the large framework of creative nonfiction. Students will write several major pieces of varying lengths and types.

MAWR 02.520: Writing the Novel

3 s.h.

Writing the Novel teaches students the structure, technique, and apparatus of the literary novel, and provides feedback and guidance through extensive instructor critique and workshop-style evaluation. It is recommended that students enrolling in this course have some prior practice in literary novel-writing or at least a strong background in reading the literary novel. Students are required to submit four consecutive novel chapters with synopsis by the end of the course.

MAWR 02.521: Writing the Nonfiction Book

3 s.h

Writing the Nonfiction book is about the culture and commerce of publishing, as well as the process of writing a nonfiction book. Students finish a proposal for a nonfiction book by the end of this semester and submit it to a commercial publisher. They receive guidance and criticism from the instructor throughout the entire process, submitting and re-submitting the proposals and sample chapters several times during the semester. In addition, students analyze book markets, prepare detailed proposals for their book idea, and present their idea to a mock editiorial board making decisions about the publishing promise of the book. During lecture, students develop a clear understanding of the symbiotic relationships among ideas, authors, agents, publishers, and the buying public.

MAWR 02.522: Nonfiction Workshop

3 s.h.

The Nonfiction Workshop provides an in-depth examination of nonfiction genres, including news reporting, features, opinion, immersion journalism, biography, criticism, and social commentary and analysis. Lectures cover the methods, techniques, and ethics of nonfiction. Various nonfiction markets and market requirements are discussed. Students read model selections in various nonfiction genres and experiment with writing their own similar selections, which are discussed and critiqued. Students complete substantial published articles and/or book selections in their chosen nonfiction genres.

MAWR 02.523: Writing the Memoir

3 s.h.

Students receive in-depth instruction in writing the memoir, one of the most engaging and popular literary forms today. Students will read widely from selected memoirs, write three short memoirs that may stand alone or be interrelated, and experience the workshop method of critiquing manuscripts. Students will focus on characterization, conflict, point-of-view, and other literary elements traditionally associated with the narrative form as they develop their memoirs.

MAWR 07.500: The Essay: Art and Craft

3 s.h.

This course introduces students to the essay as genre, its evolution, and current status. Emphasis is on esthetics, craft, and technique. Students will engage in both analysis and essay writing as means toward achieving a theoretical understanding of the form.

ME 10.501: Computer Integrated Manufacturing and Automation

3 s.h.

The course covers the basic aspects of computer integrated manufacturing and automation systems. Hard and flexible automation concepts are introduced. Various automation strategies are presented. Coding and classification ideas of group technology are related to computer aided process planning. Topics of numerical control, industrial robotics, and artificial intelligence are discussed.

ME 10.505: Special Topics in Mechanical Engineering

The topics will be announced in the course schedule.

3 to 6 s.h.

ME 10.511: Combustion

3 s.h.

This course presents the concepts of chemically reacting systems (flames) along with many practical applications. Topics include chemical equilibrium, chemical kinetics, premixed laminar flames, detonations, diffusion flames and environmental issues. The course uses chemically reacting flow software for combustion modeling.

ME 10.512: Rocket Propulsion

3 s.h.

In this course, the principles of rocket propulsion theory are presented along with practical applications of rocket propulsion design. Theoretical topics include performance analysis of ideal rocket engines, departure from ideal performance and detailed thermochemical propellant calculations. Practical design issues are addressed for both liquid propellant engines and solid rocket motors. The course also includes an introduction to electric propulsion.

ME 10.514: Energy Conversion Systems

3 s.h.

This course will introduce energy conversion technologies for the generation of electrical power. Topics will include a review of power cycles, steam and gas cycles, generation of thermal power, combustion and fuels, steam power plant design considerations, gas turbine power plant operation and design considerations, combined cells, and environmental considerations in power generation. A course project will be required on an advanced topic of mutual interest between the student and instructor.

ME 10.521: Gas Dynamics

3 s.h.

This course emphasizes application of the conservation equations of mass, momentum and energy to solve problems in one-dimensional and two-dimensional compressible flow including one-dimensional isentropic flow, flow with area change, adiabatic flow with friction, normal shock waves and flow with heat addition. The method of characteristics is introduced to solve two-dimensional compressible flow problems. Numerical techniques are presented and a numerical analysis project is completed on one-dimensional, unsteady flow.

ME 10.522: Computational Fluid Dynamics

3 s.h.

This course serves as an overview of the techniques used to solve problems in fluid mechanics on computers and describes in detail those most often used in practice. Included are advanced techniques in computational fluid dynamics, like direct and large-eddy simulation of turbulence, multigrid methods, parallel computing, moving grids, structured, block-structured and unstructured boundary-fitted grids, free surface flows. The issues of numerical accuracy, estimation and reduction of numerical errors are treated in detail with many examples. An independent research project will be required on an advanced topic of mutual interest between the student and the instructor.

ME 10.541: Advanced Mechanism Design

3 s.h.

This course presents an indepth coverage of the design of mechanisms using matrix methods as the platform to model, synthesize, analyze and simulate mechanisms. It covers advanced design techniques that include type synthesis, numerical optimization techniques as applied to mechanism design. It also covers branch defects and circuit defects that occur during mechanism synthesis and modeling and simulation of mechanical systems. Students will perform analysis and simulation using appropriate mechanism design software.

ME 10.542: Advanced Mechatronics

3 s.h.

This course introduces the students to the design and development of mechatronic systems. It introduces the students to the multidisciplinary nature of mechatronic products, and teaches them to design and develop such products. Students will learn about mechatronic design philosophy, mechatronic system modeling, sensors, actuators, microprocessors and their interfaces. The course project will involve the design of a real-world mechatronic system. A final project will be required.

ME 10.551: Mechanics of Continuous Media

3 s.h.

Students will engage the three-tiered framework used to interrogate problems involving bodies of continuous media. This begins with derivation of the governing equations from the conservation of mass, momentum, and energy followed by the application of constitutive models, such as Hooke's law, that govern the behavior of particular materials, and concludes with the solution of boundary value problems. In addition to the study of classical problems and their solutions, students will be required to program numerical algorithms for the solution of problems that can not be solved in closed form. Kinetic and kinematic constraints, such as material frame indifference, compatibility, and objectivity, will be addressed. The material covered will include both cylindrical and Cartesian coordinate frames.

ME 10.552: Structural Acoustics

3 s.h

The control of noise is an important part of engineering practice in many industries today. Vital to effective noise control is an understanding of wave behavior in structures. This course will teach engineers the fundamentals of the generation of noise in structures, with an emphasis on the phenomena of mechanical resonance and modal behavior. Topics covered include vibration of strings, bars, beams and plates. An introduction to simple acoustic sources will be given.

ME 10.553: Analytical Dynamics

3 s.h.

This course is an advanced introduction to three-dimensional motion of particles and rigid bodies. Students study modern analytical rigid body dynamics equation formulation and computational solution techniques applied to mechanical systems and multibody systems. Students will formulate Newton/Euler and Lagrangian equations for applications to engineering systems, Hamiltonians principle, study kinematics of motion generalized coordinates and speeds, analytical and computational determination of inertia properties, generalized forces, holonomic and nonholonomic constraints, computational simulation.

ME 10.554: Elastic Stability of Structures

3 s.h.

Many important structures (e.g. buildings, bridges, aircraft frames) have buckling as a primary mode of failure. Because of this, it is important for structural engineers to have at least a cursory knowledge of elastic stability phenomena. This course will provide graduate-level Mechanical Engineering students with an overview of elastic stability in structures, and a brief introduction to dynamic stability, as applied to rotating shafts. Applications of mathematical theory to real-world structural design problems will be emphasized.

ME 10.570: Principles in Biomechanics

3 s.h.

This course presents topics in the biomechanics of human motion. The course will encompass the use of engineering principles to describe, analyze and assess human movement. Topics will include kinematics, kinetics, anthropometry applied to the synthesis of human movement and muscle mechanics. A course project and laboratory project will enhance this course.

ME 10.575: Fund Crash Safety Engineering

3 s.h

This course presents the design and analytical principles of passenger vehicle crashworthiness engineering. The course will encompass three major focus areas: the crash response of (1) the vehicle structure, (2) the occupant, and (3) the occupant restraints. Topics will include the analysis of crash tests, vehicle crash kinematics, vehicle modeling, the biomechanics of impact injury, the dynamic response of vehicle occupants to crash loading, and advanced restraint design.

MGT 06.500: Designing, Developing, and Leading High Performance Organizations 3 s.h

Students will study and develop skills in interpersonal behavior in organizations and groups. They will learn about issues in leadership, how groups function, elements of power and influence, conflict management, management of time and stress, creative and rational problem solving in groups. In addition, they will study theories of motivation and methods of empowerment in organizations.

MGT 06.501: Advanced Operations Management and Strategy

3 s.h.

Prerequisites: BUS 01518

This course is designed to familiarize students with the complexities of operating a manufacturing, as well as a service, organization. The focus is primarily on gaining a competitive edge by improving functions of operations management. Concepts and tools pertaining to business forecasting, operations decision-making, resources allocation, location and capacity planning, inventory control and management, facility layouts, scheduling, project management, and quality control and management will be covered. Case studies and team projects will also be used to provide practical applications in a realistic business context.

MGT 06.502: International Business and Society

3 s.h.

Prerequisites: BUS 01518

This course addresses numerous aspects of the increasingly global business environment and implications for business organizations and key stakeholders. Frameworks for comparing political, legal, social, economic, and governmental differences across nations are utilized. Macro issues include trade theories, trade regimes, roles of governments and global institutions. Strategies and structures adopted by various types of international firms and functional approaches to international finance, management, and marketing are also included.

MGT 06.503: Organization Development

3 s.h.

Students study the application behavioral science in the management of planned organizational change and development. In addition to the analysis of issues facing the change agent, students also develop skills in implementing and intervening in the effort to improve organizational effectiveness. This course may not be offered annually.

MGT 06.510: Strategic Engineering Management

3 s.h.

The course introduces engineers to the concepts and application of strategic planning specifically to the roles and responsibilities of the engineering function in the strategic planning process for high-tech firms.

MGT 06.520: Global Leadership and Organization Culture

3 s.h.

Prerequisites: MGT 06500

The course is designed for graduate business students. Course content will cover the theories of business leadership and the focus of this course will be on leadership from a variety of perspectives--organizational leadership in the external environment, as well as leadership at the top, middle and lower levels inside organizations. Students will focus on the theory and implementation of various business leadership tasks and responsibilities including working with other leaders in a multinational world, supervising workers with diverse backgrounds. These business skills will include establishing workplace goals, organizing work units for productivity, conducting interviews, giving feedback to subordinate employees, designing and implementing employee motivation programs, changing organization culture, the capacity to lead globally, leading work teams and managing workforce diversity. By the end of the course, students will be able to effectively diagnose the complex dynamics of leadership in business environments and take action as leaders and to improve individual and organization performance.

MGT 06.601: Strategic Planning for Operating Managers

3 s.h.

Prerequisites: BUS 01518

This course prepares the operating manager for the responsibilities of performing strategic planning. The course will identify what goes into and how strategic planning is performed. Strategy formation and evaluation will be assisted by computer decision models and management games. The interrelationships of organizational units and pro-active management posture with respect to environmental forces will be stressed. This course may not be offered annually.

MGT 07.500: Managerial Decision Making Tools

3 s.h.

Prerequisites: BUS 01518

This course requires the application of analysis and decision making tools in a business setting, with emphasis on the evaluation of problems facing the modern firm in a changing global marketplace. It provides in-depth coverage of analytical tools that are invaluable to the entrepreneur/manager as he or she is confronted with strategy and implementation decisions in a competitive world.

MGT 07.600: Business Forecasting

3 s.h

This course is designed to acquaint the graduate student with the advanced statistical forecasting techniques. Upon completion of the course, the student should be able to identify a forecasting problem, gather data and use computerized statistical packages to obtain solutions, analyze results, determine the validity and reliability of the model, and if necessary, recommend alternative methods to solve the model. This course may not be offered annually.

MIS 02.500: Issues in Management Information Systems

3 s.h.

Prerequisites: BUS 01518

Information technology and systems are pervasive in business today and will become more so in the future. Therefore, this course is designed to provide skills for managing this changing environment. The primary focus of the course is on the management of technology. The management of technology and systems is not left solely to information systems professionals; it is the responsibility of all managers.

MIS 02.515: Electronic Commerce

3 s.h.

This course will introduce students to electronic business. It will cover such diverse issues as: e-commerce payment mechanisms, encryption and authentication of data, web assurance, electronic data interchange, legal issues on the web, and web marketing. There will also be a lab component that will provide students with exposure to and practice in web page design and creation.

MKT 09.500: Marketing Management

3 s.h.

Prerequisites: BUS 01518

This course focuses on managing the marketing function in a dynamic, competitive environment in coordination with other organizational functions to enhance the overall performance of an organization. Attention will be devoted to the design of strategies for the achievement of competitive advantage in product/service offerings, pricing, promotion and distribution. Students will build upon their existing knowledge base of marketing concepts and will develop or extend competencies in analytical decision-making, ability to identify market opportunities, and ability to develop and evaluate marketing plans.

MKT 09.501: Consumer Analysis

3 s.h.

Prerequisites: MKT 09500

Students will conduct detailed analyses of consumer and/or business markets. After examining a range of conceptual materials and research methodologies, they will apply these insights to the analysis of actual decision-making situations by means of case studies and/or independent research projects.

MKT 09.502: Marketing Research

3 s.h

Contemporary marketing decisions are based on marketing research information. This course will help students develop a managerial perspective on the use of marketing research information in making decisions, as well as specific research skills and practical experiences that will enhance their career advancement. The skills covered in this course are applicable to marketing problems encountered in both consumer and business-to-business markets. Students will experience a "project-based learning" to apply marketing research tools and methods to identify and solve specific marketing problems.

MKT 09.600: International Marketing

3 s.h.

Prerequisites: MKT 09500

Students will examine all issues facing marketing managers in the light of the unique challenges posed by the internationalization of the economy. The cultural, economic, political, and legal environment will be examined. Market research in world markets, the planning and development of consumer and industrial products, promotion, pricing and distribution will also be analyzed. This course may not be offered annually.

MUS 04.500: Applied Major Instrument I

2 s.h.

Private instruction on a student's major instrument. Designed to guide the development of each student toward the realization of his fullest potential as a performer.

MUS 04.501: Applied Major Instrument II

2 s.h.

Private instruction on a student's major instrument. Designed to guide the development of each student toward the realization of his fullest potential as a performer.

MUS 04.502: Applied Major Instrument III

2 s.h.

Private instruction on a student's major instrument. Designed to guide the development of each student toward the realization of his fullest potential as a performer.

MUS 04.503: Applied Major Instrument IV

2 s.h.

Private instruction on a student's major instrument. Designed to guide the development of each student toward the realization of his fullest potential as a performer.

MUS 04.504: Advanced Woodwind, Brass-Percussion, Strings, Piano

2 s.h.

These courses are intended to develop skills in performance on the various instruments beyond the undergraduate level. Particular emphasis will be placed on the teaching of these instruments and on the latest developments in methodology and pedagogy.

MUS 04.505: Advanced Woodwind, Brass-Percussion, Strings, Piano

2 s.h.

These courses are intended to develop skills in performance on the various instruments beyond the undergraduate level. Particular emphasis will be placed on the teaching of these instruments and on the latest developments in methodology and pedagogy.

MUS 04.506: Advanced Woodwind, Brass-Percussion, Strings, Piano

2 s.h

These courses are intended to develop skills in performance on the various instruments beyond the undergraduate level. Particular emphasis will be placed on the teaching of these instruments and on the latest developments in methodology and pedagogy.

MUS 04.507: Advanced Woodwind, Brass-Percussion, Strings, Piano

2 s.h.

These courses are intended to develop skills in performance on the various instruments beyond the undergraduate level. Particular emphasis will be placed on the teaching of these instruments and on the latest developments in methodology and pedagogy.

MUS 04.508: Instrumental Procedures

2 s h

Designed as a laboratory course for instrumental instructor in organization of rehearsal techniques and instrumental problems in the elementary, secondary, and junior college curricula.

MUS 04.510: Applied Major Voice I

2 s.h.

Private instruction in techniques of singing. Designed to guide the development of students toward the realization of his fullest potential as performers.

MUS 04.511: Applied Major Voice II

2 s.h.

Private instruction in techniques of singing. Designed to guide the development of students toward the realization of his fullest potential as performers.

MUS 04.512: Applied Major Voice III

2 s.h.

Private instruction in techniques of singing. Designed to guide the development of students toward the realization of his fullest potential as performers.

MUS 04.513: Applied Major Voice IV

2 s.h.

Private instruction in techniques of singing. Designed to guide the development of students toward the realization of his fullest potential as performers.

MUS 04.514: Choral Procedures

2 s.h.

Designed as a laboratory course for choral directors in the organization of rehearsal techniques, selection and placing of voices and development of programs. Special attention is given to individual vocal needs.

MUS 04.515: Graduate Applied Voice I

4 to 6 s.h.

The continuation, on an advanced level, of the intensive study of vocal technique and performance begun in the undergraduate level. Successful completion requires the preparation and performance of a graduate recital of sufficiently high quality to provide access to professional auditions, doctoral programs and teaching positions in higher education.

MUS 04.516: Graduate Applied Voice II

4 to 6 s.h.

The continuation, on an advanced level, of the intensive study of vocal technique and performance begun in the undergraduate level. Successful completion requires the preparation and performance of a graduate recital of sufficiently high quality to provide access to professional auditions, doctoral programs and teaching positions in higher education.

MUS 04.520: Applied Major Conducting I

4 to 6 s.h.

Private instructing in conducting. This course in the conducting sequence, is designed to guide the development of conductors to a full realization of their technical and musical potential.

MUS 04.521: Applied Major Conducting II

4 to 6 s.h.

Private instructing in conducting. This course in the conducting sequence, is designed to guide the development of conductors to a full realization of their technical and musical potential.

MUS 04.522: Applied Major Conducting III

4 to 6 s.h.

Private instructing in conducting. This course in the conducting sequence, is designed to guide the development of conductors to a full realization of their technical and musical potential. During semester III of the applied conducting sequence, the student is expected to serve as Assistant Conductor of an appropriate ensemble at the discretion of the conducting faculty.

MUS 04.523: Applied Major Conducting IV

4 to 6 s.h.

Private instructing in conducting. This course in the conducting sequence, is designed to guide the development of conductors to a full realization of their technical and musical potential. During semester IV of the applied conducting sequence, the student is expected to serve as Assistant Conductor of an appropriate ensemble at the discretion of the conducting faculty. In addition, as a culminating activity, the student will present a full-length conducting recital.

MUS 04.524: Conducting I (Instrumental)

2 s h

Full scores for major orchestral and concert band works are studied in the class. Baton technique required to interpret these works is demonstrated and practiced.

MUS 04.525: Conducting II (Vocal)

2 s.h.

In this class emphasis is placed on choral rehearsal techniques and procedures as they apply to vocal music organizations.

MUS 04.526: Applied Music Instrumental I

4 to 6 s.h.

Private instruction on an instrument or in conducting, preparing the student for performance of a successful public graduate recital.

MUS 04.527: Applied Music Instrumental II

4 to 6 s.h.

Private instruction on an instrument or in conducting, preparing the student for performance of a successful public graduate recital.

MUS 04.528: Applied Music Instrumental III

4 to 6 s.h.

Private instruction on an instrument or in conducting, preparing the student for performance of a successful public graduate recital.

MUS 04.529: Applied Music Instrumental IV

4 to 6 s.h.

Private instruction on an instrument or in conducting, preparing the student for performance of a successful public graduate recital.

MUS 04.530: Applied Major Composition I

2 s.h.

Private instruction in composition. Designed to guide the development of students toward the realization of their creative talents in the writing of musical compositions.

MUS 04.531: Applied Major Composition II

2 s.h.

Private instruction in composition. Designed to guide the development of students toward the realization of their creative talents in the writing of musical compositions.

MUS 04.532: Applied Major Composition III

2 s.h.

Private instruction in composition. Designed to guide the development of students toward the realization of their creative talents in the writing of musical compositions.

MUS 04.533: Applied Major Composition IV

2 s.h.

Private instruction in composition. Designed to guide the development of students toward the realization of their creative talents in the writing of musical compositions.

MUS 04.534: Graduate Music Composition I

4 to 6 s.h.

The student develops his undergraduate compositional skills, completing a major work for chamber ensemble which demonstrates an ability to use contemporary compositional ideas in the organization of music.

MUS 04.535: Graduate Music Composition II

4 to 6 s.h.

Prerequisites: MUS 04534

This course prepares the student to complete his/her major requirement in music composition: a thesis consisting of a major compositional work and a paper describing its genesis. May be re-taken.

MUS 04.536: Chamber Music I

1 s.h

The study and performance of selected repertoire for specific instrumental groups and combinations. Students will be assigned to a small ensemble and will be required to rehearse and to perform the chosen repertoire in a public setting.

MUS 04.537: Chamber Music II

I s.h

The study and performance of selected repertoire for specific instrumental groups and combinations. Students will be assigned to a small ensemble and will be required to rehearse and to perform the chosen repertoire in a public setting.

MUS 04.540: Jazz Arranging and Composition

3 s.h.

The course presents techniques in arranging and composition in the jazz idiom and is tied to the course CD Project in that it coordinates the needs of the second course through preparation in Jazz Arranging and Composition. Students will be required to arrange and orchestrate existing compositions and compose original music in the jazz idiom.

MUS 04.541: Jazz Piano

1 s.h.

This course in applied music for the non-pianist focuses on the basic keyboard skills needed by the professional jazz musician, especially the use of the piano to realize harmonic progressions and concepts. The student must have passed the piano proficiency exam before enrolling for this course.

MUS 04.545: Opera Role Study I

3 s.h.

A complete opera role from the standard repertoire will be learned and performed in each semester through private instruction and coaching, either in staged or unstaged, in public.

MUS 04.546: Opera Role Study II

3 s.h.

A complete opera role from the standard repertoire will be learned and performed in each semester through private instruction and coaching, either in staged or unstaged, in public.

MUS 04.551: Piano Accompanying I

1 s.h.

This course in applied piano accompanying will pair the student with a vocal or instrumental student under the supervision of the piano instructor.

MUS 04.552: Piano Accompanying II

1 s.h.

This course in applied piano accompanying will pair the student with a vocal or instrumental student under the supervision of the piano instructor.

MUS 04.553: Guitar Accompanying I

1 s.h.

This course in applied guitar accompanying will pair the student with a vocal or instrumental student under the supervision of the guitar instructor. Students will learn to interact musically with the soloist and to begin to know the collaborative literature for guitar and other instruments.

MUS 04.555: Counterpoint

3 s.h.

The principles of counterpoint and its practical application in musical literature are studied.

MUS 04.557: Advanced Orchestration

2 s.h.

This course will introduce the conducting student to the practical considerations of performance on orchestral instruments and their use in orchestral repertoire.

MUS 04.560: Form and Analysis

3 s.h.

The course presents important contemporary approaches to the analysis and understanding of music of all periods including those of the present. Students will present analyses of works appropriate to their graduate level studies in their major area. This is a required course for all students in the master of music program.

MUS 04.561: Score Reading I

1 s.h.

This course begins training the conducting student to read orchestral scores, including the mastery of clefs and transposition. It is a requirement for the Master of Music in Instrumental Conducting.

MUS 04.562: Score Reading II

1 s.h.

This course continues training the conducting student to read orchestral scores, including the complete mastery of clefs and transposition, and the study of score reductions. It is a requirement for the Master of Music in Instrumental Conducting.

MUS 04.565: Seminar in Band Conducting

3 s.h.

This course will involve classroom discussion, research, and scholarly presentations of topics related to the business of conducting, where students will share their views with other students and the facilitator. The class will visit rehearsals of professional organizations and bands and will interview known professionals in the field. A lecture presentation by each student on a relevant conducting topic will conclude the semester.

MUS 04.570: 20th Century Literature and Techniques

3 s.h.

This course explores 20th century music and the compositional techniques it embodies. Emphasis will be upon important trends and developments that are still current in the music of today. Each student will present his/her own research in this area of study as it relates to their major area of study. This is a required course for the master of music in composition.

MUS 04.575: CD Project

2 s.h.

Prerequisites: MUS 04540 and MUS 04541

The student will develop and produce a compact disk containing the student's original compositions through the choice of repertoire to be performed, the rehearsal of the material, to the completion of the technical and business details leading to a final product.

MUSG 05.547: Music and the Related Arts

3 s.h.

The aesthetics of music is approached from the point of view that the same forces motivate all the arts and that significant parallels exist among them. This course may not be offered annually.

MUSG 06.503: Jazz History

3 s.h.

This course presents an overview of jazz history and requires the student to prepare indepth studies of any three topics related to the history of jazz, chosen in consultation with the professor. Students must exhibit their mastery of these areas by written and oral assignments.

MUSG 06.505: History and Literature of Guitar and Lute

3 s.h

This course provides indepth study of the literature of the family of plucked instruments, especially the guitar and lute, from the Renaissance to the present day.

MUSG 06.506: Art Song Literature

3 s.h.

The indepth study of the evolution and development of the art song as a genre, its development, structure, styles and composers from the 17th century to the present. Aural familiarity and stylistic recognition will be emphasized, as will the association of song composers with their works and periods.

MUSG 06.509: String Instrument Literature

3 s.h.

This course explores the literature written for stringed instruments from both stylistic and technical points. Students will study and analyze the most important solo works for the bowed string instruments and will be expected to identify aurally these works and to provide written analyses of several. It is a required course for string students in the master of music program and is available also as an elective.

MUSG 06.510: Keyboard Literature

3 s.h.

This course presents a broad overview of the massive literature for the keyboard from Baroque through the end of the 20th century. Students learn to listen, to analyze, and to identify the stylistic characteristics of the great composers for the piano. They will, within the course of the semester, choose several composers whose works are of particular interest to them, thoroughly catalogue their literature and analyze in depth several compositions by each. The results of this work will be presented in oral and written form.

MUSG 06.511: Twentieth Century Band Literature

3 s.h.

This course will survey all levels of band repertoire, from elementary through high school, and standard college and professional band works. Students will have a knowledge of where to find musical selections for any scenario, from teaching works to standard competition pieces and public performance selections.

MUSG 06.515: Organ Literature

3 s.h.

The course will present the vast literature for the organ, a history of the instrument, and a performance context for the repertoire reviewed. Students will study and analyze the monuments of the organ repertoire from the 14th century to the present. They will choose and deeply explore at least one area of the repertoire and present written documents about their chosen area.

MUSG 06.542: Opera Literature

3 s.h.

An historical survey of opera, its development and composers, from 1600 to the present. The course will emphasize the most important operas, their plots, forms and main musical numbers.

MUSG 06.545: Development and Interpretation of Choral Literature

2 s.h.

Studies choral music from Gregorian chant to contemporary works. Representative works of various types studied in detail. These are drawn from various categories such as motet, madrigal, polyphonic chanson, cantata and oratorio. This course may not be offered annually.

MUSG 06.546: Development and Interpretation of Symphonic Literature

3 s.h.

The evolution of instruments, the standardization of the orchestra in the classic period, the introduction of new instruments and the growth of the orchestra are studied. The principal orchestral forms such as the symphony and the concerto are studied and various types of orchestration are examined. This course may not be offered annually.

PHED 35.521: Physiology of Exercise

3 c h

This course involves the study of the interrelationship of exercise and physiology. It covers the functions of the human body under the stress of activity. Research in exercise physiology will be related to practices in physical education and athletics.

PHED 35.530: Principles of Coaching

3 to 16 s.h.

The course is designed for coaches of sport in educational systems. Its purpose is to examine relationships between institutional organizations, sport, student growth and community expectations. Management behaviors and administrative practices connected to both sport and education are studied. Practical application of group dynamics and public media involvement are skills experienced in this course.

PHED 35.555: Individual Study in Health and Physical Education

3 to 6 s.h.

This course is designed to give the student the opportunity to pursue an in-depth inquiry into a selected topic in health and physical education on an individualized basis. It provides flexibility for the student in increasing specialization in a selected area of interest. Offered in summer session only for matriculated students with a minimum of 25 S.H. completed. Students must submit a written proposal for individual study to the program advisor by March 15 prior to the summer session desired.

PHED 35.560: Administration of School Athletics

3 s.h.

Devoted to intramural as well as interscholastic athletic programs. Legal aspects of athletic administration are determined. Budgeting, planning, scheduling, purchasing and caring for equipment, publicity, insurance and other related aspects are studied. Students study the decision-making process in the athletic program as it relates to other institutional programs and policies.

PHED 35.570: Planning Construction and Maintenance of Facilities for Health and Physical Education 3 s.h.

Designed to identify the problems in planning, building, and maintaining facilities in Health, Physical Education and Recreation. Blue print reading and block planning will involve practical experiences. Field trips, when possible, to local facilities will be taken. Surface lighting and equipment for facilities will be explored.

PHED 35.590: Critical Readings, Issues, and Trends in Health and Physical Education 3 s.h.

Students review and evaluate current professional literature in health and physical education publications. Library research skills are developed while examining critical issues and current trends in health and physical education.

PHED 35.591: Foundations and Interpretation of Health and Physical Education

3 s.h.

A course designed to examine influences of educational philosophies upon the place and function of health and physical education in American education.

PHED 35.592: Curriculum Construction in Health and Physical Education

3 s.h

The student moves from an understanding of curriculum foundations and theory to application of design, organization and evaluation. The process should culminate in the ability to produce effective kindergarten through twelfth grade health and physical education curricula in school or community educational settings.

PHED 35.595: Research Design in Health and Physical Education

3 s.h.

Students investigate research procedures and design in health and physical education. Literature review techniques, experimental and non-experimental research design, subject selection and assignment, and ethical issues in conducting research are areas studied.

PHED 35.598: Quantitative Analysis in Health and Physical Education

3 s.h.

Students investigate the application of statistical procedures in research processes in health and physical education. Descriptive and inferential statistics are included. The students use microcomputer statistical packages for data reduction and analysis.

PHED 35.600: Research Seminar I in Health and Physical Education

3 s.h.

Students will select a scholarly project or thesis. The course will include the content, organization and procedures of empirical investigative writing.

PHED 35.601: Research Seminar II in Health and Physical Education

3 s.h.

For the thesis student only. The course will involve the completion of the graduate thesis.

PHYS 02.525: Mathematical Methods in Physics

3 s.h.

Prerequisites: MATH 01131 and PHYS 02201

The following topics are studied as they apply to the solution of problems in physics: infinite series, complex numbers, determinants and matrices, partial differentiation, vector analysis and calculus, and Fourier series. The requirements of this course also include independent study of topics not discussed in class. The student will be expected to turn in a paper demonstrating his ability to solve problems in two or more of the following topics: calculus of variations, gamma and beta functions, coordinate transformations and tensor analysis, coordinate transformations and tensor analysis, functions of a complex variable, series solutions of differential equations, integral transforms, and partial differential equations. Admission to the course will be at the discretion of the graduate advisor.

PHYS 02.527: Statistical Mechanics

3 s.h.

The student will consider the laws of thermo dynamics from a statistical point of view. Topics may include: ideal gases, simple thermodynamic systems, classical and quantum distribution functions, phase transitions, and other special topics. The requirements for this course include a graduate laboratory project and/or research paper. Admission to the course will be at the discretion of the graduate advisor.

PHYS 02.528: Electricity and Magnetism I

4 s.h.

Prerequisites: PHYS 02201

This course studies static fields and charges and the application of vector calculus to electricity and magnetism. Maxwell's equations are derived from basic electrostatic phenomena. Some of the immediate consequences of Maxwell's equations, such as electromagnetic waves, will also be covered. The requirements of this course include a graduate research paper or a laboratory project. Admission to the course will be at the discretion of the graduate advisor.

PHYS 02.529: Electricity and Magnetism II

3 s.h.

Prerequisites: PHYS 02528

In this course, some of the major consequences of Maxwell's equations, such as the generation and propagation of electromagnetic waves, scattering, and special relativity will be explored. A special attention will be given to the connection of electricity and magnetism with relativity. The requirements of this course include a graduate laboratory project or research paper. Admission to the course will be at the discretion of the graduate advisor.

PHYS 02.530: Applied Physics Lab

4 s.h

This course introduces modern experimental techniques commonly used in physics. Projects consist of original experimental research experiences in Solid State Physics, Laser Physics, and/or other experimental areas of current research in the department. Experimental results are correlated with existing theories. Technical writing and presentation skills are developed and evaluated.

PHYS 02.541: Quantum Mechanics I

4 s.h.

Prerequisites: PHYS 02300 or PHYS 02563

This course will serve as an introduction to quantum mechanics. Students will learn the basic concepts of quantum mechanics and how to solve simple problems using quantum mechanics. Topics selected for study include the origins of quantum mechanics, the free particle in wave mechanics, particles in one-dimensional potentials, the axiomatic formulation of quantum physics, particles in three-dimensions, spin and the Pauli exclusion principle. The requirements of this course include a graduate research paper or a laboratory project.

PHYS 02.542: Quantum Mechanics II

3 s.h.

This course is a continuation of Quantum Mechanics I. Students will learn more advanced concepts and problems in quantum mechanics. Topics selected for study include the formalism of quantum mechanics, particles in three-dimensions, spin and angular momentum, quantum statistical mechanics, time-independent perturbation theory, time-dependent perturbation theory, and scattering. Some topics may overlap with the ones in Quantum Mechanics I, but are taught at a higher level. The requirements of this course include a graduate research paper or a laboratory project.

PHYS 02.555: Mechanics

4 s.h.

Prerequisites: MATH 01131 and PHYS 02201 or MATH 01131 and PHYS 02203

Emphasizes Newton's laws of motion, the conservation laws, kinetics and reactions, calculation of moments of inertia, periodic motion and heat. Theories and principles will be related to the motion and properties of gross bodies, and the relevance of these ideas to modern atomic physics will be pointed out. The requirements of this course include a graduate laboratory project and/or research paper. Admission to the course will be at the discretion of the graduate adviser. This course may not be offered annually.

PHYS 02.559: Light 4 s.h.

Prerequisites: MATH 01131 and PHYS 02201 or MATH 01131 and PHYS 02203

Geometrical and physical optics are treated. Study is made of reflection, refraction, lenses (thin and thick) and systems of lenses. Consideration is given to dispersion, diffraction, interference and polarization. The use of these effects in spectroscopy and polarimetry is emphasized. The requirements of this course include a graduate laboratory project and/or research paper. Admission to the course will be at the discretion of the graduate adviser. This course may not be offered annually.

PHYS 02.561: Electronics

4 s.h.

Prerequisites: MATH 01130 and PHYS 02201 or MATH 01130 and PHYS 02203

A basic course in the theory of generation and detection of electromagnetic waves leading to a study of vacuum tubes, rectifiers, amplifiers, oscillators, oscilloscopes, electronic switches and wave generators. The requirements of this course include a graduate laboratory project and/or research paper. Admission to the course will be at the discretion of the graduate adviser. This course may not be offered annually.

PHYS 02.563: Atomic Physics

4 s.h.

Prerequisites: MATH 01131 and PHYS 02201 or MATH 01131 and PHYS 02203

Considers the molecular structure of matter and the structure of the atom. Studies the kinetic theory of gases, the photoelectric effect, x-rays and their properties, the wave properties of matter, the Bohr model of the atom and the excitation states of the atom. The requirements of this course include a graduate laboratory project and/or research paper. Admission to the course will be at the discretion of the graduate adviser. This course may not be offered annually.

PHYS 08.545: Quantitative Mechanics

3 s.h.

Prerequisites: MATH 01230 and PHYS 08401

Course includes basic concepts of quantitative mechanics including orbitals, perturbation and variation theory; rotational and vibrational motion; and spectroscopy. This course may not be offered annually.

PHYS 08.550: Thermodynamics I

3 s.h.

Prerequisites: PHYS 08401

Advanced concepts in chemical thermodynamics including an introduction to statistical mechanics are considered. The requirements of this course include a graduate research paper. Admission to the course will be at the discretion of the graduate adviser. This course may not be offered annually.

PSY 01.560: Research Designs in Applied Psychology I

3 s.h.

This is a graduate level introduction to research methods and statistical procedures commonly used in psychological research. Students will develop skills necessary to critically evaluate and interpret both research designs and statistical methods, thus allowing them to develop their own research, while at the same time becoming better consumers of research. This course focuses on ethical issues surrounding the use of human and animal participants, the appropriate use and interpretation of descriptive and inferential statistics, and an understanding of the statistics used in correlational research based on the general linear model.

PSY 01.562: Research Designs in Applied Psychology II

3 s.h.

Prerequisites: PSY 01560

This is a graduate level introduction to research methods and statistical procedures commonly used in experimental psychological research. Students will develop skills necessary to critically evaluate and interpret both research designs and statistical methods, thus allowing them to develop their own research while becoming better consumers of research. Students will learn how to present their own research. The fundamental principles, practices and applications of needs assessment and program evaluation are also covered in this course.

PSY 01.570: Research Methodology and Statistics in Counseling Psychology

3 s.h.

This is a graduate level introduction to research methodology and statistics with special application of these principles to the practice of mental health counseling. Students will develop the skills necessary to critically evaluate and interpret research and statistics, thus allowing them to be excellent consumers of research as well as developing practice-relevant research projects.

PSY 01.610: Career and Lifestyle Development

Advanced students will learn the major theories of career choice and development, gaining an understanding of the complex personal, organizational, and societal factors that impact upon career choice. Students will learn to understand occupational trends and occupational classification systems, and have the opportunity to study and administer various career interest batteries. Students will gain an appreciation for the changing nature of work and career focus across the life span, including predictable career transitions and challenges. Theoretical and self assessment techniques will be utilized to help students gain an understanding of the need for balance between work and personal life, and will provide insight into the theories and choices involved in leisure activity and in stress management practices. Experiential exercises and projects will be an integral aspect of the course leading to an appreciation not only of theory but of its application.

PSY 01.611: Counseling and Psychotherapy

3 s.h.

Prerequisites: PSY 01621 or PSY 03624 and PSY 09595

This course will provide the student with an understanding of fundamental skills, principles and theories of counseling. Issues addressed will include characteristics and behaviors of the client and counselor that influence the helping process. The application of counseling approaches across diverse contexts and populations will be

PSY 01.612: Group Counseling and Psychotherapy

3 s.h.

Prerequisites: PSY 01621 or PSY 03624 and PSY 09595

This course addresses fundamental issues concerning the development and dynamics of group counseling and provides the student with a background in group counseling theories and methods. Issues covered include group process components, the stages of group development and leadership styles and approaches. Methods for evaluating the effectiveness of group counseling are discussed.

PSY 01.620: Legal and Ethical Issues in Counseling

This course covers legal and ethical issues involved in the delivery of human services and counseling. Issues addressed include ethical standards for therapists, the role of the mental health professional in the legal system, and standards of ethical practice for counselors. The student will consider the possible legal consequences of treatment decisions and approaches. This course will provide an understanding of all aspects of professional functioning including history, roles, ethics, standards and credentialing.

PSY 01.621: Psychopathology

3 s.h.

Advanced study of the major forms of psychological disorders. Emphasis is placed on the dynamics leading to these disorders and the psychological treatment of them. Field trips to psychiatric institutions may be included.

PSY 01.622: Perception

Consideration of perception as an information-extraction process, perceptual hierarchy, perceptual constancies, major learning, cultural and social determinants of perception and roles of perception in establishing sets, concept formation, problem solving and creative thinking. Previous acquaintance with general psychology or human behavior and development is assumed.

PSY 01.630: Family Systems Theory and Family Therapy

3 s.h.

Prerequisites: PSY 09595 and PSY 01621 and PSY 01611

This graduate level course will explore the importance of family therapy in the human service delivery system. The course will emphasize several areas. First, the course will review the major theoretical approaches to family therapy as well as the foundation concepts of general system theory. Second, the skills and techniques unique to family therapy will be reviewed. This aspect of the course will utilize role plays to demonstrate specific intervention strategies. Third, the course will review assessment tools and evaluation research of family therapy. Finally, the ethical and documentation issues involved in a family therapy will be discussed.

PSY 01.650: Practicum in Counseling

3 to 9 s.h.

Prerequisites: PSY 01620 and PSY 01611 or PSY 01620 and PSY 01612
Students will be placed in human service settings where they will provide, under supervision, counseling and related services. Both on-site and Psychology Department supervisors will monitor student progress. Students will work with clients to establish goals for change, employ appropriate counseling techniques and evaluate goal attainment.

PSY 01.685: Masters Thesis in Psychology I

3 s.h.

Prerequisites: PSY 01570

This course requires the design of an independently executed research project. The project will be supervised by a member of the Psychology Department. The student may choose a group design, single subject ABA design or Case Study for their project. The thesis will include a literature review, design of the project and the initial implementation.

PSY 01.687: Masters Thesis in Psychology II

3 s.h.

Prerequisites: PSY 01570 and PSY 01686

This course requires the completion of the independently executed research project that was initiated in Masters Thesis in Psychology I. The project will be supervised by a member of the Psychology Department. Completion of the course will include the production of a comprehensive final product that needs to be approved by the student's project supervisor.

PSY 03.518: Psychological Evaluation and Counseling Services to Combat Alcohol and Drug Abuse 3 s.h.

Prerequisites: PSY 09512

This course provides students with information needed to evaluate and counsel drug and/or alcohol dependent or addicted individuals and their families. Topics covered include strategies necessary for the coordination and delivery of intervention and referral services in a school setting.

PSY 03.620: Cognitive-Behavioral Treatment Strategies

3 s.h.

Prerequisites: PSY 09595 and PSY 01611 and PSY 01621

This course is designed to be an overview of cognitive-behavioral treatment and theory. The course will include didactic and experiential components, and will focus on developing the skills and knowledge necessary to use cognitive-behavioral treatment in a professional context. In addition to these general skills, the course will also focus on the application of these techniques to specific populations of interest within the psychological community.

PSY 03.624: Psychopathology of Childhood and Adolescence

3 s.h.

Prerequisites: PSY 09511 and PSY 09587

This course includes relating personality theory to psychopathology, diagnostic nomenclature in child psychopathology, review of major psychotherapeutic approaches for children, techniques for working with parents and treatment facilities away from home. This course may include field trips to appropriate agencies and as well as case preparation.

PSY 05.501: Intervention Approaches in Psychology and Human Services

3 s.h.

Prerequisites: PSY 01621 and PSY 09595

This course provides an overview of major intervention strategies used in diverse settings to address the counseling needs of a variety of client populations. Factors affecting counselor efficacy are discussed. The course covers ethical principles and practice standards in human service intervention, as well as strategies for measuring the effectiveness of intervention approaches as applied to specific problems.

PSY 05.502: Fundamentals of Drug and Alcohol Abuse and Dependency

3 s.h.

This course provides an overview of fundamental issues concerning drug and alcohol use and addition. Topics covered include psychological theories of addiction, psychopharmacology, and legal and ethical issues in the prevention and treatment of addiction. The role of social context in drug and alcohol abuse prevention and treatment is discussed.

PSY 05.610: Social and Cultural Diversity

3 s.h.

This course will review studies that provide an understanding of the issues and trends in a multicultural and diverse society and their influence on social thinking, social influence, and social relations. It will examine research dealing with the dynamics and impact of socially constructed categories. These categories include culture, ethnicity, nationality, age, gender, sexual orientation, mental and physical characteristics, education, family values, religious and spiritual values, socioeconomic status and unique characteristics of individuals, couples, families, ethnic groups, and communities. The implications of these issues for effective counseling is addressed.

PSY 05.623: Social Psychology

3 s.h.

Course includes a survey of the field of social psychology with emphasis upon: basic psychological factors affecting social behavior; attitudes; language and communication, society and culture; individual in relation to social groups and organizations, group effectiveness and role behaviors. Emphasis will be placed upon major theories and concepts of social psychology and relationships to other disciplines.

PSY 05.651: Interpersonal Theory and Psychotherapy

3 s.h.

This course is designed to be an overview of interpersonal psychotherapy and theory. The course will include didactic and experiential components, and will focus on developing the skills and knowledge necessary to use interpersonal techniques in a professional context. In addition to these general skills, the course will also focus on the application of these techniques to specific populations of interest within the psychological community.

PSY 05.652: Advanced Seminar in Clinical Practice

3 s.h

This advanced seminar in clinical practice is intended as a vehicle for bringing cutting edge information to current and future practitioners engaged in clinical services. The topic(s) covered in a specific section will vary depending upon focus chosen by the faculty member who is directing the class. However, the broad focus of each seminar will be on developing knowledge and skills that directly benefit the students' ability to function as a mental health professional.

PSY 06.533: Tests and Measurements

3 s.h.

The use, organization and interpretation of individual and groups standardized tests are studied. Other means of evaluation, such as observations, inventories and use of cumulative records, will be included. Opportunity will be provided for examining and evaluating these various evaluation instruments and techniques.

PSY 06.540: Psychological Concepts in Human Computer Interaction

3 s.h

This course will explore insights from cognitive psychology, learning theory, clinical psychology, social psychology, human factors, industrial/organizational psychology, and educational psychology to enhance the integration of computers into both workplaces and schools. This course addresses the new social concerns brought about from the expected fit of the human-computer interface both from the perspective of individual adjustment and social process.

PSY 06.627: Individual Psychodiagnostics I

3 s.h.

This course will focus on an overview of theories of intelligence as well as the use, organization and interpretation of individual standardized tests. Specifically, administration and interpretation of the Wechsler Scales will be expected outcomes of the course. This includes training on the WPPSI-III, the WISC-IV, the WAIS-III and the WIAT-II, with particular emphasis on the assessment process as a link to classroom cognitive and instructional interventions.

PSY 06.628: Individual Psychodiagnostics II

 $3 \, \text{s.h.}$

This course will focus on cognitive and educational assessment based on the Cattell-Horn-Carroll (CHC) theory of intelligence. Administration and interpretation of the Stanford-Binet: Fifth Edition and the Woodcock-Johnson Assessment Battery: Third Edition will be the course competencies. Special assessment issues covered will include nondiscriminatory assessment, preschool assessment and the assessment of academic achievement, with particular emphasis on the assessment process as a link to classroom cognitive and instructional intervention.

PSY 06.629: Individual Psychodiagnostics III

3 s.h.

Prerequisites: PSY 06628

This course will focus on an overview of personality and behavioral assessment. This will include instruments and techniques (standardized and clinical) for obtaining information regarding emotion, behavior, motivation, self concept, and interpersonal and attitude characteristics as distinguished from cognitive abilities. There will be an emphasis on interpreting data from multiple sources to achieve the goal of describing the personality and behavior.

PSY 06.630: Individual Psychodiagnostics IV

3 s.h.

Prerequisites: PSY 06629

Concerned primarily with the Rorschach Test in terms of basic theory and research related to it. Emphasis will be placed upon developing skills of administration, scoring and interpretation with the Rorschach.

PSY 06.631: Psychological Testing of the Preschool Child

3 s.h.

Prerequisites: PSY 06533

Practice in administration, analysis and evaluation of individual tests with infants and preschool children with emphasis upon such tests as the Gessell Infant Intelligent Scale, Cattell Infant Intelligence Scale, Gessell Developmental Tests, Minnesota Preschool Test and so forth. Tests will be administered under supervision with subsequent reports.

PSY 06.632: School Psychology: Consultation and Intervention

3 s.h.

Prerequisites: PSY 06533 and PSY 06627

The course is designed to help students become familiar with alternative frameworks for educational delivery systems including emerging skills in instructional and collaborative consultation, teaming strategies, curriculum based assessment and measurement, and intervention strategies in the academic, behavior and social areas. Emphasis is placed in viewing the problems children experience in schools from a systems or ecological perspective as opposed to residing within the child. The role of the school psychologist will be enlarged to permit their effective participation in transdisciplinary school based terms.

PSY 09.511: Child Psychology

3 s.h.

This course is designed to help professional educators and others concerned with facilitating healthful child development to become more aware of the interrelationship of children's needs, potentialities and competencies. Attention is devoted to the physical, social, mental and emotional growth of the child from conception to puberty.

PSY 09.512: Developmental Psychology of Alcohol and Drug Abuse

3 s.h

This course addresses the psychological issues of drug and alcohol abuse in the context of the developmental psychology of childhood and adolescence. Developmental considerations in prevention and intervention programming are emphasized. The insight of developmental psychology concerning normal developmental processes are integrated with family systems theory.

PSY 09.560: Lifespan Development

3 s.h.

This course focuses on the developmental processes across the lifespan. Major theoretical perspectives are presented. Attention is given to physical, cognitive, social and emotional development at each significant developmental periods.

PSY 09.587: Adolescent Psychology

3 s.h

This course is designed to help those college graduates who are preparing to become secondary school teachers to understand the behaviors, goals, motivations and drives of the students with whom they will be working. The unique characteristics of this age group will be treated in some detail.

PSY 09.589: Psychology of Human Relationships

3 s.h.

The course focus is on the organization and effective use of processes involved in personal and interpersonal relationships.

PSY 09.594: Psychology of Personality

3 s.h.

This course studies the current theories of personality. Attention is given to the physical, social, and psychological factors which influence personality development.

PSY 09.595: Introduction to Counseling

3 s.h

This course is designed to provide mental health counselors with counseling foundation skills. These include the development of professional identity, observation skills, and microcounseling skills or interactive skills, observation skills such as the use of empathy and attending skills. The course also reviews mental status exams, and the content areas required for an initial intake. Students are expected to demonstrate these skills through the use of role plays and videotapes.

PSY 10.610: Psychopharmacology

3 c h

This course will provide an understanding of basic neurological mechanisms and how they are effected by psychotropic medications. It includes a description of the functioning of neurotransmitters and their role in the etiology of some mental illnesses. The course will review the major classes of psychotropic medications and their use for specific psychological disorders. The integration of psychotropic medications into best practice treatment plans and case management is discussed.

PSY 10.625: Physiological Psychology

3 s.h.

Course includes molecular and molar studies of the nervous system; control centers of emotion and consciousness; biochemical changes in the nervous system due to drugs, disease, chemicals, nutrition, radiation, electrical shock, psychosomatic factors, accidents and injuries. In-depth study of one interest area and experiences in laboratory instrumentation in physiology of learning.

PSY 22.507: Development and Learning

3 s.h.

This course is an introduction to the basic theories, vocabulary and principles of developmental psychology. Special attention is focused upon the role of environmental and educational factors in development, and the application of learning theory to modify behavior. Age-appropriate behaviors expected of children and adolescents are described.

PSY 22.510: Theories of Learning

3 s.h.

The focus of this course is on the major psychological theories of learning and is designed for students preparing for career or presently in educational settings, as teacher and/or administrators. Both cognitive and behavioral approaches will be discussed. The contribution of learning theory in various theories of instructions will also be discussed.

PSY 22.512: Educational Psychology

3 s.h.

The dynamics involved in the process of learning are emphasized. An objective of the course is a consideration of the ways psychology can be of value in facilitating the teaching-learning process. Such topics as formulating objectives, motivation and evaluation of learning are considered.

PSY 22.530: Consultation and Clinical Services Practicum

4 s.h

This course emphasizes psychoeducational assessment, intervention, and strategies for the student with special needs. Practical experiences in psychoeducational assessment and consultation strategies with students are provided, as well as, with staff and parents. The practical experiences are provided within the Special Educational Services Clinic or other educational/mental health service programs. Instruction as well as supervision is provided as part of this pre-externship experience.

PSY 22.586: Psychology of Motivation and Learning

3 s.h.

An intensive study of the basic theories of learning and current research in motivation and learning is emphasized in this course. Stress is placed upon the significance of these theories and investigations for educational practices.

PSY 22.600: Seminar I in Applied Research: School Psychology

3 s.h.

This course will concentrate on the latest developments in the field of educational psychology, emphasizing theoretical and research findings. An introduction to the field of school psychology will also be included. Students will be expected to complete a project to demonstrate scholarly and professional awareness in the field.

PSY 22.601: Seminar II in Applied Research: School Psychology

3 s.h.

This course will concentrate on the latest developments in the field of educational psychology, emphasizing theoretical and research findings. An introduction to the field of school psychology will also be included. Students will be expected to complete a project to demonstrate scholarly and professional awareness in the field.

PSY 22.634: Colloquium in School Psychology

6 s.h.

The colloquium is a full school year externship in School Psychology with placement in a public school. Monthly meetings will focus on discussion of psychological diagnosis, educational remediations and research based upon consideration of case materials related to externship experiences; review of current theoretical and experimental developments in school psychology.

READ 30.515: Teaching Reading Across the Grades

3 s.h.

Students acquire a background in current theory and practices related to emerging literacy, word identification, fluency, comprehension, study skills, and recreational reading in grades K-12. The relationships between reading and the other language arts and between reading and other subject areas are addressed. Additionally, students become familiar with various methods, materials and technology used in teaching reading, assessing reading performance, and organizing and managing a reading program in the K-12 classroom. This course is required for those seeking the M.A. in reading education and/or reading specialist certification. Teachers and administrators who wish to increase their knowledge in the K-12 reading curriculum and instruction may also enroll.

READ 30.520: Teaching Reading in Content Areas

3 s.h

This course is designed for reading and non-reading majors interested in increasing knowledge and skills in teaching reading in the content areas. It is a required course for those seeking an M.A. in reading. Instruction is provided in the developmental aspects of reading with little emphasis on corrective or remedial practices. The content of the course may be oriented toward the subject matter areas represented by the students enrolled in the course. Special emphasis is also given to developing vocabulary, comprehension, and study skills as well as to assessing pupil ability to read content material and to select suitable materials for instruction.

READ 30.530: Teaching Reading to Exceptional Children

3 s.h

The primary purpose of the course is to present the philosophy of teaching reading to exceptional children along with the appropriate methods and materials. Major topics include the nature and needs of children who deviate from normal assessment of reading ability, emerging literacy, the role of parents and the child study team, intervention strategies, settings for instruction, word recognition, comprehension and study skill techniques appropriate for exceptional learners, adaptations of methods and materials, and organizational patterns. This course may not be offered annually.

READ 30.535: Word Study: Phonics, Spelling, and Vocabulary Instruction

3 s.h

This course develops understandings for teaching phonics, spelling, and vocabulary in integrated language arts classrooms. The importance of knowing what to teach and when is emphasized. Major topics include: the development of word knowledge from emergent literacy to adulthood, strategies for instruction, the role of assessment, and parental involvement.

READ 30.540: Administration and Supervision of School Reading Programs

3 s.h.

Prerequisites: READ 30515 or REED 30515

The purpose of this course is to examine the role of the reading specialist in planning, developing, supervising, and evaluating reading programs at all levels. Major topics include reading program budget planning, components of an overall reading program, subsystems, special provisions, evaluating teacher performance, planning and conducting in-service workshops, organizational patterns, planning and preparing district materials, and selection and evaluation of commercial materials.

READ 30.550: Diagnosis of Remedial Reading Problems

3 s.h.

Prerequisites: READ 30515 and READ 30535 or REED 30515 and REED 30535

Students in this course will become aware of the factors which influence reading achievement. They will learn to administer standardized and informal tests to individuals as well as to small groups. Furthermore, they will recognize the need to modify some procedures for exceptional learners. Throughout the course, the importance of on-going assessment will be emphasized. Finally, strategies for interpreting and reporting test results will be delineated. As a course requirement, students will administer selected tests to a student and summarize the results in a report.

READ 30.552: Workshop in Reading

3 s.h.

Such areas as the following are explored: methods and materials for teaching reading and determining reading levels; influencing factors in reading disability; and differences in teaching varied types of children. Demonstrations, hands-on experiences and group work are involved. May not be offered annually.

READ 30.560: Correction of Reading Problems

3 s.h.

Prerequisites: REED 30550 or READ 30550

Students in this course become aware of factors that are considered when planning instruction for readers experiencing difficulty. In planning lessons students design and adapt instructional materials, develop computer-based teaching strategies, and implement instructional procedures in an integrated language arts perspective. The course instructor supervises students as they use diagnostic teaching strategies to instruct remedial readers in field-based settings.

READ 30.566: Researching Classroom Practice

3 s.h.

Prerequisites: ELEM 02511

This course will provide opportunities for students to read and analyze various types of research for the purposes of improving practice. Students will focus on action research by designing a project that includes selecting the issue, determining the data to be collected, data analysis and interpretation, and change of teaching and learning behavior.

READ 30.570: Clinical Experiences in Reading

6 s.h.

Prerequisites: REED 30560 or READ 30560

Students plan and execute reading lessons for groups of remedial readers. They integrate the results of testing, observation and the assessment of reading-related factors in order to devise appropriate sequences of corrective instruction. Students select and use varied teaching strategies, including remedial techniques in order to adjust to the individual needs of their pupils. Following weekly observations, students discuss their performance with the instructor. During the seminar portion of the class, students learn to administer, interpret and evaluate diagnostic instruments. They are taught to use corrective procedures which integrate the language arts and utilize computers.

READ 30.600: Seminar and Research in Reading

3 s.h.

Prerequisites: REED 30570 or READ 30570

The most commonly used techniques employed in educational research are studied. Guided reading and discussion of research articles in reading education are provided. Research studies are analyzed and critiqued with special attention given to the methodology of the studies. Enrollment is limited to matriculated graduate students with permission of the graduate advisor.

SCPY 25.516: Applied Tests and Measurements

 $3 \, \text{s.h.}$

Emphasis is placed upon data-gathering, the evaluation of data and the use of data in educational measurement. Standardized tests, both group and individual, will be studied. Generally, enrollment is limited to those who have been formally admitted to the student personnel services, learning disabilities and school psychology programs.

SELN 10.577: Collaborative Instruction in Inclusive Classrooms

3 s.h.

This course will focus on instructional strategies in inclusive classrooms for students with and without disabilities. Collaborative and consultative skills for working with parents, regular education teachers, special education teachers, support personnel, and school administrators will be discussed and modeled, as well as role play for team teaching in such environments.

SELN 10.578: Administration and Supervision in Special Education

3 s.h.

This course considers the problems in administering and supervising programs for students with disabilities between three and twenty-one years of age. Attention is given to organizing, financing and supervising such programs at federal, state and local levels.

SELN 10.580: Teaching Students with Moderate and Severe Disabilities

3 s.h.

Through this course students acquire knowledge of the curriculum, assessment procedures, and intervention strategies required to effectively teach individuals with moderate and severe disabilities. Among the areas of emphasis are functional academics, personal care, recreation/leisure, vocational and community living skills. Research-based best practice in instruction for students with moderate and severe disabilities is stressed.

SELN 10.581: Teaching Strategies for Managing Behaviors of Students with Disabilities: A 3 s.h. Curriculum Approach

This course provides the student with a comprehensive study of the goals of misbehavior in classrooms and in other settings. Specific theoretical techniques and methodology in channeling deviant behavior through the use of behavior modification and other management techniques will be explored. Curricula content, self-development, attitudes, and research finding will enable each student to acquire effective skills in working with learning resistant and deviant behaving children and adults.

SELN 10.582: Communication Skills for Students with Disabilities

3 s.h.

This course provides an intensive study of the language needs of students with moderate and severe disabilities and includes individual assessment for the identification of initial communication and the development of acceptable language procedures. Finger spelling, basic American Sign Language, and using technology to develop alternative communication strategies will be covered.

SELN 10.583: Advanced Workshop in Special Education

1 to 6 s.h.

Instruction is provided in current issues and topics related to the field of special education which are compatible with the student's prerequisites and interest. The course can be designed to meet the in-service needs of federal and state agencies, teachers and/or local school systems. Number of credits will be determined by course content each time the course is offered. Students should consult the program adviser for specific course content and credits assigned. This course may not be offered annually.

SELN 10.585: Educational Assessment in Special Education

3 s.h

Trends, practices, problems and issues in educational assessment will be examined. The course is designed to enable the special education teacher to administer criterion-referenced, informal, or standardized tests and to plan individualized educational programs for students with special needs. Curriculum-based assessment is emphasized.

SELN 10.586: Emotional and Behavioral Support Strategies

3 s.h.

This graduate course will discuss positive strategies, related laws and regulations, and services to support students with behavioral and emotional problems. Social and emotional factors that affect behavior and learning will be explored. Emphasis will be placed on appropriate academic and social skills instruction, and pro-social interventions to meet the needs of students with difficulties in social and emotional adjustments.

SELN 10.590: Teaching Students with Autism and Pervasive Development Disorders 3 s.h.

This course provides an overview to the autism spectrum disorder and other pervasive developmental disorders (e.g. Rett's Disorder, Asperger's Syndrome), their identification, etiology, and best practices and services in educating children with autism and related spectrum disorders. It will focus on the characteristics, diagnosis and assessment, communication styles, and various instructional and behavioral strategies to teach those children. Collaboration with other professionals, paraprofessionals, and parents will also be explored. Co-teaching opportunities in the inclusive classroom will be practiced as a means to support children with autism or other pervasive developmental disorders.

SELN 10.592: Clinical Seminar in Special Education

1 s.h.

This seminar course is designed to be taken concurrently with the clinical field practice. Students meet throughout the semester to discuss teaching experiences, problem solving strategies, and their own reflections on working with children and youth with disabilities. A teaching portfolio is also completed.

SELN 10.593: Clinical Internship in Special Education

3 s.h.

This course will provide students an opportunity to apply research-based best practice in the field to teach children and youth with mild, moderate, or severe disabilities. Participants will be observed by both college supervisors and their mentor teachers, and will reflect on their instruction for improvement.

SELN 10.600: Research Seminar in Special Education

3 s.h

Students are expected to conduct an original research project. Guidance and assistance will be provided to help identify a problem, select appropriate research procedures, conduct a study, and write a comprehensive review of the results. Registration is by permission of the program advisor. During the Spring Semester students are required to pass a written comprehensive examination.

SMED 32.501: General Music in the Elementary and Secondary Schools

3 s.h

The philosophy, scope and sequence of the general music program for all children is related to the total school curriculum. Permission to take this course must be secured from the music department. This course is offered bi-annually.

SMED 32.502: Teaching of Music Theory

2 s.h.

Methods of teaching theory such as listening, reading, writing, analyzing, playing and creating are examined. The content of music theory courses and representative music theory texts are analyzed and evaluated. This course may not be offered annually.

SMED 32.505: Selected Approaches in Music Education

3 s.h.

The approaches are those of: Gordon, Kodaly, Orff, Montessori, Suzuki, and Jacques-Dalcroze. The student will research each approach, and while doing an in-depth study on one approach, develop a curriculum for his or her teaching situation. This course is offered bi-annually.

SMED 32.506: Guitar Pedagogy

3 s.h.

The student will be made aware of the philosophies of guitar instruction, be familiar with the two or three most widely-used method books and will have begun to develop his/her own pedagogical system. A practicum experience is included in the course.

SMED 32.507: Piano Pedagogy

3 s.h.

The course will systematically present the pedagogical methods and materials readily found in the United States for teaching beginning, intermediate and early advanced students of the piano. A supervised practicum is an essential part of the course.

SMED 33.502: Processes and Principles of School Mathematics

3 s.h

In this course, designed for certified teachers of secondary school mathematics, students will expand their pedagogical repertoires to include the mathematical processes of communicating, representing, making connections, problem solving, and reasoning and proving. The principles of curriculum, teaching, technology, equity, learning, and assessment will provide a framework for the study of the processes and students current practice. These processes and principles will be studied entirely within the context of school mathematics content.

SMED 33.502: Processes & Principles of School Mathematics

3 s.h.

In this course, designed for certified teachers of secondary school mathematics, students will expand their pedagogical repertoires to include the mathematical processes of communicating, representing, making connections, problem solving, and reasoning and proving. The principles of curriculum, teaching, technology, equity, learning, and assessment will provide a framework for the study of the processes and students?current practice. These processes and principles will be studied entirely within the context of school mathematics content.

SMED 33.510: Computers and the Curriculum

3 s.h

The philosophical, psychological, sociological and educational implications of the computer and its impact on the public school curriculum are explored. Current relationships between theory and practice, along with future technologies, are examined.

SMED 33.521: Instructional Computer Languages: LOGO

3 s.h.

This course is designed to help students become literate in a structured programming language. Special emphasis is placed on teaching techniques and curriculum design relating to public school education.

SMED 33.525: Instructional Applications of Word Processing and Data Management 3 s.h

Word processing, data base management and spreadsheet operations are combined into an integrated system suitable for educational applications, including text preparation, filing, and grading systems. Hands on experience with the integrated systems, along with other complementary software, including desktop publishing and keyboarding, is provided. Evaluation of programs for classroom use, as well as personal use, is included.

SMED 33.530: Computer-Assisted Instruction

3 s.h.

This course provides a foundation for the effective design, selection, and evaluation of educational software. Instructional interaction between the computer and the student is explored and the teacher's role in CAI is defined. A variety of software packages for the classroom are evaluated.

SMED 33.548: Seminar in Educational Computing

3 s.h

The major concepts studied in the Computers in Education Post-Baccalaureate Certificate Program are summarized, integrated, applied, and evaluated in this course. An in-depth research project is developed and executed. Projects are selected from the areas of curriculum development and evaluation, computer assisted instruction, or administrative applications.

SMED 33.560: Instructional Applications of Computers

3 s.h.

As an entry level course in computer usage for teachers, this course deals with the use of computer hardware and software in classroom settings. Commercial and public domain courseware packages are examined in terms of their quality and their potential for enhancing the curriculum. The programming language BASIC and LOGO are examined with relevance to classroom applications.

SMED 33.572: Special Topics

3 to 6 s.h.

This course will address specific contemporary issues in educational computing. The topics will change as needs arise and will be published in the course selection catalog. Variable credit.

SMED 33.574: Multimedia & Hypermedia for Teachers

3 s.h

As an advanced level course for classroom teachers engaged in the utilization of the computer in the classroom, this course will explore ways to create multimedia and hypermedia materials for use in the classroom. Instructional planning is emphasized by applying the principles of instructional design and using the techniques of courseware design to facilitate the delivery of information in the context of multimedia and hypermedia environments.

SMED 33.580: Introduction to Educational Technology

3 s.h.

This course is intended for educators at all levels who place a high value on successful teaching and learning. The purpose of the course is to help educators incorporate media and technologies for learning into their repertoire--to use them as learning tools. The course will draw examples from elementary, secondary, and postsecondary education as well as corporate training and development. This course will provide the initial opportunities necessary to begin technology infusion in the school curriculum.

SMED 33.583: Computers and Related Technologies in the Elementary Classroom

3 s.h.

Prerequisites: SMED 33580

This course is designed to assist elementary school teachers in the successful integration of computers and related technologies into the elementary classroom curriculum. The student will develop computer and technology skills enabling them to select, interpret, and evaluate computer elementary and middle school applications in the math, science, social studies, reading and language arts curriculum. The student will be exposed to a large variety of educational software.

SMED 33.584: Desktop Publishing in the Educational Environment

3 s.h.

The primary objective of this course is to provide a comprehensive introduction to desktop publishing using desktop publishing programs that can be used in the educational setting. This course provides a hands-on approach to desktop publishing using both high-end and low-end publishing programs. The experiences in this course will help students to become more involved with the visual impact of their ideas on the readers. Students will learn to integrate ideas with words, typestyle, graphics and other features involved in the production of publications with a high level of visual impact.

SMED 33.585: Internet in the Classroom

3 s.h.

Prerequisites: SMED 33580

This course provides and introduction to the Internet emphasizing its value in teaching and learning. In this course students will discover how to use some basic Internet navigation programs to locate and gather information from the Internet. Lessons will include finding and subscribing to listserv lists in education, using ERIC online, accessing and employing web search engines., locating and downloading files, handling files with e-mail, discovering and capturing multimedia elements on the web, developing a personal web page, and analyzing the implication of the Internet for lifelong learning in education.

SMED 33.586: Planning and Implementing Technology in Public Education

3 s.h.

This course is intended for present and future leaders of instruction and technology in public schools. This course will help the graduate student become instrumental in improving teaching and learning by examining concepts and techniques in strategic planning, goal setting, curriculum restructuring and alignment, technological assessment, and program and staff development. The course will provide the graduate student with experience in selecting the appropriate hardware and software in an educational setting. Students will also be asked to identify and explore future trends in educational technology.

SMED 33.587: New Directions in Educational Technology

3 s.h

This course is intended for educators who are interested in identifying new technologies and unique applications of these technologies in classrooms. Students will research, identify and publish information about new innovations and applications on a web site specifically designed for this endeavor. This web site will provide a forum for the graduate student. It will also include suggested as well as tried-and-true activity structures, and assessment rubrics. This course will afford the graduate student opportunities to make connection with professionals in related areas of technology design and development.

SMED 33.588: Research Seminar in Educational Technology I

3 s.h.

This first seminar will provide a foundation whereby students (1) gain an understanding and appreciation of the field of educational research and (2) develop sufficient knowledge of quantitative and qualitative research methods so that more technical research skills can be developed and applied in the subsequent seminar. In this course the graduate student will decide with his/her advisor on an appropriate topic of study for the research thesis/project required by the program. This thesis/project will be completed in the second seminar. Prerequisites: Completion of at least 24 S.H. of course work in the Masters in Educational Technology program.

SMED 33.589: Research Seminar in Educational Technology II

3 s.h.

Prerequisites: SMED 33588

This second seminar is a continuation of the first offering. It provides additional formal training in design, statistics, qualitative research, and evaluation research. Techniques for recording, organizing and documenting research, along with the In-depth understandings that research brings, will be acquired through the experience of conducting or participating in the ongoing research thesis/project guided by the senior advisor.

SMED 33.600: Problems in Mathematics Education I

3 s.h.

Investigates recent developments and relevant research in mathematics education. The student will determine a problem and investigate the problem as a project. The project must deal with a problem in mathematics, mathematics education, or computer science education. This project may be local or national in scope.

SMED 33.601: Problems in Mathematics Education II

3 s.h.

Investigates recent developments and relevant research in mathematics education. The student will determine a problem and investigate the problem as a project. The project must deal with a problem in mathematics, mathematics education, or computer science education. This project may be local or national in scope.

SMED 34.532: Physical Science Activities for Teachers

3 s.h.

This course is designed to assist the elementary and middle school teacher gain a better understanding of the basic concepts in force, motion, heat, light, sound and electricity. Through intensive experiential use of science materials, the teacher will be provided an opportunity to improve skills in demonstrating and in experimenting in physical science. This course may not be offered annually.

SMED 34.600: Seminar in Science and Science Teaching I

3 s.h

Consideration given to assumptions and hypotheses upon which practical applications are based. Opportunity provided for advanced students to do special research on a professional problem involving any phase of science or science education.

SMED 34.601: Seminar in Science and Science Teaching II

3 s.n

Consideration given to assumptions and hypotheses upon which practical applications are based. Opportunity provided for advanced students to do special research on a professional problem involving any phase of science or science education.

SMED 96.501: Introduction to Environmental Education

3 s.h.

An introduction to environmental education as related to outdoor education, conservation education, and resource education is presented historically. The goals of environmental education are to: (1) examine environmental problems and alternate solutions; and (2) improve curriculum and instruction at all levels of formal and informal education. Practical, relevant applications of biology, physics, chemistry, earth sciences and the social sciences are emphasized.

SMED 96.502: Trends in Environmental Education

3 s.h

Emphasis in this course is centered on modern research related to environmental education. Modern and timely concerns in environmental education including exemplary local, state and federal environmental education activities and curricula are explored and demonstrated. May not be selected to meet specialization requirements for Teaching Secondary School Science or Environmental Education.

SMED 96.503: Developing Curriculum Guides and Materials for Environmental Education Programs 3 s.h.

Techniques and procedures for the development of curriculum guides and materials for the teaching of environmental concerns via environmental education programs are the goals of this course. Emphasis will be placed upon the development of curriculum materials, by each student, that can be utilized in his professional career. The course will deal with the selection, production and utilization of audiovisual materials related to environmental education. Educational materials available from educational and commercial sources will be surveyed.

SMED 96.505: Environmental Conservation Workshop

3 s.h.

An overview of environmental resources including water, air, energy, land, and minerals, and an identification of the problems related to the conservation of those resources is presented. The effect of population quantity, population density, life style and energy use patterns on environmental quality is examined. Local, state, national and world ecosystems are investigated. Field oriented small group projects are emphasized in addition to large group integrating seminars.

SMED 96.506: Practicum in Marine Environments

2 s.h

Marine, wetland, and coastal ecosystems are investigated and evaluated. Field experiences include the monitoring of biological, chemical and physical factors in marine aquatic areas. The environmental impacts of modern man on the ecology of bays, estuaries and coastal regions will be studied. The use of marine studies to improve curriculum will be emphasized.

SMED 96.507: Practicum in Woodland Environments

2 s.h

Forest and grassland ecosystems, their wildlife and food chains are investigated. The benefits and costs of preservation and conservation of these resources are studied. Methods of using the woodland and aquatic environments as sites and topics for improving curriculum are included. Field experiences are emphasized.

SMED 96.508: Practicum in Urban Environments

2 s.h

Field studies of urban, suburban, rural, and natural environments provide contrasts and comparisons of varying environmental quality. The impacts of increasing population densities on air, water, and land are observed and evaluated. The sociological, economic and psychological effects of urbanization are noted. Opportunities to use the urban environment as a medium for curriculum improvement are investigated. This course may not be offered annually.

SMED 96.509: Environmental Land Use-Resources and Recreation

3 s.h

Knowledge of environmental guidelines concerning the identification, planning, and use of land areas for the purposes of industrial, educational, residential and recreational endeavors will be presented in this course. Developing a procedure for determining proper land use and the means by which governments established land use practices will be stressed. Also emphasized will be society's increasing demands for educational and recreational facilities and programs and how the schools, communities and private organizations can meet these needs. Students in this course will participate directly in certain current land use problems by attending public hearings and doing related field work. This course may not be offered annually.

SMED 96.515: Environmental Issues and Actions

3 s.h.

This course focuses on environmental issues and addresses the knowledge and skills needed by instructors to successfully implement issue instruction in the classrooms and in non-formal settings. Participants will develop skills associated with issue analysis, issue investigation, information collection and processing, and citizenship participation. Relevant research will be reviewed. Additional instruction will focus on implementing issue instruction in both classroom and non-formal settings.

SMED 96.600: Seminar in Environmental Education I

3 s.h.

This is a research, independent study course designed to give the graduate student a general knowledge of research and evaluation techniques in education and the methods and modes of curriculum development. With these skills, the student will select an M.A. thesis/project topic, review the literature on this topic, select and collect data on this topic and begin the writing of the formal "Master's Thesis/Project." Significant course time is allocated to individual conferences with the instructor and library research and data collection. It is a program objective that graduate students propose and complete a "useful and meaningful" terminal Thesis/Project that is focused on their overall career objectives.

SMED 96.601: Seminar in Environmental Education II

3 s.h.

The second half (2nd semester) of a research, independent study course designed to give the student a general knowledge of research and evaluation techniques in education and the methods and modes of curriculum development. During the course of this semester the student will complete a thesis/project started in the previous semester and prepare it for final acceptance by the Graduate Committee and for acceptance and binding by the College Library. In compliance with the Rowan University Graduate Catalogue, a Comprehensive Examination will be given on or about the mid-term of this course. Most course time is allocated to individual conferences with the instructor and library-research time.

SPED 08.515: Curriculum, Instruction, and Transition in Special Education

3 s.h.

Students are required to proceed from the assessment of a learner to the selection of appropriate curricula and effective teaching strategies. The scope of the course will permit an analysis of the current knowledge base for effectively teaching students with mild, moderate, and severe handicaps in the areas of academics, social interactions, and employment.

SPED 08.520: Clinical Experiences in Special Education

2 s.h.

This course provides the student with the opportunity to engage in a variety of field-based experiences with students with disabilities. Participants will be placed in self-contained, resource centers and inclusive settings to apply research-based best practices. A weekly seminar to discuss experiences and current issues in special education will be required.

SPED 08.530: Introduction to Vocational Education for Individuals with Special Needs 3 s.h.

This course provides an overview of the history, philosophy, and process of vocational evaluation, for special needs students. Vocational evaluation tools and techniques will be presented. Emphasis is placed on gaining a broad knowledge of the evaluation process and how it can be incorporated into transition planning.

SPED 08.540: Technology for Students With Special Needs

3 s.h

This course is designed to assist special and regular educators with effective instructional applications of hardware, software, Internet resources, and adaptives. Students will be required to design, implement and evaluate instructional program plans that incorporate examples of current technological materials/devices that foster independence in students with special needs in the regular or special education classroom. Prerequisites: Basic computer skills (e.g., ability to use word processing, email, and the WWW).

SPED 08.545: Home/School/Community Collaboration: Family Systems and Interventions 3 s.h.

This course is designed to promote students' knowledge, skills and dispositions regarding positive home-school and community collaborations. Topics include the study of families and schools as separate systems, ways in which family systems, theory, diversity, and disabilities affect both a student's learning and behavior, and the families' relationships with schools. The role of educational helping professionals and methods of collaboration between home, school, and community that will facilitate effective comprehensive services will be examined.

SPED 08.547: Professional School Psychology

3 s.h.

The purpose of this course is to introduce students to current theory, research, practices and issues in school psychology and to the code of ethics that guides the field. Particular emphases are conceptual, professional, legislative, legal and ethical issues, and emerging problems in school psychology. Students will apply these issues to their own training and professional development. The student will be introduced to the conceptualization of the school psychologist as a problem-solver who links assessment to intervention and provides both direct and indirect psychological services.

SPED 08.555: Education & Psychology of Exceptional Learners

3 s.h.

The course provides an in-depth study of individuals who are so different that they require special social and educational programming. The course content develops an understanding of characteristics and problems of handicapped children and acquaints students with the basis for identifying, classifying and planning to effectively meet needs of children with physical, mental, emotional and social handicaps.

THD 07.501: Introduction to Graduate Theatre Study

2 s.h.

This course examines basic tools for graduate research in theatre. Students learn to analyze, support and present written research at the level expected of a graduate student. Their writing style will be evaluated and writing exercises will be critiqued. In addition, students will review scholarly documentation and look at various approaches the writer can take to assemble a thesis proposal.

THD 07.502: Studies in World Theatre History and Criticism

3 s.h.

Prerequisites: THD 07501

Through the study of landmark works of drama and dramatic theory, this course investigates style, form and production methodology in selected periods of European and Asian theatre from the Classical Age to 1915. A research paper is required.

THD 07.503: Studies in American Theatre History and Criticism

3 s.h.

Prerequisites: THD 07501

Building on student background and interest, this course will focus on the history of theatre in America from the colonial period through America's emergence as a world theatre force (the work of O'Neill and others) to the post-modern experiments of today. Students will investigate the work of major playwrights, critics, theatre practitioners and theorists across a broad cultural and social spectrum.

THD 07.504: Seminar in Contemporary World Theatre and Drama

3 s.h.

Prerequisites: THD 07501

From a list of selected topics, this course will investigate major trends and the work of significant playwrights, directors, designers and other theatre practitioners in the period since 1950. Particular focus will be given to topics of current concern to the theatre educator and the theatre professional. Several short papers and a major research paper are required.

THD 07.505: Independent Study in Graduate Theatre

1 to 3 s.h.

Prerequisites: THD 07501

Students will pursue research in an area of theatre study determined by the student in consultation with the adviser. The project can include examination of performance activities, historical or critical concerns or any other area of concern to the student.

THD 07.506: Scenography: Process and Product

3 s.h

This course studies the function of design elements within the production process. It will focus on the evolution of design ideas through the exchange of views among directors and designers and the process which turns these ideas into the physical matter used in production. The student's basic visual communication skills will be enhanced by learning essential theatrical drafting and modelmaking techniques.

THD 07.507: Challenges in Design & Technical Production

3 s.h.

Prerequisites: THD 07506

The activity in this course will examine specific set, costume and lighting design and technical production challenges presented by the stylistic and physical demands of a script. The student will be required to research and create practical solutions within an overall design concept.

THD 07.508: Seminar in Directing: Working With the Actor

3 s.h

This course explores techniques employed by the director working with actors during the rehearsal period. Topics include: conducting efficient rehearsals, improving physical and vocal effectiveness, guiding characterizations, stimulating emotional credibility and creating ensemble. Examination of source works on acting and directing is augmented by observation and demonstration.

THD 07.509: Special Problems in Directing

3 s.h.

Prerequisites: THD 07508

Utilizing research, discussion and a laboratory format, the student will explore advanced concerns of staging and style. This course will focus on topics selected from the following: specialized blocking situations; regionalisms, dialect and verse dialogue; historical production styles; non-realistic production styles; post-modern approaches to acting and directing; the role of gender in directing; the semiotics of directing. The course culminates in a final scene project.

THD 07.510: Musical Theatre Production

3 s.h.

Utilizing a workshop format, this course will look at musical theatre in the school, college, community theatre or little theatre setting and consider practical solutions to problems of production and staging. Focus will be on the working relationships among members of the musical theatre production team.

THD 07.511: Production/Performance Project

3 to 6 s.h.

Prerequisites: THD 07501

Permission of the department Graduate Committee is required. This activity enables students to use production work as a centerpiece for a project that associates production/performance work with writing and research. For this course, students may write, design, direct, choreograph or perform in an approved production activity on a Rowan stage. Combined with further research and writing, the project provides the student with an indepth look at production activity in a wider context. This project may also serve as the basis for the M.A. thesis.

THD 07.515: Internship in Theatre

3 to 6 s.h.

Premission of the department Graduate Committee is required. This credit is earned for practical experience with a theatre or theatre-related company, in an acting, directing, design/production, management or dramaturgy. In general, 3 semester hours are given for a full semester or summer in such a setting; the course may be repeated to a maximum of 6 s.h. The prospective internship and duties must be approved in advance by the department before credit can be considered.

THD 07.520: Thesis Research and Writing

3 to 6 s.h.

Prerequisites: THD 07501

Completion of 17 s.h. in the theatre program and approval of advisor is required. This credit is earned for time spent researching and writing the master's thesis under the supervision of a faculty adviser. The student reports to the adviser on a regular basis during this period. The finished thesis must be approved by a committee composed of the adviser and two other faculty designated by the department. The 6 s.h. of credit may be taken all at one time or be divided between two terms (3 s.h. each).

THD 07.525: Theory and Practice in Teaching Theatre K-12

3 s.h.

This course presents teaching/learning theory and its application in K-12 theatre education. Students will learn to design and teach theatre arts experiences, observe and evaluate teaching, and develop resources, including instructional plans for a multi-week unit, for teaching at the elementary and secondary level. Through this course, students will actively learn the knowledge and skills needed to teach an effective K-12 theatre curriculum.

THD 07.570: On-site Theatre Study

3 s.h.

This course offers students the opportunity to study theatre and drama at important theatrical centers in the United States or abroad, under the supervision of a faculty leader. Study includes such things as attendance at productions, discussions with theatre practitioners, tours of theatres and specialized workshops as well as investigation of the area's other important historical and cultural sites. Students will incur additional travel and program costs which vary according to study site selected. Students are required to submit a final written project. The course may be repeated under a different subtitle. This course may not be offered annually.

THD 08.510: Dance: Art in Motion

3 s.h

This course begins with a broad historic overview of dance as an art form. The origins and evolutions of movement within the major genres of dance ?dance in world cultures, ballet, jazz, tap, social, modern and post-modern will be addressed. Opportunities to view, discuss and participate in various elements and styles of dance will lead to an aesthetic appreciation of dance as a cultural art form. Students will also study the roles of the dancer, choreographer and audience in performance, dance in education, and careers in dance. This course may not be offered annually.

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B.S., M.A., Rowan University

Director of University Events

DORLAND, DIANNE (2000)

B.S., M.S., South Dakota School of Mines and Technology; Ph.D., West Virginia University

Dean of the College of Engineering

Administrative Assistant for Music

DUKE, H. KEITH (2001)

B.S., Rutgers University

Purchasing Agent

DePASQUALE, LAWRENCE (1983) B.A., M.A., Glassboro State College (Rowan)

Associate Director in Career and Academic Planning Center

EIGENBROT, CAROL (1996) B.S., Springfield College; M.A., Kowan University

EIGENBROT, EDWIN (1993) B.S., M.Ed., Springfield College

Director of Student Information Services

FARISH, DONALD J. (1998) The President B.Sc., University of British Columbia; M.S., North Carolina State University; Ph.D., Harvard University; J.D., University of

Missouri

FISHER, BENJAMIN (1970) **Public Services Librarian** B.J., University of Texas; M.A., American University; M.A., Glassboro State College (Rowan); Ph.D., Rutgers University

FISHER, JOANNE (1987)

Associate Director in Financial Aid

B.A., Rutgers University

FOGLEIN, JOHATHAN (1996) Instrument Coordinator and Safety Officer for Chemistry and Biochemistry B.S., University of New Brunswick; M.S., Queens University

FRIERSON, MURIEL (1990)

The Registrar

B.A., Chestnut Hill College; M.S., Drexel University

GALLIA, DONNA (2004)

B.A., M.A., Rowan University (Glassboro)

Director of the Schaub Instructional Materials Center

GALLIA, THOMAS J. (1970) Vice President for University Relations/President's Chief of Staff B.A., M.A., M.A., Glassboro Staté College; Ed.D., Rutgers University

GAYMON, JAMES (1997)

Director of Civic and Governmental Relations

B.A., Rowan University; M.A., Rutgers University-Newark

GILCHRIST, DORIE (1978)

B.A., Penn State University; M.Ed., Temple University

Director of Graduate Admissions

GIUNTA, KAREN (1986)

Provost's Managing Administrative Assistant

Director, Major Gifts & Planned Giving

HAGAN, ANNE (1997)

B.A., Indiana University; M.S., Drexel University

Vice-President of Administration and Finance

HALE, RICHARD (2005)

B.A., Brown University; J.D., Vanderbilt University

Dean of the College of Liberal Arts and Sciences

HARPER. JAY (1999) B.S., City College, City University of New York; Ph.D., State University of NY at Stony Brook

HENDERSON, JAMES (1989)

Director of Enterprise Information Services

B.A., Furman University

HOGAN, FRANK (1991)

General Manager of WGLS

A.A.S., Cleveland Institute; Certified Professional Broadcast Engineer, S.B.E.

HOLLOWAY, KATHY (1987)

Director in Human Resources for Administration Services

B.S., Glassboro State College (Rowan)

HOLMES, JUDITH (1988)

Head Reference Librarian

B.A., Marymount College; M.A., Glassboro State College (Rowan)

HOUSHMAND, ALI (2006)

The Provost

B.A., M.A., University of Essex, United Kingdom; M.S., Ph.D., University of Michigan

IMPERATORE, JOHN (2000) *B.S., M.E., Drexel University*

Director of Facilities Resource Management

JACKSON, PATRICIA (2000)

Laboratory Technician for Chemistry and Biochemistry

JORDAN-COX, CARMEN (2007)

A.B., Indiana University; M.Ed., Pennsylvania State University; Ph.D. Boston College

KATZ, CRAIG (2001)

Director of International Student Service

Vice-President of Student Affairs

KLEIN, BRUCE (1992) B.S., Glassboro State College (Rowan)

B.A., Rutgers University; Ed.M., Temple University

Director of Network and System Services

KLOSKEY, THOMAS (1977)

B.A., M.A., Temple University

Director in College of Communication

KORDEN, MARY (1988)

B.A., Glassboro State College (Rowan)

Director of Preschool at Camden Campus

KUDER. SIDNEY JAY (1984)

Associate Provost for Research/Dean of Graduate School

B.A., Trinity College; M.Ed., Temple University; Ed.D., Boston University

KUERZI, KEN (1994)

B.S., J.D., Florida State University

Director of Employee/Labor Relations

Director of Facilities Business Services

KUHLEN, JOHN (1987)

B.A., M.B.A., Glassboro State College (Rowan)

Managing Administrative Assistant in University Advancement

LAW. FRANCES (1986)

B.A., Rowan University

LIPARTITO, ROBERT (2001) Music Librarian in the College of Fine and Performing Arts

B.M., Glassboro State Collège; M.M., Manhattan School of Music; M.L.S., Queens College (CUNY)

LOVEGROVE, JAMES (1982) B.S., Glassboro State College (Rowan) Associate Director for Accounts Payable/Long Range Planning

LYNCH, CINDY (1980)

B.A., M.A., Glassboro State College (Rowan)

Assistant Dean of the College of Liberal Arts and Sciences

MARGOLIS, JEFFREY (2002)

B.S., Temple University; M.A., Rowan University

Director of University Publications

Advisor for Elementary Education

MARSHALL, LORI (1992)

B.S., Evangel College; M.A., Rowan University

Director in Beginning Teachers Induction Center

MAZZEI, DIANE (2003) B.A., M.A., Rowan University

MEREDITH, PHYLLIS (1987)

B.A., Fayetteville State University; M.L.S., Atlanta University

Public Services Librarian

Director of Public Safety

MICHENER, TIMOTHY (2002)

B.S., Kutztowń State University; M.Ś., West Chester State; Ph.D., Walden University

MILLER, DEMOND S. (1997) B.A., Northeast Louisiana University; M.S., Ph.D., Mississippi State University

MILLIGAN, CAROLYN (2005) B.S., Rugers University

Director of Payroll

Director of EOF/MAP

MILLS, JOHN T. (1992) B.S., M.A., Glassboro Staté College (Rowan)

MONROE, CRAIG (2003)

Dean of the College of Communication B.A., University of Central Oklahoma; M.S., Emporia Kansas State University; Ph.D., University of Nebraska

MORAN, EILEEN (1995)

Director in Development

B.A., St. Michael's College; M.S., Worcester State College

MORDOSKY, ANTHONY (2000)

Associate Provost for Information Resources

Director of Liberal Arts and Sciences Institute

B.S., Kutztown State University; B.S., Millersville State College; M.B.A., Temple University

MORRIS, MARJORIE (1975)

B.A., University of Pennsylvania; M.S., Drexel University

Head of Music Branch Library

MORROW, EILEEN (1992)

B.A., Wilkes College; M.A., Bucknell University; CSP

Director of University Bookstore

MULLENS, CYNTHIA (1980)

B.A., Belmont College; M.L.S., George Peabody College for Teachers

Librarian

Assistant Dean of Students

MULLIGAN, JOSEPH (2004)

B.A., M.A., West Chester University

MUMMERT, ESTHER (1989) Coordinator for College of Communication Academic Advising B.S., East Stroudsburg University; M.A., Shippensburg University

McCAFFERTY, JACQUELINE (2003)

Director of ESL and Basic Skills

B.A., Ithaca College; M.S.Ed., Temple University; CELTA Teaching Certificate, Cambridge University

McCALL, SALLY (1977)

B.S., Drexel University

Director of Budget

McGEE, STUART (1975)

B.A., University of Pennsylvania; M.F.A., Temple University

Theatre Arts Manager

McRAE, MARY R.

B.S., Villanova University

Vice President for Advancement

NEWELL, JAMES Interim Associate Provost for Academic Affairs B.S., Carnegie-Mellon University; M.S., Penn State University; Ph.D., Clemson University

NORTON, RICHARD (1997)

Laboratory Technician for Chemistry and Biochemistry

B.S., Rowan University; M.S., University of Maryland

NURKOWSKI, LUCIA (1977)

Associate Director in Admissions

B.A., M.Ed., Boston College; Ed.D., Widener University

ORLINS, JOSEPH (1999)

Assistant Vice-President for Facilities

B.S., University of Washington; M.S., Ph.D., University of Minnesota

Interim Associate Dean for College of Education

PERRY, JILL (2001) *B.S., M.Ed., University of Florida; Ph.D., University of Central Florida*

PINDER, ANNE (2003)

Assistant Director of Enterprise Information Systems (EIS)

B.S., Rowan University; M.A., Certification Information Management, Stevens Institute of Technology

PINOCCI, TINA (1992)

Assistant Vice President of Student Life

B.S., M.Ed., Frostburg State College

PONTES, NANCY (2003)

Director of Student Health Center

B.S.N., Pensacola Christian College, M.S.N., University of Florida; D.N.Sc., Columbia University

POTTER, GREGORY (1969)

Associate Dean of Campbell Library

B.A., University of Pennsylvania; M.S.L.S., Villanova University; M.A., Glassboro State College (Rowan); Ed.D., Rutgers University; Certified Public Manager, State of New Jersey

REEVE, JULIA (1988)

President's Managing Administrative Assistant

ROBINSON, FAYE (2000)

B.A., Glassbóro State College (Rowan); M.A., Rowan University

ROSENBERGER, ROMINE (1999)

Public Services Librarian

Public Services and Business Librarian B.S., Longwood College; M.S., Virginia Commonwealth University; M.A., Rowan University

ROZANSKI, KATHY (1990)

B.A., Glassboro State College (Rowan)

Director of Alumni Relations

SAHM, GEORGETTE (1999)

B.A., Rowan University; M.A., Philadelphia University

Courseware Development Specialist for Instructional Technology

SCHMELZ, NICHOLAS (1974)

B.A., Bloomfield College; M.A., Seton Hall University

Dean of the Rohrer College of Business

Advisor in Elementary Education

Director in Human Resources

SCHOEN, EDWARD J. (1999)

B.S., LaSalle University; J.D., Georgetown University Law Center

SCHOEN, MARGARET (2003)

Director of Government Grants & Sponsored Research

B.S., King's College; M.S., College of Misericordia

SCOTT, EILEEN (1977)

B.S., Rowan University

SCULLY, JOSEPH F., JR. (2000)

B.S., M.B.A., LaSalle University; CPÁ

Associate Vice President for Fiscal Affairs and Controller

SHARP, CAROL (1987)

B.A., Glassboro State College; M.A., William Paterson College; Ph.D., Penn State University

SIEFRING, KAREN (1983)

Dean of the College of Education

B.A., Douglass College; M.A., Glassboro State College (Rowan)

SMALL, KATHLEEN (1977) B.A., M.A., Glassboro State College (Rowan)

Advisor in Elementary Education

SNYDER, RICHARD (1979) B.S., Glassboro State College (Rowan); M.B.A., Rowan University **Director of Accounting Services**

SOLOMEN, JOY (1986) B.A., M.A., Glassboro State College (Rowan)

Athletic Director

SOSA, HORACIO (2006)

Dean of the College of Professional and Continuing Education

Assistant to the Dean of the Rohrer College of Business for Student Advisement

B.S., UNLP, Argentina; M.Ś., Stanford University; Ph.D., Stanford University,

SPENCER, JEROME (1997)

B.S., University of North Carolina at Chapel Hill; M.B.A., Cornell University

Lab Coordinator for Computer Science

STEVENSON, SHEILA (1985)

B.A., Rochester Institute of Technology

Director of Sports Information

STOLL, PATRICIA ALEXY (1984)

MIS/Certification Specialist for the College of Education B.A., M.A., Glassboro State College (Rowan); Ed.D., Widener University

STRATTIS, ELLA (1993)

B.A., Niagara College; M.L.S., Drexel University

Government Documents Librarian

SULLIVAN-WILLIAMS, LIZZIEL (1976)

B.A., Glassboro State College (Rowan); M.A., Antioch University

Director of Career and Academic Planning Center

SWEETEN, LINDA C. (1992)

B.A., Trenton State College; M.Ed., University of Delaware

Assistant Dean of the College of Communication

TARTAGLIONE, PHILIP (1972)

B.S., LaSalle University

Director of Financial Aid

Bursar

TAVAREZ, LUIS (1998) B.A., Glassboro State College (Rowan); M.A., Thomas Edison State College

TIEMANN, MARIE (2006)

B.S., Rutger's University; M.Ed., Ph.D., Temple University

Executive Director of Human Resources

TOPORSKI, NEIL (2003) **Director of Instructional Technology**

B.S., University of Wisconsin-Madison; M.S., Clarion University; Ed.D., Lehigh University

TURNER, VANETTA (2000)

B.A., Penn State University; M.S. Central Michigan University

Assistant Dean of the Rohrer College of Business

Associate Director for Pensions and Benefits

VAN BRUNT, MARGARET (1995)

B.S., Rutgers University; CPA

Executive Assistant to the Vice-President of University Advancement

VEACOCK, PEGGY (1983) B.A., Rowan University

VELEZ-YELIN, JOHANNA (1990)

Acting Director of Affirmative Action

B.A., InterAmerican Univ., San Juan, Puerto Rico; M.A., Glassboro State College (Rowan); Ed.D., Widener University

WADLEIGH, RICHARD (1988)

B.G.S., University of Nebraskà

Associate Director of Public Safety

WAGENER, MARK (1988)

B.A., B.S., M.B.A., Glassboro State College (Rowan)

Director of Housing and Business Services

WAGNER, FRANK J. (1997)

B.S., Kean College; M.S., Thomas Jefferson Medical College

Laboratory Director for Biological Sciences

WENRICH, KEITH (1996)

B.S., Susquehanna University; M.S., University of Southern Mississippi

Director of Student Recreation Center

Dean of Campbell Library

WHITHAM, BRUCE ALAN (2006)

B.A., M.L.I.S., University of Western Ontario; M.E.S., York University

WILLIAMS, RICHARD A. (1984)

B.A., Lincoln University; M.Ed., Trenton State College

Director of EEO/Affirmative Action /Diversity

ZAZZALI, ROBERT (1973)

B.A., M.A., Glassboro State College (Rowan); M.A., Rutgers University

Associate Provost for Faculty Affairs

ZIEGLER, EDWARD (1972) *B.A., Trenton State College; M.A., Glassboro State College (Rowan)*

Director of University Marketing

ADAMS, ETHEL M. (1968-1984)

Professor

Psychology

B.A., Eastern Michigan Univ.; M.A. Univ. of Michigan; Ed.D., Univ. of Pennsylvania

ADDISON, CAROLYN (1967-1991)

Professor

Health & Physical Education

B.S., James Madison Univ.; M.A. New York Univ.; Ed.D., Temple University

ALVINO, ESTHER (1966-1987)

Assistant Professor

Elementary Education

B.A., M.A., Glassboro State College

AMBACHER, JR., RICHARD J. (1967-2000)

Professor

Communication Studies

B.A., Glassboro State College; M.F.A., Yale University

AMME, LINDA (1968-1990)

Assistant Professor

Special Ed. Serv./Instuction B.A., M.A., Glassboro State College

ANDERSEN, DONALD (1970-1998)

Assistant Professor

Special Ed. Serv/Instruction B.A., M.Ed., Rutgers University

AVRIL, EDWIN (1959-1982)

Professor

Music

B.A., San Francisco State College; M.A., Ed.D., Teachers College, Columbia University

BARTELT, PEARL W. (1972-1999)

Professor

Sociology and Dean

B.S., M.A., Ph.D., Ohio State University

BENDER, AARON (1964-1991)

Professor

History

B.A., Brooklyn College; M.A., Ph.D., New York University

BENNETT, RENEE (1963-1983)

Assistant Professor

Elementary Education

B.S., Rider College; M.A., Glassboro State College

BEVERLY, LEAH (1958-1984)

Professor

Health and Physical Education

B.S., Southwestern Louisiana College; M.A., N.Y.U.; Ed.D., Univ. of So. Mississippi

BIANCHI, JOHN (1967-1990)

Education and Coordinator of Research

B.S., Villanova Univ.; M.Ed., Rutgers Univ.; Ed.D., Temple University

BISAZZA, GAETANO R. (1966-2000)

Assistant Professor

Biological Sciences

B.S., LaSalle College; M.S. Villanova University

BLANKEN, MAURICE (1957-1982)

Associate Professor

Economics and Political Science

B.A., Drew University; M.A., Columbia University

BLOUGH, ROBERT (1963-1995)

Professor

Elementary Education

B.S., Juniata College; M.Ed., Temple University; Ed.D., University of Pennsylvania

BORGEN, EVELYN (1965-1991)

Professor

Elementary/Early Childhood Education

B.S., Monmouth College; M.A., Glassboro State College; Ed.D., Fairleigh Dickinson Univ.

BOROWEC, ALEXANDER (1956-1988)

Professor

Physical Sciences

B.S., Trenton State College; M.S., Univ. of Pennsylvania; Ed.D., Temple University

BRENT, GEORGE (1971-2003)

Professor

Elementary/Early Childhood Education

B.A., Ed.M., Boston University; Ed.D., University of Massachusetts

BRESLIN, FREDERICK (1960-1991)

Professor

Psychology

B.A., Queens College; M.A., Ph.D., New York University

BRINKER, BEULAH (1960-1984)

Assistant Professor

Elementary Education

B.S., Glassboro State College; M.A., New York University

BRITTON, PEARL E. (1968-1977)

Professor

Health and Physical Education

B.S., Cortland State College; M.Ed., Ed.D., University of Buffalo

BROOKS, ELLAIN (1965-1983)

Assistant Professor

Math/Computer Science

B.S., North Carolina State; M.A., Columbia University

BROWN, ESTELLE (1962-1992)

Professor

Reading/Speech Correction

B.S., M.A., Glassboro State College; Ed.D., Temple University

BUZASH, GABRIEL (1964-1981)

Professor

Elementary Education

B.S., Slipper Rock State College; M.S., Westminster College; Ed.D. Penn State University

BYRER, JOSEPH (1968-1995)

Assistant Professor

Technology

B.S., M.S., Indiana State University

CALLIARI, CARL (1968-2004)

Professor

Education

B.A., M.A., Glassboro State College; Ed.D., Temple University

CELL, HOWARD R. (1967-2000)

Professor

Philosophy/Religion

B.S., University of Wisconsin; M.A., San Jose University; Ph.D., Temple University

CHAMBERLAIN, MARK M. (1969-2000)

President Emeritis

B.S., Franklin and Marshall College; Ph.D., University of Illinois

CIMPRICH, JACK R. (1973-1998)

Associate Professor

Computer Science

B.A., Boston College; M.S. Eng., University of Pennsylvania

CLAPP, ROBERT A. (1969-2000)

Assistant Professor

Theatre and Dance

B.A., Pennsylvania State University; M.A., Syracuse University

CLAY, KENNETH (1965-1991)

Professor

Technology/Dean of Academic Administration

B.S., Millersville State College; M.A., Ball State Univ.; Ed.D., Michigan State University

COHEN, STANLEY (1961-1984)

Professor

Educational Administration

B.S., Rutgers University; M.Ed., Ed.D., Temple University

COLLINS, JOHN (1963-1994)

Professor

Communications

B.S., West Chester State College; M.A., Penn State University; Ed.D., Temple University

COLLINS, JOHN J. (1969-1999)

Professor

Educational Leadership

B.A., M.A., Glassboro State College; J.D., Rutgers University

COMBS, ETHEL (1967-1995)

Associate Professor

Reading/Speech Correction

B.A., Douglass College; M.A., Glassboro State College; Ph.D., Temple University

CONRAD, GEORGE (1958-1979)

Professor

Art

B.S., New York University; M.A., Ed.D., Columbia University

COVI, ADELYNE (1964-1984)

Assistant Professor

Elementary Education

B.S., Washington University; M.A., Glassboro State College

CRAVER, RHYS (1963-1994)

Associate Professor

Chemistry & Physics

B.S., Millersville State College; M.S., University of Delaware; Ph.D., Walden University

CREAMER, MARVIN C. (1948-1977)

Professor

Geography/Anthropology

B.S., L.H.D., Glassboro State College; M.S., Univ. of PA; M.S., Univ. of Wisconsin

CROMIE, DAVID (1973-2000)

Associate Professor

Public Rélations/Advertising

B.A., M.A., Western State College of Colorado; Ed.D., University of Colorado

DARRAH, GLADYS L. (1967-1979)

Assistant Professor

Health and Physical Education

B.S., M.S., University of Wisconsin

DELANEY, LAWRENCE (1964-1988)

Professor

Physical Sciences

B.Š., Trenton State College; M.S., Ed.D., University of Pennsylvania

DETRICK, FRED (1964-1987)

Associate Professor

Foundations of Education

B.A., M.S., Rutgers University

DINSMORE, LEE (1971-2002)

Professor

Chemistry and Physics

B.S., M.A., Glassboro State College

DONAGHAY, ROBERT (1963-1992)

Assistant Professor/Coordinator

Academic Advising

B.S., University of Minnesota; Ph.D., University of Texas

DONAHUE, CHARLES T. (1960-2000)

Professor

English

B.A., Texas A &M University; M.A., University of Texas; Ph.D., Temple University

DOSKOW, MINNA (1986-2002)

Professor

English/Dean

B.S., M.S., City College of N.Y.; M.A., University of Connecticut; Ph.D., University of Maryland

DOWNS, EDWARD (1961-1991)

Assistant Professor

Elementary/Early Childhood Education B.S., M.A., Glassboro State College

DUFF, ELIZABETH R. (1959-1984)

Professor

Psychology

B.S., Kent State Univ.; M.A., New York Univ.; Ed.D., University of Maryland

DUGAN, RUTH (1964-1981)

Professor

Psychology

B.A., Washington Square College; M.A., Ph.D., New York University

EDWARDS, ROBERT (1960-1991)

Associate Professor

Geography/Anthropology

B.A., M.A., University of Michigan

ELLIOTT, GENE V. (1963-1998)

Professor

Psychology

B.S., M.A., Michigan State University; Ph.D., University of Maryland

EMERSON, ROBERT (1966-1992)

Asst Professor/Asst Director

Professional Lab Exper.

B.R.E., United Wesleyan College; M.A., Glassboro State College

ENGEBRETSON, HERSCHEL (1969-1988)

Assistant Professor

Communications

B.A., Taylor University; M.A., University of Pennsylvania

ENSLIN, WILLIAM L.(1974-2000)

Associate Professor

Management/MIS

B.E., University of Pennsylvania; Ed.D., Rutgers University

FALZETTA, JOHN (1969-1988)

Professor

Secondary Education

B.A., LaSalle College; M.A., Niagara University; Ed.D., Temple University

FANSLAU, MARTHA C. (1971-1980)

Librarian/Instructor

Library

B.A., University of Pennsylvania; M.A., Glassboro State College

FOSTER, BRUCE (1970-2005)

Professor

Reading

B.A., Trenton State College; M.S.Ed., Bucknell Univ.; Ed.D., Florida State University

FOX, JOHN (1964-1990)

Assistant Professor

Health and Physical Education

B.A.P.E., M.S.P.E., West Virginia University

FRANKL, RAZELLE (1983-2000)

Professor

Management/MIS

B.A., Temple University; M.B.A., Drexel University; M.A., Ph.D., Bryn Mawr College

FRIEBIS, GEORGE (1969-1993)

Director

Educational Media

B.S., M.Ed., Temple University; M.A., Glassboro State College; Ed.D., Nova University

FRISONE, JOHN (1973-2002)

Associate Professor

Psychology

B.A., Queens College; Ph.D., City University of New York

GALLAGHER, DONALD (1973-1994)

Professor

Communications

B.A., St. Francis College; M.A., Villanova University; Ed.D., Temple University

GARDINER, DICKINSON (1967-1991)

Professor

Secondary Ed/Educational Foundations

B.A., Western Maryland College; M.Ed., Ed.D., Temple University

GARRABRANT, WILLIAM (1973-2003)

Head of Circulation

Interlibrary Loan & Science Librarian

B.A., Hamilton College; M.S.Ed., M.S.L.S., Syracuse University

GARRAHAN, JOHN (1965-1982)

Associate Professor

Special Education

B.A., City College of New York; M.S., Ed.D., University of Pennsylvania

GATES, RODNEY E. (1968-2000)

Assistant Professor

Art

B.S., Univ. of Maryland; M.A., Glassboro State College

GAYNOR, WILLIAM (1965-1987)

Assistant Professor/Librarian

B.A., Georgetown Univ.; M.A., Fairfield Univ.; M.S., Villanova University

GILLESPIE, JOHN (1972-1992)

Associate Professor

Communications

B.S., M.A., Glassboro State College

GLASSBERG, ROSE (1964-1991)
Secondary Ed/Educational Foundations

Professor

B.S., West Chester State College; M.A., Middlebury College; Ph.D., Temple University

GOLDBERG, LEON (1968-1988)

Associate Professor

Physical Science

B.S., City College of New York; M.S., New York University

GOODFELLOW, FRANK (1965-1999)

Associate Professor

Secondary Education

B.A., College of Wooster; M.S.L.S., Drexel Institute of Technology

GRACE, JAMES H. (1969-2000)

Professor

Philosophy/Religion

B.A., M.Th., Drew University; M.A., Ph.D., Temple University

GRAZIAN, FRANK (1968-1991)

Associate Professor

Communications

B.A., Rutgers University; M.S., Columbia University

GREEN, CHARLES H. (1962-1993)

Professor

Life Sciences

B.S., Penn State Univ.; M.S., University of Delaware; Ph.D., Purdue University

GUERARD, MICHAEL P. (1971-1995)

Associate Professor

Technology

B.S., M.Ed., Ph.D., Texas A & M University

GUNDAKER, ISABELLE (1983-2003)

Instructor

Composition & Rhetoric

B.A., Chestnut Hill College; M.A., Rutgers

GURST, LAWRENCE (1966-1993)

Assistant Professor

Elementary Education

MA.A., M.Ed., Temple University

HABA, JAMES (1972-2003)

Associate Professor

English

B.A., Reed College; Ph.D., Cornell University

HAYNES, ROBERT (1960-1991)

Professor

Art

B.F.A., Colorado State College; M.A., Ed.D., Columbia University

HEWSEN, ROBERT H. (1967-1999)

Professor

History

B.A., University of Maryland; M.S., Catholic University; Ph.D., Georgetown University

HILTS, RICHARD (1962-1981)

Professor

Music

B.M., Eastman School of Music; M.M., University of Oklahoma

HITCHNER, BENJAMIN G. (1964-1998)

Assistant Professor

Economics

B.S., Temple University; M.S., University of Pennsylvania

HUMBERT, JOHN J. (1969-1995)

Professor

Technology

B.S., University of Maryland; M.Ed., Pennsylvania State University; Ed.D. Texas A&M University

JAEGER, PETER (1966-1981)

Associate Professor

Communications

B.A., Mexico City College; M.Ed., University of Houston

JENSEN, IVAR I. (1959-1981)

Professor

Foundations of Education

B.Ed., Univ. of Connecticut; M.A., Middlebury College; Ed.D., Columbia University

JOHNSON, RICHARD J. (1971-2000)

Associate Professor

Political Science

B.A., M.A., Cert. of Russian Institute; Ph.D., Columbia University

JOHNSON, THEODORE B. (1990-1999)

Associate Professor

Educational Leadership

B.S., M.A., Temple University; Ed.D., Rutgers University

JONES, JOHN (1968-1990)

Assistant Professor

Foreign Languages and Literatures

B.A., M.A., University of Alabama; Diplome, Institut de Touraine, Tours, France

KAPEL, DAVID (1988-2002)

Professor

Secondary Ed/Foundations

B.S., M.Ed., Ed.D., Temple University

KARDAS, WILLIAM (1968-2000)

Head Reference Librarian

B.S., M.L.S., Villanova University

KELLER, HORACE (1960-1986)

Professor

Psychology

B.S., West Chester University; M.Ed., Ed.D., Temple University

KELLY, MICHAEL F. (1961-1998)

Professor

Theatre and Dance

B.A., Elmhurst College; M.A., Ph.D., State University of Iowa

KERSHNER, E. THEODORE (1968-1998)

Assistant Professor

Health and Exercise Science

B.S., Ursinus College, M.Ed., Temple University

KESSLER, SIDNEY (1958-1991)

Professor

History

B.A., Montclair State College; M.A., Columbia University; M.L.S., Pratt Institute

KIRNER, CLARA (1971-1994)

Librarian

B.A., Rutgers University; M.A., Drexel University

KLANDERMAN, JOHN (1986-2005)

Professor

Special Education

B.A., Calvin College; M.A., Ph.D., Michigan State University

KUSHNER, WILLIAM (1970-1999)

Professor

Communication Studies

B.A., Montclair State College; M.A., Temple University; Ph.D., Indiana University

LANGWORTHY, STANTON (1956-1991)

Professor

Secondary Ed/Foundations of Education

B.A., M.Ed., Alfred University of NY; M.S., M.A., Ph.D., University of Wisconsin

LEE, ELAINE (1967-1994)

Associate Professor

Elementary/Early Childhood Education

B.S., M.A., Trenton State College; Ed.D., Temple University

LESHAY, STEVEN V. (1978-1999)

Associate Professor

Marketing

B.A., Lenoir Rhyne College; M.A., Glassboro State College; Ph.D., Temple University

LIBRO, ANTOINETTE (1968-2002)

Dean/Professor

Communication

B.A., Glassboro State College; Ph.D., New York University

LINT, JERRY N. (1964-1998)

Assistant Professor

Geography/Anthropology

B.S., Clarion State College; M.Ed., Pennsylvania State University

LLOYD, DAVID D. (1959-2000)

Associate Professor

Journalism and Creative Writing

B.A., Montclair State College; M.A., University of Michigan

LOIGMAN, BARRY M. (1970-1999)

Associate Professor

Psychology

B.A., M.A., Temple University; Ph.D., Rutgers University

LONGACRE, DAVID (1961-1989)

Education and Assistant Registrar

B.A., Gettysburg College; M.S., University of Pennsylvania

LYNCH, ROBERT D. (1973-1999)

Professor

Management/MIS

B.S., M.S., Ph.D., Carnegie-Mellon University; SPHR

MARTIN, DORIS (1976-1987)

Assistant Professor

Home Economics

B.S., Penn State University; M.S., Cornell University; Ed.D., Temple University

MARTIN, MARILYN (1995-2004)

Dean

Library Services

B.A., M.L.S., Univ. of Washington; M.A., Univ. of Arkansas; Ph.D., Texas Woman?s Univ.

MASAT, FRANCIS E. (1972-1998)

Professor

Mathematics

B.A., Blackburn College; M.S., Kansas State University; Ph.D., University of Nebraska

MERCIER, J. DENIS (1967-2002)

Professor

Communication

B.A., Marian College; M.A., Niagara University; Ph.D., University of Pennsylvania

METCALF, OWEN (1972-2000)

Associate Professor

Music

B.M.E., M.M.E., University of Colorado; D.M., Indiana University

MEYERS, DOROTHY (1967-1985)

Assistant Professor/Librarian

B.A., State University of Iowa; M.L.S., Rutgers University

MICAL, AGNES (1968-1996)

Assistant Professor

Health & Exercise Science

B.S., M.S., West Chester University

MICHAELSON, JAMES (1967-1991)

Assistant Professor

Secondary Ed/Ed. Foundations B.S., M.A., Temple University

MICKLUS, SAMUEL C. (1968-1991)

Professor

Technology

B.S., Philadelphia College of Art; M.A., Trenton State College; Ed.D., New York Univ.

MILLER, CLARENCE (1956-1992)

Professor

Music

B.M.E., Mount Union College; M.M., Marshal University

MITCHELL, RICHARD (1964-1991)

Professor

English

B.A., University of the South; M.A., Ph.D., Syracuse University

MITCHELL, ROBERT D. (1965-1997)

Associate Professor

Mathematics

B.S., M.A., University of Texas

MONROE, GERALD (1968-1986)

Associate Professor

Art

B.S., M.A., Ed.D., New York University

MOORE, ELIZABETH (1972-2002)

Professor

Biological Sciences

B.Sc., Rollins College; M.S., Ph.D., Cornell University

MOORE, OSCAR (1971-2003)

Assistant Professor

Health & Exercise Science

B.S., M.S., Southern Illinois University

MORFORD, IDA B. (1956-1981)

Professor

Psychology

B.S., Geneseo State College; M.A., Ph.D., Ohio State University

MORRIS, WILLIAM C. (1968-1999)

Professor

Theatre and Dance

B.A., DePaul University; M.A., Northwestern University; Ph.D., University of Illinois

MOYER, MEL (1967-2000)

Associate Professor

Psychology

B.A., Glassboro State College; M.Ed., Temple University; Ed.D., Rutgers University

MUMFORD, DONALD (1961-1985)

Assistant Professor/Research Assistant

B.A., Geneva College; M.A., University of Pittsburgh

MYKSVOLL, BIRGER (1962-1981)

Professor

Psychology

B.A., Notodden Teachers College, Norway; M.A., Oslo Univ., Norway; Ph.D., University of Maryland

McCONNELL, HELEN (1965-1995)

Professor

Home Economics

B.S., State Univ. College, Oneconta, NY; M.A., Columbia Univ.; Ph.D., Michigan State University

McCRANN, VIRGINIA E. (1968-1985)

Assistant Professor

Home Economics

B.A., M.Ed., Rutgers University

McKENZIE, JAMES J. (1954-1980)

Professor

English

B.A., Canisius College; M.A., Ph.D., Harvard University

McLEAN, DESMOND (1966-2002)

Associate Professor

Art

B.A., Newark State College; M.A., Hunter College

NEFF, GEORGE (1962-2000)

Professor

Art

B.S., Kutztown University; M.A., Columbia University; Ed.D., Pennsylvania State University

NICHOLS, LOLA (1960-1986)

Assistant Professor

Elementary Education

B.S., Trenton State College; M.A., Columbia University; M.A., Glassboro State College

NIENSTEDT, CARL W. (1962-1982)

Professor

Special Education

B.A., M.A., Bucknell University; Ph.D., University of Connecticut

NORTON, DONALD (1961-1983)

Professor

Music

B.S., Western Michigan University; M.A., University of Maryland; Ed.D., Columbia Univ.

O'DAY, SHIRLEY (1963-1990)

Professor

Health and Physical Education

B.S., University of Delaware; M.Ed., West Chester State College; Ed.D., Temple University

ONNI, MURIEL (1967-1991)

Professor

Foreign Languages and Literatures

B.A., Univ. of Toronto; M.A., McGill University; M.A., Ph.D., Rutgers University

PALLADINO, MARY ANNE (1964-1994)

Professor

Communications

B.A., Immaculata College; M.A., Villanova University

PERKINS, THELMA (1970-1986)

Assistant Professor

Secondary Education

B.S.Ed., M.Ed., Temple University; M.A., University of Pennsylvania

PERRY, WILHELMINA E. (1968-1997)

Professor

Sociology

B.A., Tilotson College; M.A., Howard University; Ph.D., University of Texas

PICKETT, ETHEL (1968-1987)

Assistant Professor

Home Economics

B.S., University of Delaware; M.Ed., University of Maryland

PIKE, FRANK (1964-1987)

Assistant Professor

English

B.A., Suffolk University; M.A., Boston College; M.Ed., State College at Boston

PITTARD, NORMA (1968-1987)

Assistant Professor

Art

B.A., Adelphi University; M.A., Columbia University; Ph.D., University of Maryland

PORTERFIELD, RICHARD (1961-1998)

Associate Professor

History

B.A., Johns Hopkins University; M.A., University of Pennsylvania; Ph.D., Temple University

PRIMACK, ROSE Z. (1964-1976)

Associate Professor

Psychology

B.S., Seton Hall University; M.Ed., University of Maryland

PUJALS, ENRIQUE J. (1969-2000)

Professor

Foreign Languages and Literatures

B.A., M.A., Indiana State University; Ph.D., Rutgers University

PUJALS, JOSEFINA (1971-2000)

Associate Professor

Foreign Languages and Literatures

B.A., M.A., Indiana State University; Ph.D., Rutgers University

REEVES, EDWIN C. (1968-1996)

Assistant Professor

Reading

B.A., M.A., Glassboro State College

REGENSBURG, GEORGE E. (1959-1984)

Professor

Special Education

B.S., Rider College; M.A., Montclair State College; Ed.D., Rutgers University

REINFELD, GEORGE (1956-2002)

Professor

Communication

B.A., M.A., Montclair State College

RESNIK, BENJAMIN (1965-1991)

Assistant Professor

Communications

B.A., M.A., Glassboro State College

RICHARDSON, HERBERT A. (1966-1998)

Assistant Professor

History

B.M., M.M., Yale University; M.A., Ph.D., University of Pennsylvania.

RILLING, MARION (1971-2001)

Professor

Graduate School

B.S., Trenton State College; M.S., Ed.D., University of Pennsylvania

ROBINETTE, JOSEPH (1981-2005)

Professor

Theatre/Dance

B.A., Carson-Newman College; M.A., Ph.D., Southern Illinois University

ROCH, JOHN (1959-1984)

Professor

English

B.A., University of Massachusetts; M.A., Ph.D., Columbia University

ROWAND, EDITH T. (1966-2000)

Assistant Professor

Health and Exercise Science

B.S., The King?s College; M.S., West Chester State College

SAKIEY, ELIZABETH (1974-2000)

Professor

Reading

B.S., Eastern Michigan University; M.Ed., Ed.D., Rutgers University

SALATI, RUDOLPH (1959-1983)

Assistant Professor/Registrar

B.S., Glassboro State College; M.Ed., Temple University

SALERNO, ANTHONY (1976-1997)

Assistant Professor

Law/Justice

B.A., University of Delaware; M.A., Rutgers University

SCHREIBER, ELLIOTT (1967-1995)

Associate Professor

Psychology

B.A., Upsala College; M.A., Bradley University; Ed.D., West Virginia University

SERFUSTINI, LEONARD (1971-1986)

Professor

Health and Physical Education

B.Ed., M.Ed., University of Buffalo; Ed.D., State University of New York

SHAWVER, MURL C. (1958-1974)

Professor

Life Sciences

B.S., Central Missouri State College; M.Ed., Univ. of Missouri; Ed.D., Columbia Univ.

SHRADER, EDITH (1959-1968)

Demonstration Teacher

Early Childhood Education

B.S., M.S., Glassboro State College

SIMPSON, EUGENE (1975-2000)

Professor

Music

B.M., Howard University; B.M., M.M., Yale University; Ed.D., Columbia University

SMITH, RICHARD R. (1964-1999)

Educational Leadership

Professor

B.A., M.A., Glassboro State College; Ed.D., Temple University

SMITH, STEWARD (1968-1983)

Assistant Professor

Elementary Education

B.A., Rutgers University; M.Ed., Temple University

SOOY, JOHN M. (1961-1998)

Professor

Mathématics

B.S., Glassboro State College; M.S., University of Pennsylvania; Ed.D., Temple University

SPEAR, MIRIAM (1967-1983)

Assistant Professor

Secondary Education

B.A., M.S., Glassboro State College

STANLEY, DANIEL (1966-1991)

Health and Physical Education

Professor

B.Ed., Univ. of Buffalo; M.Ed., State Univ. of New York; Ed.D., Temple University

STEVENS, KATHLEEN (1972-1998)
Associate Professor

Communication

B.A., Georgian Court College; M.A., Glassboro State College (Rowan)

STONE, DON C. (1968-2000)
Associate Professor

Computer Science

E. Eng. Phys., Cornell University; M.S.E., Ph.D., University of Pennsylvania

SULLIVAN, JANE E. (1972-1999)

Professor

Reading

B.S., Seton Hall University; M.S., Ed.D., State University of New York, Albany

TANNENBAUM, MARGARET D. (1971-2000) Professor

Secondary Education

B.A., Bryan College; M.Ed., Ed.D., Temple University

TANNENBAUM, THEODORE (1973-1998)

Professor

Sociology

B.A., M.A., Brooklyn College; Ph.D., Purdue University

TAYLOR, ALBERT (1964-1987) Professor

Foundations of Education

B.S., Trenton State College; M.Ed., Ed.D., Rutgers University

TAYLOR, ROBERT (1964-1991) Professor

Music

B.S., Julliard; M.A., Ed.D., Teachers College, Columbia University

THYHSEN, JOHN (1969-2000) Professor

Music

B.M., M.M., Eastman School of Music

TOMEI, MARIO (1964-1995)

Professor

Educational Administration

B.A., Montclair State College; M.S., University of Pennsylvania; Ed.D., Temple University

TRACEY, JAMES H. (1994-2000) Dean/Professor

College of Engineering

B.S.E.E., M.S., Ph.D., Iowa State University

TSUJI, THOMAS (1969-1995) Professor

Technology

B.S., M.S., Stoudt State College; Ph.D., Michigan State University

VERBEKE, MAURICE !967-1987) Professor

Educational Administration

B.S., M.Ed., Ed.D., Pennsylvania State University

VIVARELLI, THOMAS (1967-2004)

Assistant Professor

Special Education

B.A., Trenton State College; M.A., Glassboro State College

VOGAL, HAL (1984-2005)

Professor

Public Relations/Advertising

B.A., Temple University; M.A., William Paterson College; Ph.D., Antioch University; APR

WACKAR, RICHARD (1956-1988)

Professor

Health and Physical Education

B.S., M.A., Rutgers University

WARD, HUGH J. (1959-1976)

Associate Professor

Foundations of Education

B.S., M.A., Glassboro State College

WASSERMAN, BURTON (1960-2003)

Professor

Art

B.A., Brooklyn College; M.A., Ed.D., Columbia University

WEAR, BARBARA (1973-1999)

Assistant Professor

Elemenary/Early Childhood Education

B.A., Trenton State College; M.S.W., Rutgers University

WELSH, CHARLES (1973-1992)

Professor

Marketing

B.S., Villanova University; M.B.A., Ph.D., University of Pennsylvania

WHITCRAFT, JOHN (1963-1987)

Professor

Philosophy/Religion

B.A., Asbury College; M.A., Temple Univ.; B.D., Asbury Seminary; S.T.M., Boston Univ.

WHITE, EDWARD H.(1973-2000)

Professor

Educational Leadership

B.A., Keene State College; M.S., Indiana State University; Ph.D., University of Maryland

WICKS, LAWRENCE (1962-1997)

Associate Professor

Music

B.M., M.M., Ithaca College

WILLIAMS, THELMA (1969-1987)

Associate Professor

Music

B.S., Trenton State College; M.A., New York University

WINAND, LOIS (1971-1991)

Assistant Professor

Home Economics

B.S., M.S., Drexel University; Ed.D., Pennsylvania State University

WOLFE, EDWARD (1959-1994)

Professor

English

B.A., M.A., Ph.D., University of Pennsylvania

WOOD, A. TAGE (1968-1987)

Associate Professor

Speech/Theatre/Dance

B.S., East Stroudsburg State College; M.Ed., University of South Dakota

WOODS, WELLINGTON (1967-1998)

Associate Professor

Chemistry and Physics

B.S., Glassboro State College; M.Ed., Rutgers University; Ph.D., Walden University

YANNELLA, DONALD (1964-1991)

English

B.S., M.A., Ph.D., Fordham University

YOUNG, FLORA (1968-1995)

Sociology

B.A., M.A., Howard University; Ed.D., University of Pennsylvania

YOUNG, WALTER BYRON (1972-1997)

B.A., M.A., Glassboro State College; Ed.D., Pennsylvania State University

ZAHN, RICHARD (1960-1987)

Foundations of Education

B.S., West Chester State College; M.Ed., Ed.D., Temple University

ZALUSKY, DONALD (1966-1991)

Physical Sciences

B.S., M.A., University of Missouri; Ph.D., University of Delaware

ZIMMERMAN, DONALD (1961-1992)

Elementary/Early Childhood Education

B.S., M.A., State University of New York, Buffalo; Ed.D., Temple University

ZINK, THEODORE (1966-1987)

Law/Justice

B.S., M.S., University of Delaware; Ed.D., Temple University

Professor

Professor

Professor

Professor

Associate Professor

Professor

Professor

Alvin Shpeen Hall

Named for the late mayor of Glassboro, an advocate for better town-gown relations, this restored downtown facility had been the old vacant Academy Street School. Purchased in 2001, it houses Rowan's Management Institute, Education Institute and Center for Addition Studies plus the Child and Family Assessment Clinic and Tobacco Dependency Clinic.

Bole Annex

Opened in the spring of 1970, the Annex houses University Public Safety, University Marketing and Institutional Research and Planning.

Bosshart Hall

Formerly home to the departments of biological sciences, chemistry and physics, Bosshart was replaced by the all new Science Hall in 2003. It is slated for demolition.

Bozorth Hall

Named for former registrar Loriot D. Bozorth, the building opened in 1954 as the campus elementary school. Renovated in 1985 and 1994, Bozorth now houses the College of Communication offices and classrooms, a distance learning facility, television studios, WGLS radio, film editing suites, a computer-equipped newsroom, an advertising/public relations client suite, layout room and writing lab.

Carriage House

Built in 1849 adjacent to the former Whitney mansion (now Hollybush), the Carriage House contains University Publications and the ROTC program.

Cassady Maintenance Building

Opened in the summer of 1971 the Cassady Maintenance Building houses central receiving and as well as the carpentry, electrical and plumbing shops.

Chestnut, Magnolia and Willow Halls

Built during a campus expansion in the 1980s, Chestnut, Magnolia and Willow Halls house up to 800 students combined. Arranged in same-gender suites that can accommodate five to 16 students, each suite shares a large common bathroom and lounge. Hallways and lounges are carpeted and furnished with couches and chairs. Rooms are furnished and wired for Internet, cable TV and phone service.

Edgar F. Bunce Hall

The original building on campus, Bunce Hall was built in 1923 and is named for the second president of Rowan University. Bunce houses the College of Business and the departments of Economics, English, Foreign Languages and Literatures, Philosophy and Religion, and Theatre and Dance. This building also houses the Tohill Auditorium and has classroom space.

Edgewood Park Apartments

This four-building complex opened in the fall of 1974. Each building houses 24 apartments and up to four students live in each. Apartments contain two bedrooms, a living room, dining room, kitchen and bath. The apartments are carpeted, furnished and air-conditioned and limited parking is available for residents.

Education Hall

New in January 2006, Education Hall is home to the College of Education, its 120 faculty and staff and nearly 2,500 education majors. The three-story, 135,000 square-foot facility features smart classrooms, distance learning facilities, an early childhood development center and an assortment of labs and outreach centers.

Esby Gym

The Roland A. Esbjornson Health and Physical Education Center, "Esby" houses the gymnasium, a swimming pool and classrooms. The building is named for a former chairman of the Health and Exercise Science department.

Evergreen Hall

Evergreen houses 204 students. The building is three stories tall and is separated into two wings. Rooms are arranged in suites with each containing two double bedrooms and a bathroom.

Hawthorn Hall

Formerly a student residence facility, Hawthorn was renovated in 1986 and again in 2001 to house offices and classrooms for the College of Communication.

Henry M. Rowan Hall

Home to the College of Engineering, the 95,000 sq. ft. building was designed for maximum flexibility in teaching and research. It features terrestrial and wireless networking, three floors of offices, classrooms, labs and a 115-seat auditorium.

Hering Central Heating and Cooling Plant

Sheathed almost entirely in glass, this facility provides heating and cooling for the entire campus. An \$11 million upgrade to the plant, begun in 2006, will enable it to generate 80 percent of Rowan's electricity upon completion. The plant creates steam as a by-product which is used for heating, hot water and air conditioning.

Hollybush Mansion

Originally the Whitney Mansion, Hollybush was built in 1849 and served as a dormitory and then as the university president's private residence until 1998. The building was the site of the historic 1967 summit meeting between President Lyndon B. Johnson and Soviet Premier Alexei B. Kosygin. Hollybush is being restored and renovated into a museum and meeting center.

John B. Sangree Greenhouse

Built in 1923 adjacent to Bunce Hall, the university's original greenhouse remains a functioning glassed-in botanical garden. It is named for the university's first biology teacher, a charter faculty member of the Glassboro Normal School.

John Green Team House

Opened in the summer of 1971, the Team House contains locker and training facilities as well as offices for intercollegiate athletics and coaches.

Keith and Shirley Campbell Library

Opened in 1995, Rowan University's central library features 118,000 square feet of space for research, study, archives and offices. Designed with a striking six-story tower, the highest point on campus, the library, renamed in 2000 for benefactors Keith and Shirley Campbell, is the intellectual heart of the University. The library has a computer lab, seating on four floors, and special facilities for group study and conferences. Collections include more than 350,000 volumes and there are subscriptions to approximately 3000 periodicals.

Laurel and Oak Halls

Originally built as residence halls, these buildings were used as administrative offices for a number of years. In 1998, they were renovated and now serve as residence halls again housing 45 students in each hall.

Linden Hall

Formerly a student residence facility, Linden Hall houses the office of human resources, the student health center, the facilities management office, the safety office and the offices of the vice president for administration and finance.

Mansion Park Apartments

The University owns and operates this complex of 24 one-bedroom and 50 two-bedroom apartments. These on-campus apartments offer an independent living environment in which residents are required to pay for electrical service for heat, hot water and cooking.

Mark M. Chamberlain Student Center

Built in 1974, the Student Center was renamed in 2006 to honor the fourth president of Rowan University. The center features several dining options for students, staff and guests including The Rowan Marketplace (an all-you-can-eat buffet serving breakfast, lunch and dinner), The Owl's Nest restaurant and a food court on the lower level. The center has an ATM, study and meeting space, a laundry, TV lounge and ballroom.

Memorial Hall

Opened in 1956, Memorial now serves as the university's center for information resources. Housed here are offices for the associate provost for Information Resources, Enterprise Information Services, Instructional Technology, Network & System Services, the Support Desk, and Duplicating Services. Memorial is also home to Web Development, the Graduate School, the Office of Government Grants, and studios for the Department of Theatre & Dance.

Mimosa Hall

This freshmen resident hall houses up to 340 students on four floors. Mimosa is located centrally on campus and contains same-gender suites made up of 2-3 rooms that share a common bath.

Mullica Hall

Located adjacent to an oak grove on the south side of campus, Mullica houses up to 103 students on three floors. Each floor consists of same-gender suites that contain two double bedrooms and a bath.

R. Grace Bagg Alumni Center

Named in honor of a Rowan administrator who served the university for 48 years, the center on Whitney Avenue is headquarters for the Rowan University Alumni Association and the Office of Corporate and Foundation Relations.

Robert D. Bole Hall

Bole is the administrative center of the University, home to the offices of the President, Provost, Executive Vice President for University Advancement, Associate Provost for Academic Affairs, Associate Provost for Faculty Affairs and University Relations.

Robinson Hall

Named after Thomas E. Robinson, the university's third president, Robinson Hall is home to many of the departments within the College of Liberal Arts and Sciences, the largest college at Rowan. Housed here are offices for the departments of Computer Science, Geography/Anthropology, History, Mathematics, Political Science, Psychology and Sociology. Robinson is also home to the International Center, the LAS Institute and McSiip.

Savitz Hall

Named for Jerohn Savitz, the first president of the University, Savitz Hall houses student services offices including the Registrar, Bursar and Financial Aid, the Vice President for Student Affairs, the Dean of Students, Career and Academic Planning, Developmental Education, Tutoring, Basic Skills and Testing, Admissions, Counseling, Residence Life, Multicultural/international Affairs, Specialized Services and the offices of EOF/MAP.

Science Hall

Dedicated in 2003, the facility features a 102-seat planetarium, rooftop observatory with 16-inch telescope, and rooftop greenhouse. Its 150,000 square feet of space is spread over 6 floors. There are 27 teaching laboratories and 22 research labs.

Seymour Winans Hall

Home to the University bookstore, Winans is named for a former faculty member and is home to the University bookstore. The store sells all required textbooks, school and art supplies, Rowan gifts and clothing, toiletries and foodstuffs. It also offers such services such as resume printing, film developing, and cap and gown rentals.

South Jersey Technology Park at Rowan University

A mixed research and academic campus at the intersection of Routes 322 and 55, the South Jersey Technology Park at Rowan University is designed as a massive business incubator to spur the economic revitalization of southern New Jersey through science and technology. Once complete it will be an integral part of the proposed 580-acre Rowan University West Campus.

Student Recreation Center

Opened in 1993, the student recreation center adjacent to Esby Gym is a comprehensive recreation sports facility. The three-story, 76,000 square-foot center houses an 8-lane swimming pool (linked by a doorway to the Esby pool), a 3-lane indoor running track, a 3-court multi-sport gym, five racquetball courts, an aerobics room, fitness and free-weight rooms, a conference room, and men's and women's locker rooms.

Townhouses

Opened in the fall of 2004, the on-campus, 113-unit townhouse complex along Route 322 features four- and six-bedroom configurations nearby classes and other activities. The complex was built adjacent to a new parking garage and 5,000 square-foot community center with laundry facilities, a game room and meeting space.

Triad Hall

Located at the intersection of Route 322 and Bowe Blvd., Triad Hall is one of four on-campus student apartment complexes. The individual apartments are designated same-gender units and each floor is co-ed. Available are 1-, 2- or 3-bedroom units that can accommodate 2, 4, or 6 students. Each apartment is carpeted and fully furnished with a living room, bathroom and kitchen. There is a large laundry facility on the second floor and the site offers ample parking for all residents.

Westby Arts Center

Completed in 1967, Westby houses the Art Department for the College of Fine and Performing Arts. Named in honor Cleve O. Westby, a former director of county and state college construction, Westby contains comprehensive laboratories, classrooms, a lecture hall, faculty offices, the Westby Gallery, the graphics communication technology center and a darkroom.

Wilson Hall

Wilson Hall, which was named for former Rowan University faculty member Harold Wilson, opened in the spring of 1972 as the central music facility. It contains two large rehearsal rooms, a recital hall, numerous practice rooms, classrooms, two student lounges, a music library, faculty offices, the concert box office and the W. Clarke Pfleeger Hall (a 1,000 seat auditorium). Offices for the dean of the College of Fine & Performing Arts, the Music Department, and the Law and Justice Studies Department are also located in Wilson.

Directions to the University

Glassboro is located in South Jersey, 18 miles southeast of Philadelphia. It can easily be reached from the N.J. Turnpike, the Atlantic City Expressway, or any of the Delaware River bridges.

If you drive from the north or the south, take the N.J. Turnpike to Exit 2 and follow Rt. 322 East, which runs through the campus.

From Philadelphia, take the Walt Whitman or Benjamin Franklin Bridge to 676 South toward Atlantic City. Shortly after 676 becomes Rt. 42 South, exit to the right onto Rt. 55 South. Take Rt. 55 South to the Glassboro-Mullica Hill exit (50A) and exit onto Rt. 322 East, which passes through the campus.

From central N.J., take Rt. 70 West to Rt. 295 South. Follow Rt. 295 to Rt. 42 South (Atlantic City). Exit Rt. 42 South onto Rt. 55 South and follow directions above.

From coastal points, take the Garden State Parkway to the Atlantic City Expressway. Take the Expressway to the Williamstown exit. Turn left after exiting and follow Rt. 322 West to the campus.

From Delaware, take the Delaware Memorial Bridge to the N.J. Turnpike. Take Exit 2 and follow Rt. 322 East to the campus. From Northern Wilmington, you can take the Commodore Barry Bridge which feeds onto Rt. 322 East, which runs through the campus.

Accredited by

Middle States Association of Colleges and Schools*

Accreditation Board for Engineering and Technology

American Chemical Society

Association to Advance Collegiate Schools of Business

Commission on Accreditation of Allied Health Education Programs

National Association of School Psychologists

National Association of Schools of Art and Design

National Association of Schools of Music

National Association of Schools of Theatre

National Council for Accreditation of Teacher Education

National League of Nursing

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Notice of currency

Rowan University reserves the right in its sole judgment and for any reason to make changes in its announced policies, requirements and fees and to cancel or modify any program or course at any time without prior notice.

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It is the policy of Rowan University not to discriminate on the basis of sex, sexual orientation, handicap, race, color, religion or national or ethnic origin in its educational programs, admissions policies, employment practices, financial aid or other University-administered programs.

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