

Graduate School– Camden Catalog 2004--2006

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Important Notice

Please note that only the printed version of this catalog is the official document of Rutgers, The State University of New Jersey. While Rutgers offers its catalogs on the Internet as a convenience, the university's online catalogs are unofficial, as is academic information offered at other Rutgers web sites.

The university reserves the right for any reason to cancel or modify any course or program listed herein. In addition, individual course offerings and programs may vary from year to year as circumstances dictate.

Academic Calendars

Dates are subject to change.

2004–2005

September

1 Wednesday Fall term begins.
6 Monday Labor Day—No classes.

November

24 Wednesday No classes.
25 Thursday Thanksgiving recess begins.
28 Sunday Thanksgiving recess ends.

December

13 Monday Regular classes end.
14 Tuesday Reading period.
15 Wednesday Reading period.
16 Thursday Fall exams begin.
23 Thursday Fall exams end.
24 Friday Winter recess begins.

January

17 Monday Winter recess ends.
18 Tuesday Spring term begins.

March

13 Sunday Spring recess begins.
20 Sunday Spring recess ends.

May

2 Monday Regular classes end.
3 Tuesday Reading period.
4 Wednesday Reading period.
5 Thursday Spring exams begin.
11 Wednesday Spring exams end.
19 Thursday University commencement.

2005–2006 *

August

31 Wednesday Fall term begins.

September

5 Monday Labor Day—No classes.

November

23 Wednesday No classes.
24 Thursday Thanksgiving recess begins.
27 Sunday Thanksgiving recess ends.

December

12 Monday Regular classes end.
13 Tuesday Reading period.
14 Wednesday Reading period.
15 Thursday Fall exams begin.
22 Thursday Fall exams end.
23 Friday Winter recess begins.

January

16 Monday Winter recess ends.
17 Tuesday Spring term begins.

March

11 Saturday Spring recess begins.
19 Sunday Spring recess ends.

May

1 Monday Regular classes end.
2 Tuesday Reading period.
3 Wednesday Reading period.
4 Thursday Spring exams begin.
10 Wednesday Spring exams end.
18 Thursday University commencement

* Tentative Schedule – subject to change

About the University

Rutgers, The State University of New Jersey, with more than 50,000 students on campuses in Camden, Newark, and New Brunswick, is one of the nation's major state university systems. The university comprises 29 degree-granting divisions: 12 undergraduate colleges, 11 graduate schools, and 6 schools offering both undergraduate and graduate degrees. Five are located in Camden, 8 in Newark, and 16 in New Brunswick.

Rutgers has a unique history as a colonial college, a land-grant institution, and a state university. Chartered in 1766 as Queen's College, it was the eighth institution of higher learning to be founded in the colonies. The school opened its doors in New Brunswick in 1771 with one instructor, one sophomore, and a handful of first-year students. During this early period, the college developed as a classical liberal arts institution. In 1825, the name of the college was changed to Rutgers to honor a former trustee and Revolutionary War veteran, Colonel Henry Rutgers.

Rutgers College became the land-grant college of New Jersey in 1864, resulting in the establishment of the Rutgers Scientific School with departments of agriculture, engineering, and chemistry. Further expansion in the sciences came with the founding of the New Jersey Agricultural Experiment Station in 1880, the College of Engineering in 1914 (now the School of Engineering), and the College of Agriculture (now Cook College) in 1921. The precursors to several other Rutgers divisions also date from this period: the College of Pharmacy in 1892 (now the Ernest Mario School of Pharmacy), the New Jersey College for Women (now Douglass College) in 1918, and the School of Education (now a graduate school) in 1924.

Rutgers College became a university in 1924. The legislature passed laws in 1945 and 1956 designating all divisions of Rutgers as the state university of New Jersey. During these years, the university expanded dramatically. An evening division, University College, opened in 1934. The University of Newark joined the system in 1946, and the College of South Jersey at Camden was added in 1950.

Since the 1950s, Rutgers has continued to expand, especially in graduate education. The Graduate School–New Brunswick, the Graduate School–Newark, and the

Graduate School–Camden serve their respective campuses. In addition, the university has established professional schools in applied and professional psychology; communication, information, and library studies; criminal justice; the fine arts; management; and social work. Several of these schools offer undergraduate programs as well. In 1969, the university founded Livingston College to provide undergraduate degrees to a diverse community of students.

Today, Rutgers continues to grow, both in its facilities and in the variety and depth of its educational and research programs. The university's goals for the future include the continued provision of the highest quality undergraduate and graduate education along with increased support for outstanding research to meet the needs of society and to fulfill Rutgers' role as the state university of New Jersey.

Institutional and Specialized Accreditation

Rutgers, The State University of New Jersey, is accredited by the Commission on Higher Education of the Middle States Association of Colleges and Schools (<http://www.msache.org/>), 3624 Market Street, Philadelphia, PA 19104-2680 (215/662-5606). The Commission on Higher Education of the Middle States Association of Colleges and Schools is an institutional accrediting agency recognized by the U.S. secretary of education and the Council for Higher Education Accreditation. That accreditation was renewed and endorsed in 1998. Documents describing the institution's accreditation may be downloaded from the university's web site at <http://oirap.rutgers.edu/reports/MSA/index.html>. They may be reviewed during regular office hours by contacting the Office of Institutional Research and Academic Planning, Rutgers, The State University of New Jersey, 85 Somerset Street, New Brunswick, NJ 08901-1281 (732/932-7956).

Certain undergraduate programs on the Camden, Newark, and New Brunswick campuses of Rutgers are subject to specialized accreditation. For further information about specialized accreditation, including the names of associations that accredit university programs, contact the Office of Institutional Research and Academic Planning.

Licensure

Rutgers, The State University of New Jersey, is licensed by the New Jersey Commission on Higher Education. For more information, contact its Office of Academic Affairs at 609/292-2955.

Graduate Study at the University

The Graduate School–Camden offers master's degree programs in biology, chemistry, criminal justice, English, history, liberal studies, mathematical sciences, physical therapy, and public policy and administration. The School of Business–Camden offers the master of business administration degree. In addition, the School of Social Work in New Brunswick offers the master of social work degree in Camden, and the Graduate School–Newark offers the master of science degree in nursing in Camden.

Further information about the specific areas of specialization in which degree programs are available may be found under the general subject headings in the Programs, Faculty, and Courses chapter.

GRADUATE SCHOOL–CAMDEN

Margaret Marsh, *Dean* (856/225-6097)

Marie Cornelia, *Associate Dean* (856/225-6149)

Nancy Rosoff, *Assistant Dean* (856/225-6486)

Elizabeth A. Skyta, *Administrative Assistant* (856/225-6149)

Web Site: <http://www.camden.rutgers.edu/Academics/grad/>

Biology

Degree Programs Offered: master of science

Director: Joseph Martin (856/225-6165)

Opportunities are available for the development of a concentration in cell and molecular biology, ecology, neuroscience, or physiology.

Chemistry

Degree Program Offered: master of science

Director: Paul Maslen (856/225-6282,
maslen@camden.rutgers.edu)

Opportunities are offered in the areas of environmental, organic, inorganic, and theoretical physical chemistry.

Criminal Justice

Degree Program Offered: master of arts

Director: Drew Humphries (856/225-6073)

This is a multidisciplinary program encompassing the areas of criminal justice, public administration, law, history, and liberal studies.

English

Degree Program Offered: master of arts

Director: Tyler Hoffman (856/225-6557)

Offerings include English and American literature, communications, rhetoric, linguistics, and creative writing.

History

Degree Program Offered: master of arts

Director: Philip Scranton (856/225-6080)

Concentrations are available in American history, American legal history, and public history.

Liberal Studies

Degree Program Offered: master of arts

Director: Robert Ryan (856/225-6700)

Offerings include a wide range of interdisciplinary courses in the humanities.

Mathematical Sciences

Degree Program Offered: master of science

Director: Mahesh Nerurkar (856/225-6132)

Concentrations are available in pure and applied mathematics or mathematical computer science.

Physical Therapy

Degree Program Offered: master of physical therapy

Director: Marie Koval Nardone (856/566-6456)

The program is designed to educate students for practice as physical therapy generalists.

Public Policy and Administration

Degree Program Offered: master of public administration

Director: Michael Lang (856/225-6359)

A general program in public policy is offered. Additionally, concentrations may be completed in public management, international development policy, and health care management and policy.

SCHOOL OF BUSINESS–CAMDEN

Business Administration

Degree Program Offered: master of business administration

Director: Izzet Kenis (856/225-6711)

Web Site: <http://camden-sbc.rutgers.edu>

The program offers a broad professional education for management.

SCHOOL OF SOCIAL WORK

Direct Practice, Administration

Degree Program Offered: master of social work

Director of Graduate Studies at Camden:

Raymond Sanchez Mayers (856/225-6346)

GRADUATE SCHOOL–NEWARK

Adult Nursing

Degree Program Offered: master of science

Coordinator in Camden: Marie O'Toole (856/225-6526)

OTHER GRADUATE STUDY AT THE UNIVERSITY

In addition to the degree programs offered by the Graduate School–Camden, the following divisions of the university offer a variety of postbaccalaureate programs. In Camden, there are the School of Law–Camden and the School of Business–Camden. In Newark, there are the Graduate School–Newark, the Rutgers Business School: Graduate Programs–Newark and New Brunswick, the School of Criminal Justice, and the School of Law–Newark. In New Brunswick, there are the Graduate School–New Brunswick, the Graduate School of Applied and Professional Psychology, the Graduate School of Education, the Ernest Mario School of Pharmacy, the School of Communication, Information and Library Studies, the School of Social Work, the Mason Gross School of the Arts, the Edward J. Bloustein School of Planning and Public Policy, and the School of Management and Labor Relations. The Rutgers Business School: Graduate Programs–Newark and New Brunswick offers an M.B.A. program in New Brunswick as well as in Newark. Most of the above divisions publish individual catalogs that are available upon request.

Admission

Deborah E. Bowles, *Ed.D., Director*
Alecia Caldwell, *M.A., Assistant to the Director*

Office of Graduate and Undergraduate Admissions
406 Penn Street
Camden, NJ 08102-1400
(856/225-6056)

All inquiries regarding programs may be directed to the Office of Graduate and Undergraduate Admissions.

Admission to graduate programs at Camden is open to individuals who have graduated from recognized institutions of higher education and show evidence of potential for the successful completion of a graduate program. Admission decisions are informed judgments based upon test scores, experience, achievements, recommendations, and other data relevant to a particular applicant.

Applications are reviewed by the faculty of the program to which the applicant applies. Admission requirements vary among the programs offered, so applicants should carefully review the information and instructions provided in the application form available from the Office of Graduate and Undergraduate Admissions. The number of students that can be accommodated in some programs is very limited. For this reason, it is not possible to admit all students who meet or exceed the minimum requirements.

Applications should be sent to the Office of Graduate and Undergraduate Admissions as early as possible. Applicants to the social work program in Camden must send the completed application and all supporting credentials to the Office of Graduate and Professional Admissions, Rutgers, The State University of New Jersey, 18 Bishop Place, New Brunswick, NJ 08901-8530. Refer to the application information for correct program names, program codes, degrees offered, application deadlines, and test requirements.

APPLICATION REQUIREMENTS

Applications may be obtained and submitted online at <http://gradstudy.rutgers.edu>. Application materials may also be obtained from the Office of Graduate and Undergraduate Admissions, Rutgers, The State University of New Jersey, 406 Penn Street, Camden, NJ 08102-1400.

Applicants are required to submit a nonrefundable application fee of \$50, payable by credit card, check, or money order, to Rutgers, The State University of New Jersey.

Completed application forms and all supporting credentials must be returned in one envelope to the Office of Graduate and Undergraduate Admissions and must include:

1. Standardized test scores or the date(s) of examination, if required. Programs may require that test scores more than three years old be validated, either by evidence of continued work in the field or by reexamination.
2. One set of official transcripts, in sealed envelopes, from each undergraduate and graduate institution attended.
3. Three letters of recommendation in sealed envelopes.
4. A personal statement.

5. A brief résumé, if work experience is relevant to the application.

The university does not assume responsibility for informing applicants of the completeness of their applications. Please allow at least four weeks after sending your application before calling or writing the Office of Graduate and Undergraduate Admissions to inquire about the status of an application.

Applicants are responsible for complying with other policies and procedures as stated on the application forms.

NONDEGREE/NONMATRICULATED STUDENTS

All graduate programs, except physical therapy, permit a limited number of nondegree (nonmatriculated) students to enroll in courses each term. Eligibility for nondegree graduate study requires an earned baccalaureate degree. A maximum of 12 credits taken as a nondegree student may be applied toward degree requirements.

Applications for nondegree admission are available online at <http://gradstudy.rutgers.edu>, or from the Office of Graduate and Undergraduate Admissions.

Questions regarding enrollment of nondegree students in social work courses should be directed to the School of Social Work (856/225-6346). Questions concerning enrollment of nondegree students for all other programs should be directed to the Office of Graduate and Undergraduate Admissions.

Applicants who are accepted as nondegree students are permitted to register for the particular course(s) approved by the appropriate graduate program director. Nonmatriculated enrollment in any graduate course neither predisposes nor guarantees subsequent formal admission.

ADMISSION SCHEDULE

Deadlines

Application deadlines vary by program and are listed in current admission materials. The deadline for consideration for assistantships and fellowships is March 1. The physical therapy program has an early decision deadline of December 15. Programs reserve the right to close admission prior to stated deadlines or to extend them beyond stated deadlines.

International students applying from abroad must submit application materials by November 1 for a spring term admission and April 1 for a fall term admission, unless the individual program deadline is earlier.

Nondegree students are welcome to apply at any time before the beginning of classes and are accepted on a space-available basis.

International Applicants

International applicants are required to take the Test of English as a Foreign Language (TOEFL) if English is not their native language. For further test information, write to TOEFL, Educational Testing Service, P.O. Box 6151, Princeton, NJ 08541, U.S.A. Satisfactory English proficiency is a prerequisite for graduate study at the university. A minimum TOEFL score of 550 (paper score) or 213 (computer score) is expected for admission into most programs. Nonimmigrant students must present evidence of adequate financial resources. The university may deny admission to nonimmigrant students who lack adequate English proficiency or financial resources.

READMISSION

Readmission of former students is processed through the Office of the Dean of the Graduate School–Camden and is required of all students who

1. have officially withdrawn from school
2. have not received a degree in the program for which they were enrolled
3. have not maintained a continuous registration through either course work or “Matriculation Continued” status

The following deadlines for readmission apply:

Fall term	August 1
Spring term	December 1
Summer session	May 1

Tuition and Fees

FEE SCHEDULE

2002–2003 Academic Year

Note: The university reserves the right to alter the amounts indicated on the following schedule at any time before the first day of classes of a term.

Application Fee, nonrefundable \$ 50.00

Tuition *

Full-time New Jersey resident, per term	4,476.00
Full-time non-New Jersey resident, per term	6,562.20
Part-time New Jersey resident, per credit	373.00
Part-time non-New Jersey resident, per credit	546.85

M.B.A. Tuition *

Full-time New Jersey resident, per term	6,204.00
Full-time non-New Jersey resident, per term	9,250.00
Part-time New Jersey resident, per credit	513.50
Part-time non-New Jersey resident, per credit	767.50

Student Fee, per term

Full time (9 or more credits)	524.50
Part time (8 or fewer credits)	225.50
M.B.A. Full time (12 or more credits)	580.00
M.B.A. Part time (11 or fewer credits)	281.00

Student Housing Rates †

Private apartment (9 months)	5,576.00
Shared apartment (9 months)	5,110.00
Private apartment (12 months)	6,576.00
Shared apartment (12 months)	6,036.00

Miscellaneous Fees

Basic health insurance program (optional), per term (part-time students only)	106.50
Major medical insurance plan (optional), per year	197.50
Computer fee	
Full time	100.00
Part time	40.00–76.00
M.B.A.	40.00–94.00
Late payment fee	125.00
Partial payment fee	25.00
Returned check fee	10.00
Late fee for returned checks	50.00

Note: All breakage and damage to university property is charged for in full. The university is not responsible for loss by fire or theft of private property in its buildings.

* For information on New Jersey residency status, see Student Residency for Tuition Purposes in the Academic Policies and Procedures chapter.

† Rate is for the 2003–2004 academic year.

TERM BILLS

Instructions for registration and payment of term bills are sent by mail to all students for the first and second terms with due dates indicated. Students who do not receive a term bill by July 20 for the fall term and by December 5 for the spring term should contact the bursar's office promptly.

It is the student's responsibility to obtain, complete, and return the term bill on time, even if the bill shows a zero balance. Students who fail to do so are charged a late payment fee of \$125. Students enrolled for 6 or more credits who are unable to pay their term bills in full by the stipulated time may pay their bill according to the partial payment plan outlined below.

Payment of the term bill may be made in person, by mail, or online. Checks may be made payable to Rutgers, The State University of New Jersey. The following credit cards are accepted by fax or mail: Visa, MasterCard, and Discover. Credit card payments must include signature, expiration date, and amount. Do not send cash through the mail.

Returned Checks

A service charge of \$10 is assessed if any check presented is returned to the university as uncollectible. If collectible payment is not made before late payment deadlines, the applicable late payment fees also are charged. A late fee for returned checks of \$50 is also assessed.

PARTIAL PAYMENT PLAN

Students enrolled in 6 or more credits who are unable to pay their term bill in full may arrange with the local cashier's office to pay their bill, if it indicates a net balance due of \$200 or more, in three installments under the partial payment plan, as follows:

1. First payment: 50 percent of the net balance due on or before the date indicated on the term bill.
2. Second payment: 25 percent of the net balance due on or before September 15 for the fall term and on or before February 5 for the spring term along with a \$25 non-refundable partial payment fee.
3. Third payment: Net balance due on or before October 15 for the fall term and on or before March 4 for the spring term.

Any student submitting a term bill after classes have begun for the term must make payment according to the following schedule:

1. First payment: 75 percent of net balance due on or before the date indicated on the term bill.
2. Second payment: Net balance due on or before October 15 for fall term and on or before March 4 for spring term along with a \$25 nonrefundable partial payment fee.

The nonrefundable fee for this partial payment plan is \$25 per term and must be included with the second payment. Any subsequent installment not paid on time incurs an initial late fee of \$25. The university reserves the right to increase the partial payment plan fees and late fees at any time prior to the beginning of a term.

REGISTRATION

Activation of Registration

A student's registration is activated through the submission to the bursar's office of a term bill, accompanied either by payment or by an appropriate award of financial aid. All term bills, including those with a zero balance, must be returned to the university in order to finalize registration. Activation of registration does not take place if there are "holds" placed on a student's records because of failure to meet outstanding obligations of a financial, academic, disciplinary, or administrative nature.

Termination of Registration

The university exercises the right to terminate the registration of any student who has an outstanding financial obligation to the university after sufficient notice has been given to the student. A student whose registration is terminated at any time during the refund period because of nonpayment of amounts owed the university must contact the student accounting office for a revised bill. The university reserves the right to "hold" transcripts and diplomas as a result of nonpayment of obligations and to forward delinquent accounts to collection agencies and to levy collection fees. "Holds" are removed upon satisfaction of the outstanding obligation.

Cancellation of Registration

To cancel registration and obtain a full reduction of tuition and fees, the registrar must receive written notification from the student prior to the first day of the term. A student whose registration is canceled by the registrar will receive a full reduction of tuition and fees, and prorated charges for room and board, if applicable. Notification of cancellation received on or after the first day of the term is treated, for billing purposes, as a withdrawal and a refund will be made based on the general refund policy.

GENERAL REFUND POLICY

A student who voluntarily withdraws from *all courses* during the first six weeks of a term receives a partial reduction of tuition (and charges for room and board, if applicable) according to the week of withdrawal as follows:

first and second week:	80%
third and fourth week:	60%
fifth and sixth week:	40%

No reduction of tuition is granted after the sixth week.

The effective date of withdrawal is the date on which a written statement of withdrawal is received by the registrar. Student fees are not refundable.

No reductions are granted after the first week of the term to students who withdraw from one or more courses, but remain registered in others. No adjustment from full-time to part-time status is made after the first week of the term. If withdrawal from one or more courses amounts to complete withdrawal from a program, the provision for full withdrawal applies.

Failure to attend class is not equivalent to a withdrawal, and a student will not receive an adjustment of charges unless a formal withdrawal is filed with and approved by the registrar, regardless of whether the student actually attended classes or took examinations.

Refund Policies for Title IV Funds Recipients

There are two additional refund schedules that differ from the General Refund Policy schedule for Title IV funds recipients. First-time Title IV funds recipients who withdraw completely from Rutgers are provided with a separate schedule under the Pro-Rata Refund Policy. Title IV funds recipients who are not first-time attendees are provided a schedule of refunds via the Appendix A Refund Policy.

The refund policy for Title IV recipients should be reviewed by the Director of Financial Aid in the Office of Financial Aid.

For more information, please contact the financial aid office.

Financial Aid

Richard L. Woodland, M.A., Director

Office of Financial Aid
311 North Fifth Street
Camden, NJ 08102
(856/225-6039)

The staff in the Office of Financial Aid at Rutgers, The State University of New Jersey, is concerned with helping students meet their educational expenses. The impact of educational expenses upon the student and his or her family is significant, although the tuition at Rutgers covers only a portion of the actual cost of instruction for each student. In order to allow students with limited financial resources to attend college, every effort is made to assist these students in finding alternatives in financing their education.

The majority of graduate students at the university, like most graduate students in America, receive some form of financial aid. The amount of support each student receives depends in part upon the availability of funds. The availability of support is often dependent upon the specific graduate program and degree status. Support ranges from grants covering tuition charges to awards sufficient to pay all educational and living expenses. The sources of support include university funds, federal and state government funds, corporate and individual bequests to the university, and grants from educational and scientific foundations.

Limited funds are available from scholarships, fellowships, assistantships, grants, low-interest loans, and part-time employment to students at the school. Application for such aid is made by completing the Free Application for Federal Student Aid (FAFSA). These forms are available from most college and university financial aid offices, or from the Rutgers Office of Financial Aid. Applicants are considered for all forms of aid for which they are eligible. Applicants who file by March 15 can expect a reply by June 1. Applications received after March 15 are considered for remaining funds.

Counseling is available by appointment to all students whether or not they qualify for financial aid. All students are strongly encouraged to file an application for financial aid.

COSTS

To help students prepare for meeting educational expenses, the financial aid budget figures for the 2002-2003 academic year are shown here:

	Commuter (w/Parents)	Resident (On Campus)	Student Living Off Campus
Tuition/fees	\$ 9,219	\$ 9,219	\$ 9,219
Books/supplies	1,125	1,125	1,125
Room/board	2,145	8,275	9,107
Travel/other	3,161	1,881	3,149
Total for New Jersey residents	\$15,650	\$20,500	\$22,600
Total for non-New Jersey residents	\$19,600	\$24,450	\$26,550

HOW TO APPLY

All applicants must complete the Free Application for Federal Student Aid (FAFSA) and return it in the envelope provided. Mail the completed form as soon as possible after January 1. The Rutgers priority filing date is March 15. Applications received by the priority filing date are considered for all available sources of aid.

Letters announcing financial aid decisions are mailed to all students as soon as possible after admission. Funds are limited and awards are made on a first-come, first-served basis. Therefore, there is a definite advantage to submitting an early, accurate, and complete application.

Applications for fellowships and assistantships are due on or before March 15, although awards are occasionally available at later dates. Students interested in assistantships should contact either the graduate admissions office or the specific department in which they intend to enroll. Please keep in mind that applications for assistantships and fellowships are competitive and the number of requests exceeds availability.

Part-Time Students

The federal student financial aid sources require that a student enroll in a minimum of 6 credits per term to be eligible.

The state of New Jersey does not provide funds for assisting part-time students. The university has extremely limited financial aid funds for part-time students. All application procedures and deadlines applicable to full-time students apply to part-time students.

SOURCES OF FINANCIAL AID

Fellowships, Scholarships, and Grants

Alumni Association Fellowship. Each year the dean selects one student from among students recommended by graduate program directors as the recipient of a fellowship funded by the Rutgers-Camden Alumni Association in the amount of \$1,000.

Ralph Johnson Bunche Distinguished Graduate Award. Established in 1979, this award is named after Ralph Johnson Bunche, the black American statesman, Nobel Peace laureate, and recipient of an honorary Doctor of Laws from Rutgers in 1949.

Bunche fellowships provide \$12,000 per academic year, plus tuition remission, to exceptional full-time students with backgrounds of substantial educational or cultural disadvantage. To apply, check the appropriate box on the graduate and professional school application form. Only those applicants receiving awards are notified. The award is contingent upon acceptance into a graduate and professional school program and upon full-time enrollment. The application deadline for fall term awards is March 1, unless the program to which the student is applying has an earlier deadline.

Camden Graduate Scholarships. Each year the Graduate School-Camden awards approximately \$12,000 in the form of remission of tuition and fees. This money is divided among four or more students and is awarded on the basis of academic merit. No application is necessary. Selection is made by the dean on the basis of recommendations by program directors. Continuation of this program is dependent on continued state funding.

Hazel Vera Dean Fellowship. Awarded annually to graduate students on the basis of both academic merit and financial need. To qualify for consideration, a student must submit a current FAFSA application. No other application is necessary. The recipient is named by the dean from among candidates submitted by program directors.

Educational Opportunity Fund (EOF). New Jersey residents who are full-time students and who can demonstrate backgrounds of financial and academic hardship are eligible for EOF grants ranging from \$200 to \$2,650. Students who received EOF grants as undergraduates are presumed eligible if they fall below the maximum income parameters required for all recipients of this state grant. Graduate students who did not receive EOF grants as undergraduates, but feel that they come from backgrounds of financial hardship and wish to be considered, may write to the financial aid office for consideration. The grants are renewable for the duration of the student's degree work, subject to continued student eligibility and provided satisfactory academic progress is made. Students must complete the FAFSA form.

New Jersey State Grant. Full-time graduate students who are classified as New Jersey residents for tuition purposes and who demonstrate financial need are eligible to receive a New Jersey State Grant. Amounts vary from \$200 to \$1,000 per year and are dependent upon available funds. Grants are renewable. Application is made by submitting a FAFSA. EOF grant recipients are not eligible.

Nonuniversity Fellowships. Some graduate students at the university are supported by fellowships funded by sources outside the university. A major source of funding is the National Science Foundation, which offers talented graduate students in the sciences significant funding to pursue their academic program. Special awards are given to minority students who traditionally have been underrepresented in the sciences. Information and applications are available from the Fellowship Office, National Research Council, 2101 Constitution Avenue NW, Washington, DC 20418. Students may wish to consult standard reference materials for other sources of nonuniversity fellowships.

Other Nonuniversity Awards. Qualified graduate students may receive financial aid from many national, state, and regional associations as well.

Each department continually seeks funds from outside agencies to help defray student expenses. Grants and awards of this nature vary each year. Inquiries regarding the availability of such monies may be made through graduate program offices and advisers.

Students are urged to contact clubs; fraternal, religious, and national professional organizations; and local interest groups for possible aid through stipends and tuition credits. A student who receives any of these awards is required to notify the Office of Financial Aid.

Loans

William D. Ford Federal Direct Student Loans

Federal Direct Student Loans (Direct Loans) are available for students directly from the federal government to pay for educational costs. To be considered for a Direct Loan, students must complete the FAFSA. Subsequently, the award letter issued by Rutgers will list eligibility for the program. Money for which students are eligible will be credited directly to their accounts. Because Rutgers has chosen to participate in Direct Lending, *the university cannot*

accept any Federal Stafford applications from students or their lenders. Since the U.S. Department of Education is the lender for the Federal Direct Loan Program, borrowers will send all loan repayments to the department, rather than to several lenders.

In general, to be eligible for a Direct Loan, a student must have a high school diploma or a General Education Development (GED) certificate or meet other standards approved by the U.S. Department of Education, be a U.S. citizen or an eligible noncitizen, be enrolled at least half time per term, be making satisfactory academic progress, have a social security number, sign a statement of educational purpose, not be in default on prior loans or owe refunds to a federal grant program, and register with the U.S. Selective Service Administration (males only).

In addition to these requirements, all first-time Federal Direct Loan borrowers must attend an entrance interview in order to be informed of their rights and responsibilities regarding the loan.

Federal Direct Subsidized Loan. This loan is based on financial need. The government pays the interest on the loan while the student is attending school. The interest rate is variable; that is, it is adjusted each year. Effective July 1, 1998, the maximum rate for the Federal Direct Loan was 8.25 percent. Additionally, borrowers are charged an origination fee of 3 percent. The amount students are permitted to borrow is based on their grade level and dependency status as defined by the federal government.

Federal Direct Unsubsidized Loan. This loan *is not* based on financial need, and all interest charges must be paid by the student. The interest rate is the same as the Federal Direct Loan.

Federal Perkins Loan (formerly National Direct Student Loan-NDSL). Federal Perkins Loans are available to students who are enrolled in a minimum of 6 credits per term, who are citizens or permanent residents of the United States, and who demonstrate need through the FAFSA. The maximum amount a graduate student can borrow under this program at Rutgers is \$2,000 per academic year, with maximum aggregate loan amount not to exceed \$30,000 (including undergraduate NDSL and Perkins loan totals).

Interest at the rate of 5 percent simple begins nine months after the borrower ceases to enroll in a minimum of 6 credits per term and extends over a maximum repayment period of 10 years. Monthly payments of at least \$40 are required. Deferral of repayment is permitted for certain kinds of federal service, and cancellation of loans is permitted for certain public services.

Consistent with federal regulations, all first-time Federal Perkins Loan borrowers at Rutgers are required to attend an entrance interview in order to be informed of their rights and responsibilities regarding the loan. In addition, Federal Perkins Loan recipients must attend an exit interview prior to graduation or withdrawal from school. Further details and procedures regarding the repayment of the Federal Perkins Loan are sent to each student recipient by Rutgers, The State University of New Jersey, Office of Student Loans, Division of Accounting, 65 Davidson Road, Piscataway, NJ 08854-8094.

Emergency Loans. Students who are experiencing an unusual financial emergency may apply for a university loan of up to \$500. Students need not be recipients of financial aid or have filed a FAFSA to be considered. The interest rate is 3 percent, and the loan must be repaid

within the same term (possibility of extension up to six months). An emergency need must be demonstrated and funds must be available.

Students should contact their local financial aid office for additional information. If loans in excess of this amount are required, an appointment with a counselor is recommended.

NJCLASS Loans. This program was initiated by the state of New Jersey in 1991. This program makes loans available to parents or other relatives of dependent students and independent students. Since this is a nonfederal loan program, applicants undergo a credit check. Some borrowers may need to have a cosigner. The program offers loans up to the cost of education. The interest rate for these loans varies according to the bond issue terms under which you borrow. Families must file the FAFSA before being considered for this program.

Employment

Assistantships Awarded by the University. The beginning salary for teaching and graduate assistantships is \$14,300 (2003–2004) for an academic year. Special graduate school fellowships, available only in certain programs, provide \$12,000 per year plus tuition for up to four years.

Applications for assistantships are due on or before March 1, although awards are occasionally available at later dates. Prospective graduate students may apply for assistantships when they are sent an application form for admission. Applicants who complete the appropriate section of the form when they apply for admission are considered for those financial awards granted by the university for which they may be eligible. The letters of recommendation required for admission usually serve also as letters of recommendation for assistantships. If a separate application is required for a newly established program, such notice will be included with the admissions packet. A graduate student already enrolled at the university who wishes to apply for an assistantship may inquire at the office of the director of the graduate program in which the student is enrolled.

Federal Work-Study Program (FWSP). Federal work-study employment may be offered as a self-help portion of the financial aid award. Application for this program is made by filing the FAFSA. On-campus jobs are available in many areas. Selection for a particular job is based on skills, job availability, university needs, and student preference. The assigned employment opportunity is based on an expectation that the student will work between 6 and 20 hours weekly throughout the fall and spring academic terms; in the case of summer assignments, the expectation is that the student will work between 15 and 35 hours per week. Once a job is assigned, it is anticipated that the student will continue in that position throughout the entire academic year. Off-campus employment usually is limited to returning students. No assurance can be given regarding the duration or quality of off-campus employment since it is beyond control of the university. No job assignments are made until all paperwork required to accept the aid is completed.

Sources of Aid for Veterans

The United States Veterans Administration operates various education assistance programs for eligible veterans, war orphans, surviving spouse or child of any veteran killed while on duty with the Armed Forces, disabled veterans, dependents of a veteran with service-related total disability, and certain members of the selected reserve. Inquiries concerning eligibility may be directed to the Veterans Administration office in Newark, New Jersey (800/827-1000), or to the veterans coordinator on each campus.

Veterans and others mentioned above who plan to utilize veterans' education benefits should initially present the Veterans Administration Certificate of Eligibility Form(s) and/or discharge papers (certified copy of the DD214) when registering for courses. If applying for other financial aid with the university, veterans must report the fact that they will receive veterans' education benefits to the Office of Financial Aid.

Veterans planning to train under Chapter 32 VEAP, Chapter 30 of the New (Montgomery) GI Bill of 1984, or Chapter 1606 for Reservists are required by the university to pay cash for tuition, fees, books, and supplies, when due. Veterans, in turn, receive an allowance for each month of schooling based upon credits and the number of dependents.

No veteran may officially withdraw from a course (or courses) without prior approval from the academic services and/or dean of students offices. All withdrawals must be submitted in writing. The date of official withdrawal will be the determining date for changes in benefits. Failure to comply with the official school withdrawal procedure may affect both past and future benefits. Any change in schedule also must be reported to the campus Office of Veterans Affairs.

RESTRICTIONS ON FINANCIAL AID AND EMPLOYMENT

Graduate students ordinarily may not simultaneously accept two different financial awards from the university. Students who have applied for and been offered two different awards should inquire at the dean's office of the school of matriculation before acceptance. Students who hold fellowships, assistantships, internships, or Russell Scholarships may not accept employment outside of their academic department without the permission of the dean of the school of matriculation.

Graduate students who have received aid administered by the Office of Financial Aid must report to that office any change in income, such as scholarships, loans, gifts, assistantships, or other employment received subsequent to the original aid award.

Student Life

OFFICE FOR STUDENT AFFAIRS

Mary Beth Daisey, M.Ed., Associate Provost for Student Affairs/Dean of Students

Cynthia B. Riggs, M.A., Associate Dean of Students

Mary A. Falls, Administrative Assistant

The Office for Student Affairs, located on the second floor of Armitage Hall, provides an array of services and programs that complements the academic experience and provides the support essential to student achievement and career goals. The Office for Student Affairs comprises several units, which include Student Development, Career Center, Housing and Residence Life, Campus Center, Bookstore, Dining Services, Conference Services, Student Activities, and Athletics.

Student Development

Barbara Detterline, M.A., Assistant Dean

Miguel Greenup, M.A., Assistant Dean/Coordinator of Hispanic Affairs

Nancy V. Gulick, M.A., Assistant Dean

Jonathan Muse, M.A., Assistant Dean

Donna Parker, M.S.W., Assistant Dean

Danyelle Thurman, M.S.W., Assistant Dean

Evelyn Crawford, Principal Secretary

Shirley Blessing, Secretary

Career Center

James A. Marino, M.A., Director of Career Center

Cheryl A. Hallman, M.S., Assistant Director, NBCC

Carol C. Young, B.S., Employer Relations

Barbara Thompson, Administrative Assistant

Kathryn T. McLaney, Secretary

Housing and Residence Life

Allison Emery, M.A., Assistant Dean

Campus Center

Thomas J. DiValerio, M.A., Associate Dean and Director of Campus Center

Allison A. Emery, M.A., Assistant Dean

Rawle Hines, B.A., Building Supervisor

Lori Mariano, Administrative Assistant

Facilities Use

Karen Caracino, Campus Facilities Coordinator

Dining Services/Starbucks

Irene Ulrich, B.A., Director of Dining Services

Irini Hatzinakis, Assistant Director

Ron Voughs, B.S., Chef/Manager

Alicia Jacobs, Manager, Starbucks

Athletics

Jeffrey Dean, M.E.A., Athletic Director

Mike Ballard, Sports Information Director

Thomas Nixon, M.A., Academic Adviser

Diana M. Compo, Administrative Assistant

Thomas E. Maxwell, M.A., Athletics Trainer

Gregory White, B.A., Strength and Conditioning Coach

Bookstore

Mary Alice Diehl, B.A., Manager, Follett Bookstore

STUDENT DEVELOPMENT

The academic and social integration of all students into the campus community is the primary goal of Student Development, a division of the Office for Student Affairs. Its goal is achieved through a one-stop, multifunctional office that includes advising, new graduate student orientation, personal and social counseling, student advocacy, services for students with disabilities, and services for international students. As part of this office, Hispanic affairs also works with the various Latino constituencies of the campus to assist students. Among other services, the staff is the liaison for ROTC. Students with questions may call 856/225-6043 at any time. Office hours are 8:30 A.M. to 6:30 P.M., Monday and Tuesday; and 8:30 A.M. to 4:30 P.M., Wednesday through Friday.

CAREER CENTER

The Career Center (CC) office offers a comprehensive career development program. Major emphasis is given to helping students choose and prepare for a career as well as seek employment.

Students may explore career possibilities through individual and group sessions. FOCUS, a computer guidance program, helps explore six personality aspects that are significant to career satisfaction and compares profiles to professional careers.

State-of-the-art technology assists students with résumé writing, interviewing strategies, continuing their education, and establishing future goals. The Career Center's web site, <http://cc.camden.rutgers.edu>, can be utilized to review jobs and internships, participate in on-campus recruiting, or link to the best sites for career development information and opportunities.

The office offers workshops, special programs, and major career events throughout the fall and spring terms.

CC is located in the lower level of the Camden Campus Center. Students are encouraged to make use of the services throughout their graduate and postgraduate careers. The phone number is 856/225-6046.

HOUSING AND RESIDENCE LIFE

The Residence Life program fosters a special community among students who reside on campus. An array of services and programs is provided to meet the needs of this diverse segment of the student population. Educational, social, cultural, and recreational/athletic presentations complement the student's academic pursuits and promote the total development of the individual. Talent shows, international dinners, trips to area museums and theaters, first-aid and CPR certification, and faculty-led programs are just a few offerings.

On-campus living encourages students to confront new ideas, live together cooperatively, and communicate effectively, with the goal of producing positive and lasting effects in the area of living skills. Through a combination of self-government and the application of universitywide standards and guidelines for on-campus living, residents learn to coexist peacefully and productively with others whose backgrounds, interests, and values may differ.

Full-time professional staff, as well as trained peer leaders, act as resource/referral agents, mediate conflicts, offer counseling, and encourage participation in the building of this residential community. Choosing to live on campus is convenient, affordable, and secure, and teaches living/learning skills that last well beyond the college years.

Questions regarding on-campus housing should be directed to the Rutgers-Camden Housing Office, 215 North Third Street, Camden, NJ 08102 (856/225-6471).

CAMDEN CAMPUS CENTER AND DINING SERVICES

Camden Campus Center and Conference Services

The Camden Campus Center is the hub of campus life, providing services, facilities, and programs to meet various social, recreational, and cultural needs of students, faculty, staff, and community members.

The Campus Center includes conference rooms, student health offices, student activities offices, student governing offices, the *Gleaner* (student newspaper), WCCR radio, a computer lab equipped with Macintosh and PC terminals, and Campus Center staff offices. The third level holds an expanded complex for student activities, including cubicle workspaces for 20 campus organizations, a student-only meeting room, and a work area outfitted with computers. Also located on the third level are the offices for the College of Arts and Sciences, School of Business, School of Law, Graduate School-Camden, and the Campus Activities Board.

Dining facilities found in the center include the Food Court, the Courtyard Restaurant, Sandella's Late Night, and Freshens Smoothie Bar. The Campus Center is also home to a Starbucks coffee. The Campus Center and Dining Services provide a number of locations that can be utilized for your catering needs.

Campus Center staff offices are located on the second level; hours of operation are 8:30 A.M. to 5:00 P.M., Monday through Friday. The Campus Center general hours of operation are 7:30 A.M. to 11:00 P.M., Monday through Thursday; 7:30 A.M. to 6:00 P.M., Friday; and 10:00 A.M. to 6:00 P.M., Saturday and Sunday. Summer hours are 8:30 A.M. to 5:00 P.M., Monday through Friday.

All services and activities sponsored by the Campus Center are open to all members of the Rutgers community and their guests. Elevators, ramps, and lifts are available to any person who has special needs. You are encouraged to take advantage of these services and feedback is welcomed. For more information about services and programs, contact ruccc@camden.rutgers.edu.

Dining Services

The Campus Center is home to a variety of dining options. The Food Court consists of seven eateries in one location—the Deli, the Grille, the Garden, the Breakfast Bar, Snacks,

the Main Course, and Jump Asian Cuisine. The Courtyard Restaurant offers table service and a menu featuring hot entrees, salads, sandwiches, and a daily chef's special. Freshens Smoothie Bar offers yogurt and fruit smoothies, soft-serve frozen yogurt, soft pretzels, fresh fruit, and made-to-order salads. Sandella's Late Night Café offers a variety of traditional pizzas, flat bread pizza, wraps, noodle bowls, and rice bowls. The RMart offers a full line of frozen and dry groceries.

Armitage Snacks, located in the lobby of Armitage Hall, offers coffee, soft pretzels, hot dogs, bottled beverages, pastries, and snacks. Deliberations, the law school snack counter, located in the lower level of the law school, offers coffee, sandwiches, soup, and snacks.

Vending machines are located in the Campus Center, lower level of the law school, first floor of the Business and Science Building, the gymnasium, Rutgers Community Park, and the Towers and Camden Apartments. Contact vending@camden.rutgers.edu with questions or concerns about vending machines.

On the Camden campus, students are offered diverse and unique meal plan options. Students are offered the Campus Cash Card, an individualized, cost-effective program allowing a choice of food items, rather than being restricted to a specific menu.

Dining Services provides catering services for any campus event. Contact the Assistant Director for Facilities Use/Conference Services at 856/225-6161 for catering assistance.

For additional information about Dining Services, contact 856/225-6164 or email foodco@camden.rutgers.edu.

CAMPUS INVOLVEMENT

The campus involvement office assists individual students, clubs, and organizations with planning educational, social, and cultural programs. Activities, such as lectures, dances, picnics, concerts, movies, and other special events, are an integral part of campus life.

The campus involvement office, located in the Camden Campus Center, is responsible for the recognition of all student organizations. Call 856/225-6161 for information.

The Graduate Student Association exists for the purpose of self-governance and to represent the voice of the graduate student body. In addition, there are other organizations, such as the Public Administration Student Association (PASA) and the Graduate English Student Organization.

ATHLETICS AND RECREATIONAL SERVICES

Athletics and Recreational Services provides the opportunity for students to participate in a variety of intercollegiate athletic programs as well as recreational, intramural, and club sport activities. The college competes as a member of the NCAA Division III within the New Jersey Athletic Conference (NJAC). Currently, 12 intercollegiate sports, 6 men and 6 women, are offered. The men's sports include baseball, basketball, cross country, golf, soccer, and track and field. The women's sports include basketball, cross country, soccer, softball, track and field, and volleyball. Men's and women's crews, which presently compete as club sports, will be elevated to intercollegiate status in 2004.

The Scarlet Raptors Gymnasium and the Rutgers–Camden Community Park are the focal points for the offerings of recreational services. The gymnasium is equipped with a main and auxiliary gym. It also houses a weight room, four handball/racquet courts, four squash courts, and a six-lane Olympic-sized swimming pool. The Rutgers–Camden Community Park consists of soccer and softball fields constructed with field turf playing surfaces.

Recreational Services programs offer recreational time, intramural activities, noncredit instructional courses, and club sports in the gymnasium and community park. Intramural activities include basketball, flag football, racquetball, soccer, softball, and tennis.

The noncredit instructional courses run for four, six, or eight weeks depending on the subject each term. Course offerings run the gamut from aerobic dance to Zen meditation.

A number of club sports—including cheerleading, dance, karate, ice hockey, and coed softball—are also offered by Recreational Services.

The Office of Athletics and Recreational Services is located in the basement of the gymnasium. Students may contact the office at 856/225-6193, 6194, or 6195 or at the web site <http://www.camden.rutgers.edu> by clicking on “athletics” on the side bar.

BOOKSTORE

The University District Bookstore has everything a student needs for college life including the largest selection of used textbooks, which can save a student 25 percent off the new book cost. The bookstore also features a great selection of officially licensed Rutgers University clothing and gifts.

A variety of other items sold includes academically priced software, food, reference materials, cards, and much more.

The bookstore is accessible online at <http://www.efollett.com> 24 hours a day, seven days a week. Students can reserve, prepay, and have books shipped to them as well as purchase t-shirts, sweatshirts, and other items sold on the web site.

STUDENT ID PHOTOS

Incoming students can have their official student identification card (student ID) taken in the Student ID Center, located at the IMPACT Information Booth in the lobby of the Campus Center. Students must provide one other form of identification in order to obtain a student ID.

All students should have a student ID card. This card is used as a library card and a meal plan card. ID cards for first-time/first-term Rutgers students are issued free of charge. There is a \$15 fee for all other students. Replacement of damaged ID cards costs \$15.

There is no student ID issued for Summer Session. The receipted term bill serves as the Summer Session student ID.

Student Programs and Services

PAUL ROBESON LIBRARY

Gary A. Golden, M.A., M.L.S., Ph.D., *Director*
 Susan J. Beck, M.A., M.L.S., *Associate Professor*
 Vibiana Bowman, M.S.L.S. *Assistant Professor*
 Jean D. Crescenzi, M.A., M.L.S., *Emerita*
 Theodora Haynes, M.A., M.B.A., M.L.S., *Associate Professor*
 John Maxymuk, M.L.S., *Associate Professor*
 James D. Nettleman, M.S., M.L.S., *Associate Professor*
 Julie Still, M.A., M.L.S., *Associate Professor*
 Donna Wertheimer, M.L.S. *Visiting Assistant Professor*
 E. Parker Worley, M.A., M.L.S., *Director Emeritus*

Reference Services 856/225-6033, ext. 14
 Circulation Services 856/225-6033, ext. 17

The Paul Robeson Library contains more than a half-million physical bibliographic items. Subscribing to approximately 700 print periodical and serial titles, the collection includes nearly 220,000 monographs, 210,000 pieces of microform, and 51,000 bound periodicals. Students also have computer access to over 100 online indexes, approximately 12,000 full text journals and newspapers, and almost 100,000 full text monographs published since 1600. These online resources are available anywhere on campus as well as from remote locations via the Internet, utilizing proxy server authentication.

Local physical holdings, which provide primary service for all schools on the campus (except law), are supplemented by the several million volumes contained in the other units of the Rutgers University Libraries System located in New Brunswick and Newark. Access to these collections is available through IRIS (Integrated Rutgers Information System) on terminals located in the Paul Robeson Library as well as through campus network terminals and remote authenticated web browsers. In addition, students have access on the campus to the comparably sized physical collections of the Camden Law Library. Information on holdings of non-Rutgers libraries is provided through RLIN, the computerized bibliographic system of the Research Libraries Group, as well as Internet access to local collections such as Temple University and the University of Pennsylvania. Materials from Rutgers and non-Rutgers libraries can be obtained on loan (books) or by photocopy (articles) through the Rutgers Delivery Service or interlibrary loan service at no cost to the requester. Articles are scanned and delivered to your desktop. The library staff is available to provide assistance to individuals in utilizing this wealth of informational resources. In addition, the reference librarians will meet with classes to provide instruction in general library use or, as part of our bibliographic instruction program, in the literature of a specific discipline or topical area.

The library building provides seating for over 800 students. The building is wired for laptop connections at most desks, has some wireless connectivity throughout the building, and microcomputers and selected software are

available for student use in an on-site lab operated by the computing services department. Facilities are also provided for individual and group study, for the use of microfilm and other microtexts, and for photo duplication of both hard copy and microtext and the conversion of microfilm to disk or CD.

Library hours during the academic year, unless otherwise posted, are:

Monday through Thursday	8:00 A.M. to 10:00 P.M.
Friday	8:00 A.M. to 5:00 P.M.
Saturday	9:00 A.M. to 5:00 P.M.
Sunday	11:00 A.M. to 7:00 P.M.

Hours are normally extended late in each term and during exams, and are abbreviated between terms and during the summer.

COMPUTING SERVICES

David L. Gwalthney, M.S., *Director*
 Stanley Kolasa, M.S., *Associate Director*
 Ann Billbrough, *Manager, Campus Computer Facilities*
 Allen Burns, M.Ed., *Telecommunications Analyst*
 Bill Cornwell, *User Support Services Specialist*
 Jason Gambone, B.A., *Telecommunications Analyst*
 Edward McHugh, M.B.A., *System Programmer/Administrator–Windows/PC*
 Dennis Moffett, B.A., *System Programmer/Administrator–Windows/PC/Mac*
 Debbie Mojta, M.L.S., *Manager of User Services*
 Nancy Rohrman, B.A., *System Programmer/Administrator–Unix*
 Curtis Saal, B.A., *System Programmer/Administrator–Unix*
 James Schmincke, B.A., *System Programmer/Administrator–Unix*
 Mary Sturdivant, *Administrative Assistant*
 Ronald Thornton, *User Support Services Specialist*
 Bob Young, B.A., *System Programmer/Administrator–Windows/PC*

Camden Computing Services provides computing support for instructional programs through the following general services: instructional aid for course assignments; assistance in accessing information stored on microcomputers and servers through flyers, documentation, tutorials, seminars, and student consultation; and electronic communications (email, news, web pages).

Assistance is provided by student consultants in the use of microcomputers, servers, printers, and workstations; network access to Computing Services systems, library systems, and the Internet; microcomputer software access; and interpretation of diagnostics and other common problems. Mobile access is available in two forms on the campus. Firstly, students, faculty, and staff may access the wireless network, in the stack areas of the Robeson Library and in the Campus Center, that is available in the general seating areas of the cafeteria (not including the Octagon Room and Courtyard Restaurant), Starbucks, the couches by the front windows, the lower area by the Raptor Roost/Pizza Shop, a portion of the computer lab, and the large lounge/eating area at the first floor entrance. As access is improved and funding is allocated, wireless access will continue to expand across the campus. Secondly, there is "open data jack" access for the general Rutgers community (faculty, staff, students) to RUNet that may be found

in the Robeson Library, law building, Armitage Hall Lobby, BSB lab room 110, and the Campus Center lab. Active jacks are labeled as active on the outlet plate. A laptop computer with a wireless and/or ethernet card properly installed and configured for access is needed.

Located in the Business and Science Building, Computing Services operates the following equipment: Sun SPARC Ultra Servers for Unix, ADA, C++ programming, email, news, SAS, SPSS, and web service; HP Color Scanjets to input graphics and perform text conversion; Sun workstations; and Windows servers to support the public computer labs. Various microcomputers (Dell and Macintosh) are available for student access and are located in the Business and Science Building (rooms 108-110, 132-133), Campus Center basement (room 017), law school (rooms 102, 309, 408), Robeson Library (at the entrance, a graduate lab on the second floor, and a system in room 116), and the dorms (first floor apartment side). All systems are available to support class assignments made by the faculty and other general instructional applications. Standard output across the campus is on laser printers.

Computing Services maintains the following languages/packages/applications:

Unix: Pascal, Basic, C++, Pico, Sort, Pine, nn, ssh, Java, ADA, SAS, SPSSX, sftp, Netscape, mail virus scans, and SSL.

Micro-computers: Basic, SPSS, Microsoft Office suite, Netscape, virus scans, Macwrite, Pagemaker, ssh, Internet Explorer, Arcview, and sftp.

LAN: Windows 2000/XP, Unix

Information about Camden Computing Services may be found at <http://rucs.camden.rutgers.edu>.

Computing Services hours are:

Monday through Thursday	8:00 A.M. to 11:00 P.M.
Friday	8:00 A.M. to 5:00 P.M.
Saturday	9:00 A.M. to 5:00 P.M.
Sunday	2:00 A.M. to 10:00 P.M.

Hours are usually extended on Sunday late in each term, and are abbreviated between terms and during the summer.

For further information, the main office may be contacted at 856/225-6065; the HELP desk at 856/225-6274; or email to help@camden.rutgers.edu.

PINELANDS AND MARINE FIELD STATIONS

These field stations are major universitywide research facilities of Rutgers' Institute for Marine and Coastal Sciences (IMCS). The stations are located in Lebanon State Forest (Pinelands) and at the mouth of Great Bay (Tuckerton Marine Field Station). These facilities represent unique field resources for faculty and graduate students from various campuses. Both facilities have strong ties with the Graduate School-Camden. The marine station, established by Dr. James B. Durand in 1971, is directed by Dr. Kenneth Able of the IMCS. The Pinelands Research Station is directed by Dr. John Lighton.

Research in coastal and environmental studies is the main thrust at these ecologically linked facilities. Studies at the marine station include near-shore circulation problems, the role of eel grass in detritus stocks and nutrient cycling,

marsh biogeochemistry, population dynamics of the nekton (especially fishes), benthic invertebrate ecology, and plankton ecology. Research activities at the Pinelands station include soil and freshwater nutrient cycling, wetland ecology, ecosystem fragmentation, and the effects of pollutants and fire on ecosystem processes. The stations are used as research centers by faculty and students of a number of departments within and outside the university. Both stations are surrounded by unspoiled habitats under state and/or federal protection and offer excellent research opportunities on a year-round basis.

FORUM FOR POLICY RESEARCH AND PUBLIC SERVICE

The Forum for Policy Research and Public Service is affiliated with the Rutgers-Camden Department of Public Policy and Administration. The forum is charged with the following mission:

1. to conduct fundamental multidisciplinary research on issues of concern to southern New Jersey, the state, and nation
2. to enhance the professional skills of graduate students in the Department of Public Policy and Administration by exposing them to significant management activities and tasks
3. to assist public and nonprofit managers with research support and graduate student interns
4. to provide the public with information on the activities of governments in southern New Jersey and the Delaware Valley
5. to keep contact with graduate alumni of the Department of Public Policy and Administration and to advance their professional growth and development
6. to train public and nonprofit managers in southern New Jersey and the Delaware Valley in state-of-the-art management techniques by means of noncredit short courses
7. to participate in grant opportunities as university partners with public and nonprofit agencies

The Forum for Policy Research and Public Service is located at 401 Cooper Street, Camden, NJ 08102 (856/225-6311).

STUDENT HEALTH SERVICES

Paul Brown, M.A., Director, Nurse Practitioner
 Daniel Gordon, Ph.D., Psychologist
 Karen Kramer, M.S.N., Nurse Practitioner
 Corinne Masur, Psy.D., Psychologist
 Madrid Moore, Health Technician
 Patricia Prior, M.D., Physician
 Paulette Ritter, M.S.N., Nurse Practitioner
 Robert Russo, M.A., Counselor
 Marie Serra, Psy.D., Psychologist
 Bonita Franco, Administrative Assistant

The Student Health Center is located at 326 Penn Street, Camden, NJ 08102 (856/225-6005). Rutgers Student Health Services (RSHS) provides a comprehensive set of ambulatory care and health education services for all full-time students. Part-time and University College-Camden students may become eligible by paying the student

health service fee at any health center or at the Office of Student Health Insurance, Hurtado Health Center, Rutgers, The State University of New Jersey, 11 Bishop Place, New Brunswick, NJ 08901-1180 (732/932-8285). Applications also are available at the Camden Health Center.

The center is staffed by physicians, nurse practitioners, a part-time psychiatrist, and counseling psychologists. Hours are 8:30 A.M. to 7:00 P.M., Monday; and 8:30 A.M. to 4:30 P.M., Tuesday, Wednesday, Thursday, and Friday. The center offers a wide range of services, including evaluation and treatment, general medical care, gynecology, psychological counseling, alcohol and other drug counseling, health education, physical examinations, laboratory tests, immunization, allergy treatment, and referral to other providers. In cases where RSHS does not offer the needed service, the staff provides students with a referral.

Appointments are encouraged to reduce waiting time. All services are rendered confidentially.

SEXUAL ASSAULT SERVICES AND CRIME VICTIM ASSISTANCE

Sexual Assault Services and Crime Victim Assistance staff provide support and assistance to crime victims, survivors, and other members of the university community. Advocacy, crisis intervention, short-term counseling, and referrals are available. Programs and services for students, faculty, and staff promote ways of reducing the risk of being a crime victim and the availability of resources and options should a crime occur. With a special emphasis on crimes of interpersonal violence, educational programs are available to the university community on issues concerning sexual assault, dating violence, stalking, and peer harassment.

For more information or to schedule an appointment or program, call 732/932-1181, visit the department web page at <http://www.rutgers.edu/SexualAssault/>, or email the staff at sascva@rci.rutgers.edu. The office is located at 3 Bartlett Street on the College Avenue campus, New Brunswick, New Jersey.

STUDENT HEALTH INSURANCE

All full-time students, by paying the student fee, and those part-time students who elect to pay the student health service fee are insured for up to \$5,000 in medical expenses brought about by illness or accident. This policy provides excess coverage over other group insurance plans. Students have the option to purchase a major medical policy sponsored by the university that provides more extensive coverage. Students also may, for additional cost, purchase coverage for their spouse and children. Any student not covered by individual or family policies, particularly international students, is urged to consider this coverage. Information and applications are available from the Student Health Center, 326 Penn Street, Camden, NJ 08102 (856/225-6005), or from the Office of Student Health Insurance, Hurtado Health Center, Rutgers, The State University of New Jersey, 11 Bishop Place, New Brunswick, NJ 08901-1180 (732/932-8285).

Compulsory International Student Insurance Fee

All students in F or J immigration status whose visa documents are issued by Rutgers are required to have both the basic and major medical coverage, which will

be charged to them on the term bill. Any accompanying spouse and children also must be insured. Dependent coverage with the student insurance program must be purchased at the Center for International Faculty and Student Services, Rutgers, The State University of New Jersey, 180 College Avenue, New Brunswick, NJ 08901-1156 (732/932-7015).

CAMPUS MAILBOXES

Only students in residence on campus may use campus mailbox numbers as postal addresses. Since all students are responsible for meeting the deadlines specified in mail sent to their boxes, they should check their boxes frequently throughout the term. In most instances, a box is assigned to more than one student. Therefore, care should be taken to return to the box any mail not belonging to the recipient.

PARKING AND TRANSPORTATION

Barbara Nolan, *Coordinator*

All vehicles using campus parking facilities in Camden must be registered with university parking and display a properly mounted, valid permit. Student permits are in effect September 1 through August 31. Registration of a vehicle does not guarantee a parking space or space availability. Contact the bursar's office at 327 Cooper Street to purchase a permit. There is a \$50 penalty for parking without a valid permit.

ALUMNI

Charles "Chuck" Mannella, *Director of Alumni Relations—Camden*

Alumni Relations

The university seeks the full support and interest of its alumni and, in return, offers them a number of services and programs. The responsibility for working with the university's entire alumni body, now numbering over 320,000, is vested in the Department of Alumni Relations. The department has two main objectives. First, it maintains contact with Rutgers alumni, informing them of the university's programs with the hope that they will assist Rutgers in fulfilling its educational goals. Second, the department encourages alumni to continue their college friendships after graduation through social, educational, and reunion activities.

All undergraduate colleges and most graduate and professional schools have their own alumni associations that sponsor programs based on the interests of the alumni of that college. The Rutgers–Camden Alumni Association traces its beginnings back to 1951. The organization represents over 25,000 graduates of the southern New Jersey campus of the Camden College of Arts and Sciences, University College–Camden, School of Business–Camden, Graduate School of Business–Camden, and the Graduate School–Camden. Active membership is maintained through payment of regular alumni dues. The alumni association is represented in the Rutgers University Alumni Federation which sponsors universitywide programs, such as homecoming, and services, such as group travel and insurance. The Department of Alumni Relations provides guidance

and administrative services to each of the college associations, as well as to a network of regional alumni clubs in New Jersey and throughout the country.

The university publishes a magazine for alumni and friends of the university.

The department maintains offices in Camden, Newark, and New Brunswick. The Camden office is at 411 Cooper Street, Camden, NJ 08102-1226 (856/225-6028).

Rutgers University Foundation

The Rutgers University Foundation is the fund-raising arm of Rutgers, The State University of New Jersey. The Rutgers Foundation was incorporated in 1973 to support the university in obtaining private funds to meet important needs for which adequate monies may not be available from state, federal, or other sources. Scholarship and fellowship support for undergraduate and graduate students is essential, and academic programs seek the extra margin of excellence that only private giving can provide.

The professional staff of the Rutgers Foundation has helped the university's faculty, administration, and staff raise well over a half-billion dollars since its incorporation 29 years ago. Private fund-raising in the 2000-2001 fiscal year totaled \$123,302,686, an all-time yearly high.

Rutgers is now embarked on a major universitywide campaign to raise \$500 million by June 2004 and is well on its way toward reaching that goal. "The Rutgers Campaign: Creating the Future Today" is designed to advance Rutgers' academic growth as one of the nation's top public universities. The purposes of the campaign include attracting and supporting the best students, ensuring a superior academic program, advancing the quest for knowledge, recruiting and retaining top faculty, enriching the campus and community environments, and providing outstanding facilities and equipment.

The Rutgers Foundation staff provides information about the full range of giving opportunities to donors and prospective donors, including individuals, corporations, and foundations. The staff also cultivates donors and potential donors through a variety of activities, helps donors make sound choices on how to give and the designation choices available to them, and ensures that they are properly thanked for their gifts. Fund-raising officers are also based in many of the university's schools and colleges and work very closely with the foundation.

Persons interested in making contributions to any unit of the university or to Rutgers as a whole may do so by writing a check payable to the Rutgers University Foundation. The check should be accompanied by a brief note stating the designation of the donation and whom the gift is from. Checks should be mailed to: Accounting Department, Rutgers University Foundation, 7 College Avenue, New Brunswick, NJ 08901-1261.

More information about private giving to Rutgers may be obtained from the Rutgers University Foundation, Winants Hall, 7 College Avenue, New Brunswick, NJ 08901-1261 (732/932-7777).

On this campus, the College of Arts and Sciences, University College, and the Graduate School are supported by Sharon Beales, CCAS '96, and the School of Business by Kristin Walker, CCAS '88.

The Camden campus offices are located at 411 Cooper Street, Camden, NJ 08102 (856/225-6322).

The Development Office for the College of Arts and Sciences and University College is located at 411 Cooper Street, Camden, NJ 08102 (856-225-6324). The Development Office of the Business School is located in the Business and Science Building, 227 Penn Street, Camden, NJ 08102 (856/225-6325).

Academic Policies and Procedures

STUDENT RESPONSIBILITY TO KEEP INFORMED

This catalog provides a compendium of the rules governing graduate work at the university. Students are expected to keep their copy as a reference handbook and to familiarize themselves with the principal rules and regulations contained in it. All regulations, academic and otherwise, established by the faculty and the administration of the Graduate School-Camden and the Board of Governors of the university are subject to amendment at any time.

REGISTRATION AND COURSE INFORMATION

Terry L. Richartz, M.S., Registrar, Camden Campus
W. Stanley Edens, M.P.P., Associate Registrar and
Director of Veterans' Affairs
Betzaida Feliciano-Berrios, B.A., Assistant Registrar

Office of the Registrar
311 North Fifth Street
Camden, NJ 08102-1405
856/225-6053; FAX: 856/225-6453
Veterans' Affairs: 856/225-6045 or
veterans@camden.rutgers.edu
Touchtone Registration: 856/225-1999
Web Registration Site: <http://webreg.rutgers.edu>
Web Site: <http://registrar.rutgers.edu>
Course Offerings Web Site: <http://scheduling.rutgers.edu>

Formal admission to a graduate program and payment of tuition and fees, or arrangement with the bursar regarding payment of tuition and fees, are a part of the registration process; registration is prerequisite to class attendance. All students, regardless of method of payment, must make contact with the bursar each term or their registration will be canceled.

Registration and the change-of-course process may be accomplished via the Rutgers Touchtone Telephone Registration System (RTTRS) at 856/225-1999, online at <http://webreg.rutgers.edu>, or in person at the registrar's office.

Continuous Registration

All students in degree programs must maintain status in the school by registering each fall and spring term in course work, research, dissertation study, or matriculation continued. Students who fail to maintain continuous registration in course work, research, dissertation study, or matriculation continued must apply for reinstatement in order to continue in good standing. Such students are charged an amount equal to the cost of registering for matriculation continued for each term in which they failed to register. This registration is available only to students not present on campus and not using faculty time or university research facilities.

Summer Session Registration

The preceding information applies only to registration during the regular academic year; it does not apply to Summer Session. To enroll for Summer Session, students should meet with their program director to select appropriate courses. They may register via Rutgers Touchtone Telephone Registration System (RTTRS), online at <http://webreg.rutgers.edu>, or in person at the registrar's office. Dates and deadlines for the various summer terms appear in the front of the Summer Session catalog. The requirement that matriculated students remain in continuous registration from the time they are admitted until their degrees are earned applies only to the academic year, not to Summer Session. Summer registration usually begins in late February. For more information, contact the Summer Session office at 856/225-6098.

Successive Registration

Students expecting to continue their programs in the succeeding fall or spring term are advised to take part in that term's registration. Registered students are emailed registration information for the following term prior to April 1 and October 1 each year. Participation in this advance registration process is not binding on students who do not return in the next term; however, eligible students who do return without having participated are charged a late registration fee of \$50.

Students are urged to contact the registrar if they do not receive registration information by April 1 for the fall term and October 1 for the spring term.

Late Registration

Students who do not complete registration during the period prescribed in the registration instructions may do so during the late registration period. A late registration fee of \$50 is charged. Permission to register late does not affect any financial or academic policies.

Change of Registration

After a student completes registration, he or she may add or drop courses during the late registration period preceding the term and continuing through the first 10 class days of the term. Thereafter, only drops are accepted. These changes may be made via touchtone telephone registration, online at <http://webreg.rutgers.edu>, or at the registrar's office. Refunds are not granted for courses dropped after the second week. With the beginning of the third week, and for the remainder of the term, a W grade is assigned.

A student who stops attending a course and fails to give written notification to the registrar receives a failing grade in that course. The date on which the registrar receives written notice from the student governs the academic and financial consequences of the drop. No course may be dropped during the last two weeks of classes.

Withdrawal

A student who wishes to withdraw from *all* courses does so by submitting a written notice to the registrar or by completing a withdrawal form, in person, at the registrar's office. A W grade is assigned for all courses. A percentage refund of tuition only applies through the sixth week of classes. A student who leaves the school unofficially without officially withdrawing in this manner receives failing grades in each course. The date on which the registrar

receives the written notice governs the academic and financial consequences of withdrawal. The privilege of official withdrawal is not granted after the 12th week of classes; students who leave the school during this period are still considered officially enrolled and receive final grades for the term.

Notification to the instructor, adviser, or any other administrative office does not fulfill the student's obligation to communicate directly and in writing with the registrar in all matters pertaining to changes in registration and withdrawal.

Reenrollment

Students who have voluntarily withdrawn from the Graduate School–Camden in good academic standing prior to completing their degree and who wish to reenroll are urged to contact their program director for information on the procedures to be followed.

Intrauniversity Registration

Graduate Courses

Students in the Graduate School–Camden may take courses offered by another graduate division of the university by consulting with their graduate program director. Once the graduate program director authorizes the intrainstitutional graduate course, no additional permission is required by the Graduate School–Camden.

All grade changes must be authorized by the dean or designee of the school offering the course.

Exceptions to published deadlines or academic policies regarding a course for the current term must be authorized by the dean of the school offering the course.

Undergraduate Courses

Graduate students may enroll in advanced undergraduate courses (at the 300 or 400 level) with the approval of their graduate program director.

Courses numbered 500 or above are designed for graduate students and normally carry credit toward a graduate degree. When a student is either permitted or required to take a course numbered below 500, he or she must register with a credit prefix that will appear on the permanent record as follows: *G*—the undergraduate course has been approved for graduate credit; *E*—the undergraduate course is excluded from credit in the graduate program.

Undergraduate courses taken by graduate students are charged the graduate tuition rate. Graduate students registered for undergraduate course work are bound by the policies of the school under which the course is offered.

Rates for Tuition and Fees

All credits taken outside of a student's school are billed at the per-credit graduate tuition and fee rates that are set by the school in which he or she is admitted and enrolled, regardless of the levels (graduate or undergraduate) of the courses taken, the tuition rates of the schools offering the courses, or the credit prefix and/or grading stipulations of the courses.

Courses Taken “Not-for-Credit”

Students who wish to enroll in a graduate course or a 100-level through 400-level undergraduate course and complete all of the assigned work without receiving credit may do so with the advance approval of their adviser. Such students must establish their not-for-credit status by registering for the course with an *N* credit prefix. Tuition will

be charged based on the per-credit rate of the student's graduate program. Students must fulfill the usual requirements during the term, including the execution of any written assignments, as all other students. At the end of the term, however, they may not take the final examination, and a grade of *S* (satisfactory) or *U* (unsatisfactory) is assigned. The course and the letter grade are included on the student's record, but no credit toward a degree is given.

Pass/No-Credit Courses

With permission from the appropriate graduate program director, and subject to the availability of space, a student may take any graduate course on a pass/no-credit basis. This decision must be made when the student registers for the course.

Courses taken on this basis are graded *Pass* or *No Credit*. A *Pass* grade earns degree credit and is equivalent to an *A*, *B*, or *C*. A *No-Credit* grade is equivalent to a *D* or *F*. In either instance, the cumulative grade-point average is not affected.

Auditing Courses without Registration

With permission from the course instructor, and subject to the availability of space, full-time students of the school may audit courses without registration. It is understood that no academic credit is earned in this manner. No official record of audited courses is kept.

Undergraduate Enrollment in Graduate Courses

Qualified undergraduate students in the university may take courses offered by the graduate faculty with the approval of the director of the program offering the course. Registration is made by entering the appropriate school code and course number on the undergraduate registration materials. Undergraduates must also obtain permission from the Office for Student Affairs. Successful completion of courses so taken accrue credit toward the undergraduate degree.

Credits and grades earned in graduate courses cannot be calculated in a student's graduate-level cumulative grade-point average if he or she earned the credits while admitted and enrolled as an undergraduate.

Dual-Degree Programs

B.A./M.A. in English, history, and liberal studies
B.A./M.S. in biology, chemistry, and mathematics
B.A./M.P.A. in political science/public administration

Students enrolled in the Camden College of Arts and Sciences or in University College may apply during their junior year to enter the dual-degree program (B.A./M.A., B.A./M.S., or B.A./M.P.A.). This program enables students with strong academic credentials to begin graduate work while still undergraduates, thus speeding the completion of the master's degree. Camden undergraduates who intend to pursue a master's degree in the Rutgers–Camden Graduate School must be approved for entry into this dual-degree program by the director of the graduate program in which they wish to study. If accepted, they may take one graduate course in each term of their senior year. These two courses are charged at the undergraduate tuition rate, but are double counted toward both the B.A. and the master's degree requirements. As seniors, students must apply to the Graduate School in the regular fashion, and be formally admitted and matriculated. They then go on to complete the remainder of their credits as master's level students.

Transfer Credit

Graduate courses completed at other institutions may be accepted for credit at the university. Students are allowed to transfer in a maximum of one-third of the credits required for their degree. The limit is 10 credits for 30-credit degree programs and 14 credits for 42-credit programs. This number is the maximum allowed for transfer into the Graduate School–Camden. Individual programs may impose a lower limit if it is deemed appropriate, and the acceptance of any and all courses for graduate credit is at the discretion of the program director. Application for such credit may be made by the student only after completing at least 12 credits with grades of B or better at the Graduate School–Camden. A course may be considered for transfer if the following requirements are met:

1. The course must have been graded—neither *Pass* nor *Satisfactory* grades can be accepted.
2. The student must have earned a grade of B or better in the course.
3. The course cannot include work for a thesis, independent study, or research.
4. The course must form a part of the student's program.
5. The course must have been taken during the six-year period prior to the application for transfer of credit.
6. The course must have been taken at an accredited institution of higher education.
7. The course must not have been counted for credit toward another degree.

In applying for transfer of credit, a student must obtain an official transcript of the grades to be transferred and complete a transfer of credit form. The transfer of credit form and the official transcript should be submitted to the student's graduate program director for approval. The graduate program director then submits both to the dean for review and final authorization. When the transfer is approved, the registrar's office records the transfer of credits on the student's transcript.

Minimum and Maximum Programs

A full-time academic load is defined as 9 or more credits. A load of 18 credits or more requires the approval of the dean of the Graduate School–Camden.

The following students must register for a full-time program of 12 or more credits: graduate fellows, research interns (some credits must be associated with degree-related research), graduate assistants, and teaching assistants. Fellows, interns, and assistants must register their appointments according to the appropriate designations in the *Schedule of Classes*.

Full- and Part-Time Students

The designation of students as full or part time is necessary for the regulations governing tuition charges, student fees, statistical records, time limits for degrees, residence requirements, and any other issues affected by such status. A student registered for 12 or more credits has full-time status; a student registered for fewer than 12 credits has part-time status; 6 credits is half-time status. In addition to regular course work, the following also are included in the calculation of credits: research courses, regular courses taken not-for-credit, and graduate and teaching assistantships (usually 6 credits each). Graduate and teaching assistants must remain in good standing in their own programs. In addition to their half-time academic appointments, assistants

are required to register for a minimum of 6 credits of course work or research, thereby qualifying for full-time status.

Teaching Assistants and Graduate Assistants

Teaching assistants and graduate assistants are required to register for a total of at least 12 credits per term (a full-time program), of which at least 6 credits are of academic courses or research, with the remaining credits permitted as E prefix (not for degree) credits. Graduate assistants register for (school and subject number):866; teaching assistants register for (school and subject number):877.

GRADES AND RECORDS

Grades represent the level or quality of the student's performance in a course and are reported by instructors to the registrar at the end of each term by the following symbols:

<u>Grade</u>	<u>Definition</u>	<u>Numerical Equivalent</u>
A	Outstanding	4.0
B+		3.5
B	Good	3.0
C+		2.5
C	Satisfactory	2.0
F	Failing	0.0

Other Grade Symbols

IN—Incomplete. Students whose work is incomplete at the end of the term may be assigned a regular grade or, at the discretion of the instructor if there is reason to believe that an extension of time is warranted, a grade of *IN*. Students are strongly urged to make up incomplete work as soon as possible—preferably before enrolling in additional courses. With the consent of the instructor, a student may take up to one year from the original due date to complete a course, but it is generally expected that much less time will be required. If the instructor has not submitted a final grade within the one-year period, no change can be made and the grade *IN* remains on the permanent record of registration for that course. Students may petition the program director in writing for exemption from this policy. Exceptions will be granted only in extraordinary circumstances and must be approved by both the program director and the dean. The petition must be submitted and the approval gained before the one-year period has expired. Courses with *IN* grades do not count toward degree completion. Students receiving a grade of *IN* in an essential course in their degree program during a spring term prior to graduation are not eligible for graduation that May/June, and must file for a later diploma date.

In exceptional cases, where more than one year is required, the student, in conjunction with the instructor, must complete the Graduate Extension beyond One Year Form, which must be approved by the program director and the dean.

P/NC—Pass/No Credit. A grade of *P/NC* that has no numerical equivalent is assigned to any student who has registered for a course on that basis when such registration is in accord with the regulations of the faculty governing the student and the faculty governing the course. *P* (pass) is equivalent to an A, B, or C, while *NC* (no credit) is equivalent to a D or F.

S/U—Satisfactory/Unsatisfactory. Assigned to 700-level courses of research carrying credit or to regular courses taken on a noncredit basis.

T—Temporary. Temporary grades are given at the discretion of the instructor when the student has not properly completed the course work requirements. The grade assigned in conjunction with the T grade becomes the final grade, unless a better grade is reported as a result of the completion of the course work within the time allowed by the instructor, but no later than the end of the next term. At present, this designation is used only for students in the School of Social Work.

TZ—Temporarily Not Graded. TZ grades are assigned in cases when a student never attended, stopped attending and did not withdraw from, or was not graded by his or her instructor in courses taken for credit.

Students are responsible for contacting the registrar to correct registration errors resulting in grades of TZ and, when necessary, instructors to arrange final grades.

TZ grades remaining on records automatically convert to failures, without notification to students, for fall-term courses on May 1 and for the spring and summer terms on December 1.

W—Withdrawal. Officially withdrew.

Credit Prefixes

The number of credits appearing on course records may be preceded by a letter prefix as follows:

- E.** Course does not carry degree credit; automatically assigned to undergraduate courses not prefixed G or N.
- G.** 300- or 400-level undergraduate course for which credit (normally toward the graduate degree) has been approved.
- J.** Course carries degree credit, but is not calculated into the cumulative grade-point average.
- K.** Course does not carry degree credit, but is calculated into the cumulative grade-point average.
- N.** Course does not carry degree credit; examination not required; final grade of S (satisfactory) or U (unsatisfactory) assigned.

Graduate students registering for undergraduate course work are subject to the course-offering undergraduate school's rules concerning credit prefixes, grading, and registration activities.

Grading System Used by Each School

These specific programs use the following grading systems:

- Graduate School—Camden: A,B+,B,C+,C,F,S/U,IN,W,TZ
- School of Business—Camden: A,B+,B,C+,C,F,S/U,IN,W,TZ
- Graduate School—New Brunswick: A,B+,B,C+,C,F,S/U,IN,W,TZ
- School of Social Work: A,B+,B,C+,C,F,IN,T,W
- Graduate School—Newark: A,B+,B,C+,C,F,S/U,IN,W,TZ

Policy on Warning Notices

Warning notices of deficient performance in graduate courses are not given by the Graduate School—Camden, since in many instances examinations or evaluations are neither given nor made in graduate courses until the end of the term. Also, in some cases, evaluations are based entirely on class presentations made by students at various times

during the term. Consequently, warning notices cannot reasonably be expected by midterm.

Examination Papers

Examination papers and term papers are retained by all faculty and are available for review for the period of one term following termination of the course.

Transcripts and Course/Grade Documentation

Unofficial Grade Reporting

Immediate access to verbal grade information is available to all students who call Rutgers Touchtone Telephone Registration System (RTTRS) at 856/225-1999. Students also may view their grades online at <http://registrar.rutgers.edu>. Graduate students requiring written documentation may obtain a free unofficial transcript of their full academic record or their record for a single term over the telephone. These unofficial transcripts are released in approximately 10 working days to the student's home address. The current term's grades are available as of the final exam period, upon submission by individual instructors and computer entry by the university. Term and cumulative averages are calculated after a term's faculty grade-reporting deadline has passed.

Official Transcripts

Official transcripts are prepared by the Office of the Registrar upon receipt of the student's signed request authorizing release. There is no longer a fee. Transcripts are protected by privacy laws and are issued only to third-party individuals or organizations specifically named by the student.

All transcripts issued through the Office of the Registrar include the student's complete academic record to date, including courses, grades, prizes, awards, and honors, but may be ordered to show only courses taken while admitted as an undergraduate; only courses taken while admitted as a graduate student; or the complete undergraduate and graduate record. It is not possible for the registrar's office to issue one-term-only transcripts, as they are processed only through RTTRS or <http://registrar.rutgers.edu>.

Requests for transcripts should be addressed to: Transcript Clerk, Office of the Registrar, Rutgers, The State University of New Jersey, 311 North Fifth Street, Camden, NJ 08102-1405. Include the student's full name(s) while enrolled, social security number, dates of attendance, school(s) attended, degree(s) awarded with degree date, name and address of the recipient, and student's signature. Requests may be faxed to 856/225-6453 (receipt of the fax should be confirmed by calling 856/225-6053). A request form also may be downloaded from the web: <http://registrar.rutgers.edu>.

For a fee, the transcript will be faxed to other educational institutions. In accordance with university policy, no student or former student may obtain a transcript of record, in part or whole, for any course(s) if he or she is under financial or disciplinary obligation to the university or if his or her immunization requirements have not been cleared by the Office of Student Health Services.

Transcripts requests are processed on a first-come, first-served basis and may require 10 working days for preparation and release. Academic records are stored and maintained electronically, and both official and unofficial transcripts are printed elsewhere overnight; therefore, the registrar's office is unable to issue copies on demand.

Verification of Enrollment

A student may request verification of his or her enrollment by contacting the registrar. Ten working days should be allowed for processing. Students may verify preregistration for a term, but final certification of attendance is issued only after the student has submitted that term's term bill and some form of payment to the bursar to activate registration. Often the student must repeat the verification process at the start of each term in order to continue, for example, deferment of student loan repayment or health insurance coverage.

Refer to the Student Records and Privacy Rights heading in this chapter regarding the release of information from student files.

Student Complaints about Grades

Student complaints about grades will, where possible, be handled within the structure of the graduate degree program.

First, the student is urged to confer informally with the instructor who recorded the grade in question. Such a conference shall take place within 10 school days of official notification of the grade. If the matter is not resolved during the conference, the student is urged to take the issue in written form, within 10 school days of the meeting between the student and instructor, to the director of the graduate program or a designee for review and mediation. The director or designee, within 10 school days of notification of the dispute, shall consult with all parties and propose a resolution. If this is unsuccessful, the matter shall be referred to a faculty committee, as designated in the bylaws of the program. This committee shall render a decision within 15 school days. In arriving at a decision, the committee may consult with whomever it chooses and may, in extraordinary cases, ask third parties from among the faculty to review the grade in question.

Appeal from the program faculty's decision may be made to the dean of the Graduate School-Camden. Such appeal shall be in writing, shall be made within 10 school days of receipt of the program faculty's decision, and shall state the grounds for appeal. The grounds for appeal are (1) technical error, (2) new information, or (3) extenuating circumstances.

Holds

The privileges of registration, advance registration, receipt of a diploma at commencement, and release of transcripts of record are barred to students having outstanding obligations to the university. Obligations may take the form of unpaid monies, unreturned or damaged books and equipment, parking fines, other charges for which a student may become legally indebted to the university, and failure to comply with disciplinary sanctions or administrative actions or directives.

University departments and offices may place "holds" on registration, diplomas, and transcripts for any students having an outstanding obligation.

CLASS SCHEDULES AND HOURS

Starting and closing dates for each term, scheduled holidays, and other important scheduling information can be found in the academic calendar, the *Schedule of Classes*, and at the web site <http://registrar.rutgers.edu>.

Confirmation of Schedules

Students are expected to verify the accuracy of their schedules and to learn of changes in classroom assignments by using the Rutgers Touchtone Telephone Registration System or <http://webreg.rutgers.edu>.

Attendance

Each instructor is required to maintain an accurate record of attendance of each class or section of which he or she is in charge. Students are expected to be present at each meeting of their classes. Exceptions to this rule may be made in the case of illness and in such other instances as seem justified to the instructor.

Absence Due to Religious Observance

It is the policy of the university to excuse without penalty students who are absent because of religious observances and to allow the makeup of work missed because of such absence. Examinations and special required out-of-class activities are not ordinarily scheduled on those days when these students refrain from participating in secular activities. A student absent from class because of required religious observance will be excused without penalty and will be given an opportunity to make up that examination without penalty.

Cancellation of Classes

It is the general policy of the university not to cancel regularly scheduled classes because of inclement weather. In most cases, therefore, when emergencies occur that disrupt local transportation facilities or create personal problems, students and faculty members should make decisions as to attendance that appear appropriate to them in their particular circumstances.

During severe weather conditions, announcements are made over Camden and Philadelphia radio stations. The decision to cancel classes is made by the Camden provost. If no announcements are made before 5:30 P.M. for evening classes, it can be assumed that classes are in session. The campus is not identified by name but by the following radio code numbers: 605 for daytime classes (8:00 A.M. to 6:00 P.M.) and 2605 for evening classes (6:00 P.M. to 10:30 P.M.). Students may also check the campus web page.

Arrangements for makeup work are announced by individual instructors.

POLICY ON ACADEMIC INTEGRITY SUMMARY

"Academic freedom is a fundamental right in any institution of higher learning. Honesty and integrity are necessary preconditions to this freedom. Academic integrity requires that all academic work be wholly the product of an identified individual or individuals. Joint efforts are legitimate only when the assistance of others is explicitly acknowledged. Ethical conduct is the obligation of every member of the university community, and breaches of academic integrity constitute serious offenses" (Academic Integrity Policy, p. 1).

The principles of academic integrity entail simple standards of honesty and truth. Each member of the university has a responsibility to uphold the standards of the community and to take action when others violate them.

Faculty members have an obligation to educate students to the standards of academic integrity and to report violations of these standards to the appropriate deans.

Students are responsible for knowing what the standards are and for adhering to them. Students also should bring any violations of which they are aware to the attention of their instructors.

Violations of Academic Integrity

Any involvement with cheating, the fabrication or invention of information used in an academic exercise, plagiarism, facilitating academic dishonesty, or denying others access to information or material may result in disciplinary action being taken at either the college or university level. Breaches of academic integrity can result in serious consequences ranging from reprimand to expulsion.

Violations of academic integrity are classified into four categories based on the level of seriousness of the behaviors. Brief descriptions are provided below. This is a general description and is not to be considered as all-inclusive.

Level One Violations

These violations may occur because of ignorance or inexperience on the part of the person(s) committing the violation and ordinarily involve a very minor portion of the course work.

Examples: Improper footnoting or unauthorized assistance on academic work.

Recommended Sanctions: Makeup assignment.

Level Two Violations

Level two violations involve incidents of a more serious nature and affect a more significant aspect or portion of the course.

Examples: Quoting directly or paraphrasing without proper acknowledgment on a moderate portion of the assignment; failure to acknowledge all sources of information and contributors who helped with an assignment.

Recommended Sanctions: Probation, a failing grade on the assignment, or a failing grade in the course.

Level Three Violations

Level three offenses involve dishonesty on a significant portion of course work, such as a major paper, an hourly, or a final examination. Violations that are premeditated or involve repeat offenses of level one or level two are considered level three violations.

Examples: Copying from or giving others assistance on an hourly or final examination, plagiarizing major portions of an assignment, using forbidden material on an hourly or final examination, using a purchased term paper, presenting the work of another as one's own, altering a graded examination for the purposes of regrading.

Recommended Sanctions: Suspension from the university for one or more terms, with a notation of "academic disciplinary suspension" placed on a student's transcript for the period of suspension, and a failing grade in the course.

Level Four Violations

Level four violations are the most serious breaches of academic integrity, and also include repeat offenses of level three violations.

Examples: Forgery of grade change forms; theft of examinations; having a substitute take an examination; dishonesty relating to senior thesis, master's thesis, or doctoral dissertation; sabotaging another's work; the violation of the ethical code of a profession; or all infractions committed after return from suspension for a previous violation.

Recommended Sanctions: Expulsion from the university and a permanent notation on the student's transcript.

Faculty members who believe that violations have occurred should immediately contact the Office of the Dean. Students who suspect that other students are involved in actions of academic dishonesty should speak to the instructor of the course. Questions on reporting procedures may be directed to the Office of the Dean.

UNIVERSITY CODE OF STUDENT CONDUCT SUMMARY

A university in a free society must be devoted to the pursuit of truth and knowledge through reason and open communication among its members. Its rules should be conceived for the purpose of furthering and protecting the rights of all members of the university community in achieving these ends.

All members of the Rutgers University community are expected to behave in an ethical and moral fashion, respecting the human dignity of all members of the community and resisting behavior that may cause danger or harm to others through violence, theft, or bigotry. All members of the Rutgers University community are expected to adhere to the civil and criminal laws of the local community, state, and nation, and to regulations promulgated by the university. All members of the Rutgers University community are expected to observe established standards of scholarship and academic freedom by respecting the intellectual property of others and by honoring the right of all students to pursue their education in an environment free from harassment and intimidation.

*Preamble
University Code of Student Conduct*

Overview

Communities establish standards in order to ensure that they are able to fulfill their mission and keep their members from harm. The University Code of Student Conduct (referred to as "the code" in the remainder of this summary) defines those kinds of behavior that violate the standards of the Rutgers University community and also provides the mechanism for addressing alleged violations. In doing so, the code protects the rights of those accused of offenses (referred to as "respondents" in the remainder of this summary) by providing due process while also protecting victims of those offenses and the university community as a whole.

Process

The following summary presents key aspects of the code. Students should consult the code itself for complete information on each point.

Filing a Complaint

Any individual may file a complaint against a student suspected of violating the code by notifying the dean of students (or equivalent) of the respondent's college or

school, or the assistant director of judicial affairs in the Office of Compliance, Student Policy, and Judicial Affairs.

Preliminary Review

Upon receipt of a complaint, a preliminary review is conducted by the dean of students (or equivalent) or his or her designee to assess the evidence and determine if it is sufficient to proceed to a hearing. The dean conducting this review also assesses the seriousness of the charges. The most serious charges can, upon a finding of responsibility, result in separation from the university (suspension or expulsion). These serious cases are decided at university hearings. Less serious offenses (nonseparable offenses) are heard according to procedures in place at the student's college or school.

Separable Offenses

The following offenses are deemed serious enough to result potentially in separation from the university should a student be found responsible at a hearing:

1. violations of academic integrity
2. forgery, unauthorized alteration or unauthorized use of any university documents or records or any instrument or form of identification
3. intentionally furnishing false information to the university or intentionally initiating or causing to be initiated any false report, warning, or threat of fire, explosion, or other emergency
4. use of force against any person or property or the threat of such force
5. sexual assault or nonconsensual sexual contact
6. hazing
7. violation of the university's Student Life Policy against Verbal Assault, Defamation, and Harassment (Copies are available from the judicial affairs office or dean of students' office.)
8. unauthorized entry into, unauthorized use of, or misuse of university property, including computers and data and voice communication networks
9. intentionally or recklessly endangering the welfare of any individual or intentionally or recklessly interfering with any university activity or university-sponsored activity
10. use, possession, or storage of any weapon, dangerous chemical, fireworks, or explosive, whether or not a federal or state license to possess the same has been issued to the possessor
11. the distribution of alcohol, narcotics, or dangerous drugs on university property or among members of the university community, if such distribution is illegal, or the possession of a sufficiently large quantity as to indicate an intention to distribute illegally
12. theft of university services or theft of, or intentional or reckless damage to, university property or property in the possession of, or owned by, a member of the university community, including the knowing possession of stolen property (Intentional or reckless misuse of fire safety equipment is regarded as damage under this section of the code.)
13. the violation of the ethical code of one's intended profession either by graduate students enrolled in any of the university's professional or graduate schools or by undergraduate students in clinical courses or settings related to their intended profession
14. violations of federal, state, or local law where such violations have an adverse effect on the educational mission of the university
15. failure to comply with the lawful directions of university officials, including campus police officers acting in performance of their duties
16. knowingly providing false testimony or evidence; disruption or interference with the orderly conduct of a disciplinary conference or hearing; violating the terms of any disciplinary sanction imposed in accordance with this code; or any other abuse of the university's disciplinary procedures

Campus Advisers

Both complainants and respondents may select a campus adviser to assist them during the disciplinary process. Campus advisers may fully represent students, including speaking on their behalf. The Office of Compliance, Student Policy, and Judicial Affairs maintains a list of trained campus advisers for this purpose. Students are free to select any members of the university community to serve as their advisers, whether they are on the list or not.

Attorneys

Complainants and respondents also may, at their own expense, seek the advice of an attorney in addition to that of a campus adviser. Attorneys are free to advise students, to assist in the preparation of their cases, and to attend hearings, but may not speak on behalf of their clients or question witnesses at a hearing.

University Hearings

University hearings are presided over by a hearing officer and heard by a hearing board usually composed of three students and two faculty members. It is the hearing board's responsibility to determine whether the accused student is responsible or not responsible for violating the code. If the hearing board determines a student to be responsible by the standard of clear and convincing evidence, it also recommends a sanction for the offense to the vice president for student affairs. The vice president for student affairs considers the hearing board recommendation and determines the sanction.

Appeals

A student found responsible for violating the code may appeal the finding, the sanction, or both. Appeals are filed through the Office of Compliance, Student Policy, and Judicial Affairs, which forwards them to the Appeals Committee of the appropriate campus (Camden, Newark, New Brunswick).

Authority for Student Discipline

Ultimate authority for student discipline is vested with the Board of Governors of Rutgers, The State University of New Jersey. This authority has been delegated to university administrators, faculty, students, committees, and organizations as set forth in the University Code of Student Conduct. The above summary is intended to present some key facts of the code. Copies of the code are available from all deans of students' offices and have been placed at the reference desks of all university libraries. In addition, the assistant director of judicial affairs in the Office of Compliance, Student Policy, and Judicial Affairs will provide copies of the code upon request and is available to answer any questions about the code or related judicial matters.

UNIVERSITY SAFETY AND SECURITY

Division of Public Safety

Providing a safe and secure environment for all members of the university community is the highest priority of the university's public safety staff. The executive director for public safety is responsible for safety and security services on the New Brunswick/Piscataway campuses. On the Newark and Camden campuses, the police chiefs report to the Office of the Provost while following policies, procedures, and administrative practices established by the executive director for public safety.

Members of the public safety staff patrol each campus and respond to emergencies and requests for assistance on a full-time basis, 24 hours a day, 365 days a year. Rutgers public safety employees are only part of the universitywide crime prevention team. All members of the university community also are part of that team. As a team, it is everyone's duty to actively maintain a safe environment and be careful while complying with all local, state, and university regulations.

Information regarding public safety at Rutgers is available from the campus police departments. *Safety Matters* details public safety statistics, services, and programs on each of Rutgers' regional campuses. To have a printed copy of *Safety Matters* mailed to you free of charge, please contact the appropriate Rutgers University Police Department office at one of the following numbers, or view the online version at any of the following web sites:

Camden Campus: <http://www.camden.rutgers.edu/~rupdcamd/index.htm>
856/225-6009
Newark Campus: <http://newarkpolice.rutgers.edu>
973/353-5581
New Brunswick Campus: <http://publicsafety.rutgers.edu>
732/932-8407

Rutgers University Police Department

The Rutgers University Police Department (RUPD) is dedicated to providing progressive community policing services that focus on the prevention of crime through the development of university-based partnerships. The RUPD provides police, security, and safety services, and is staffed by commissioned police officers with full investigative and arrest authority, a professional security staff, students trained as community service officers, student safety officers, dispatchers, and technical and administrative employees.

The university police department is located at 5 Huntington Street on the College Avenue campus. The campuses are patrolled on foot, in vehicles, and on bicycles. To contact the RUPD to report emergencies (police, fire, and emergency medical), dial 911; from university centrex telephones, obtain an outside line and dial 911. For nonemergency telephone calls to the police, dial 732/932-7211; from university centrex telephones, dial 2-7211. You also can contact the police by using any of the more than 60 blue light emergency telephone boxes on the campuses or by using the housing telephones located near residence hall entrances.

Community policing offices are located in each of the campus student centers. These frontline police officers act as community organizers, team builders, and problem solvers. They provide a communications link between the community and the police department, serve on campus bias committees, and perform proactive patrol. Security

officers patrol the campuses, serving as "eyes and ears" for the police while securing facilities and providing escort services. Student safety officers and community services officers provide a host of other safety and security services that include controlling access to selected residence halls during evening hours. For more information on these programs, call 732/932-5400.

Emergency Services

Fire safety is a major component of our total safety and security program. State certified fire inspectors provide fire safety awareness training sessions in the residence halls and conduct emergency evacuation drills to familiarize occupants with emergency procedures. Emergency Services personnel regularly inspect all university buildings and facilities, conduct alarm tests and fire drills, and enforce the New Jersey Uniform Fire Code. As a state-licensed ambulance service, Emergency Services provides emergency medical care to the university community. The staff of New Jersey certified emergency medical technicians respond to emergency medical calls and provide standby services at major university events.

Sexual Assault Services and Crime Victim Assistance

Sexual Assault Services and Crime Victim Assistance staff provide support and assistance to crime victims, survivors, and other members of the university community. Advocacy, crisis intervention, counseling, and referrals are available. Programs and services for students, faculty, and staff promote ways of reducing the risk of being a crime victim and the availability of resources and options should a crime occur. With a special emphasis on crimes of interpersonal violence, educational programs are available to the university community on issues concerning sexual assault, domestic/dating violence, stalking, and peer harassment. For more information or to schedule an appointment or program, call 732/932-1181, visit the department web site at <http://www.rutgers.edu/SexualAssault/>, or email the staff at sascva@rci.rutgers.edu. The office is located at 3 Bartlett Street on the College Avenue campus, New Brunswick.

ADMINISTRATIVE PROCEDURES FOR RESPONDING TO DISRUPTIONS

An academic community, where people assemble to inquire, to learn, to teach, and to reason together, must be protected for those purposes. While all members of the community are encouraged to register their dissent from any decision on any issue and to demonstrate that dissent by orderly means, and while the university commits itself to a continual examination of its policies and practices to ensure that causes of disruption are eliminated, the university cannot tolerate demonstrations that unduly interfere with the freedom of other members of the academic community.

With this in mind, the following administrative procedures have been formulated to guide the implementation of university policy:

1. The president of the university and the university vice president for academic affairs will have the authority throughout the university to declare a particular activity to be disruptive. In the two geographic areas of Camden and Newark, the respective provost will have the same authority. In New Brunswick, the senior vice president and treasurer will have the same authority.

2. Broadly defined, a disruption is any action that significantly or substantially interferes with the rights of members of the academic community to go about their normal business or that otherwise unreasonably interrupts the activities of the university.
3. A statement will be read by the appropriate officers as specified in (1) or by such officers as they may designate for the purpose of such reading and will constitute the official warning that the activity is in violation of university policy, that it must cease within a specified time limit, and where appropriate, that no commitments made by university officials will be honored if those commitments are made under duress.
4. If the activity continues beyond the specified time limit as determined by the official in authority, the authorized officers as specified in (1) will have the discretion to call upon the university police to contain the disruption. Ordinarily, the president of the university alone, or in his or her absence the university vice president for academic affairs, will have the authority to decide that civil authorities beyond the campus are to be called upon to contain those disruptions that the university police are unable to handle. In extraordinary circumstances, where neither the president nor the university vice president for academic affairs is available to make such a decision, the senior vice president and treasurer in New Brunswick and the provosts on the Camden and Newark campuses have the same authority.
5. The deans of students are the chief representatives of the deans of the colleges in all matters of student life. Members of the university community who are aware of potentially disruptive situations are to report this to the deans of students on their respective campuses. In a disruption, the deans of students and their staff members have a twofold responsibility: to protect against personal injury and to aid in providing for the order of the university. In the latter case, the deans of students, as well as other university personnel, may be called upon to coordinate or assist members of the academic community in ending the disruption, directing it to legitimate channels for solution, or identifying those who have violated the rights of others.

POLICY PROHIBITING HARASSMENT

The university prohibits harassment based on race, religion, color, national origin, ancestry, age, sex, sexual orientation, disability, marital status, or veteran status. Harassment is a form of discrimination that violates state and federal civil rights laws. It is defined for purposes of those laws and the university's policy as any behavior that

1. is unwelcome,
2. targets a person because he or she has one or more of the protected characteristics,
3. is engaged in by a person employed by or doing business with the university, and
4. is sufficiently severe or pervasive to alter negatively that person's or a group member's living, educational, or working environment.

Sexual harassment can take the form of unwelcome sexual advances; requests for sexual favors; or other unwelcome written, verbal, electronic, telephonic, or physical conduct of a sexual nature. *Hostile environment harassment* on the basis of sex, race, religion, color, national origin, ancestry, age, sexual orientation, disability, marital status, or veteran

status is severe or persistent behavior that has the purpose or effect of unreasonably interfering with a person's work or academic performance or creating a hostile environment.

If you think you have been harassed on the basis of any of the protected categories listed above, have observed harassing behavior, or need more information, you are encouraged to contact Jayne M. Grandes, Director of University Harassment Compliance and Equity, Rutgers, The State University of New Jersey, 56 Bevier Road, Piscataway, NJ 08854, 732/445-3020, ext. 626, or by email at uhce@hr.rutgers.edu. You may obtain copies of the *Policy Prohibiting Harassment and the Harassment Complaint Process* on our web page at <http://uhr.rutgers.edu/uhce>.

POLICY AGAINST VERBAL ASSAULT, DEFAMATION, AND HARASSMENT

Statement of Principles

Intolerance and bigotry are antithetical to the values of the university and unacceptable within the Rutgers community. One of the ways the university seeks to effect this principle is through a policy of nondiscrimination, which prohibits discrimination on the basis of race, religion, color, sex, age, sexual orientation, national origin, ancestry, disability, marital status, or veteran status in university programs. In order to reinforce institutional goals of nondiscrimination, tolerance, and civility, the following policy against verbal assault, defamation, and harassment makes clear that such behavior toward others violates acceptable standards of conduct within the university. (This policy is not intended to supersede the university's policy against harassment.)

Verbal assault, defamation, or harassment interferes with the mission of the university. Each member of this community is expected to be sufficiently tolerant of others so that all students are free to pursue their goals in an open environment, able to participate in the free exchange of ideas, and able to share equally in the benefits of our educational opportunities. Beyond that, each member of the community is encouraged to do all that she or he can to ensure that the university is fair, humane, and responsible to all students.

A community establishes standards in order to be able to fulfill its mission. The policy against verbal assault, defamation, and harassment seeks to guarantee certain minimum standards. Free speech and the open discussion of ideas are an integral part of the university community and are fully encouraged, but acts that restrict the rights and opportunities of others through violence, intimidation, the destruction of property, or verbal assault, even if communicative in nature, are not protected speech and are to be condemned.

Prohibited Conduct

Any of the following acts, even if communicative in nature, are prohibited "separation offenses" (charges that could lead to suspension or expulsion from the university) under the provisions of the University Code of Student Conduct:

1. Use of force against the person or property of any member of the university community or against the person or property of anyone on university premises, or the threat of such physical abuse. (Verbal assault may be prosecuted as a "threat of . . . physical abuse.")

2. Theft of, or intentional damage to, university property, or property in the possession of, or owned by, a member of the university. (Acts of graffiti or other vandalism may be prosecuted as "intentional damage to . . . property.")
3. Harassment, which is statutorily defined by New Jersey law to mean, and here means, purposefully making or causing to be made a communication or communications anonymously or at extremely inconvenient hours, or in offensively coarse language, or in any other manner likely to cause annoyance or alarm, or subjecting or threatening to subject another to striking, kicking, shoving, or other offensive touching, or engaging in any other course of conduct or of repeatedly committed acts with purpose to alarm or seriously annoy any other person. Harassment is considered a separation offense under the University Code of Student Conduct.
4. Defamation, which is judicially defined to mean, and here means, the unprivileged oral or written publication of a false statement of fact that exposes the person about whom it is made to hatred, contempt, or ridicule, or subjects that person to loss of the goodwill and confidence of others, or so harms that person's reputation as to deter others from associating with her or him. Defamation is considered a separation offense under the University Code of Student Conduct.

While any of the four categories of acts listed above is a separation offense that, if proven, could lead to a sanction of expulsion or suspension from the university under the provisions of the University Code of Student Conduct, clearly minor instances of such prohibited behavior should be resolved at the college level and not be treated as separation offenses requiring a university-level hearing. The initial judgment of whether a particular act is of a separable or nonseparable nature is made by the appropriate college official.

Students who believe themselves to be victims of verbal assault, harassment, or defamation should report such incidents to the dean or the dean of students of their college or school. In addition, the following individuals have been identified to handle complaints:

Brian T. Rose, director of compliance, student policy, and judicial affairs, 3 Bartlett Street, College Avenue campus (732/932-7312);

Cheryl Clarke, director of diverse community affairs and lesbian/gay concerns, 3 Bartlett Street, College Avenue campus (732/932-1711);

Associate provost for student life, Armitage Hall, Room 248, Camden campus (856/225-6050);

Marcia W. Brown, associate provost for student affairs and community outreach, Center for Law and Justice, Newark campus (973/353-5234).

Some complaints can and should be resolved by informal methods, while others will require the implementation of formal procedures. All complaints are treated confidentially; complainants are encouraged to report incidents even if they do not wish to pursue the matter beyond the reporting stage.

NONDISCRIMINATION POLICY

It is the policy of Rutgers, The State University of New Jersey, to make the benefits and services of its educational programs available to students, and to provide equal

employment opportunity to all employees and applicants for employment, regardless of race, religion, color, national origin, ancestry, age, sex, sexual orientation, disability, marital status, or veteran status. (Douglass College, as a traditionally and continuously single-sex institution, may, under federal law, continue to restrict college admission to women.) Questions concerning student rights violations should be addressed to Brian T. Rose, Director of Compliance, Student Policy, and Judicial Affairs (732/932-7312). Questions concerning harassment or employment discrimination should be directed to Jayne M. Grandes, Director of University Harassment Compliance and Equity (732/445-3020, ext. 626).

DRUG-FREE SCHOOLS AND CAMPUSES ACT

The Drug-Free Schools and Campuses Act requires institutions of higher education to adopt and implement a program to prevent the unlawful possession, use, or distribution of illicit drugs and alcohol by students and employees. In compliance with this federal regulation, Rutgers has various policies and programs in place. The University Code of Student Conduct, available at <http://www.rci.rutgers.edu/~judaff/code.htm>, or through the Assistant Director of Student Judicial Affairs (732/932-9414), provides information regarding prohibited conduct and sanctions related to drug and alcohol possession, use, and distribution. The university also has adopted a Policy on the Use of Alcoholic Beverages that can be accessed online at <http://www.rci.rutgers.edu/~polcomp/alcohol.shtml>. In addition, Rutgers offers extensive educational resources and programming related to alcohol and other drugs through Rutgers University Health Services. Students can access educational materials and program information online at <http://health.rutgers.edu/healthinfo/alcohol.htm>. More comprehensive information regarding the Drug-Free Schools and Campuses Act is set forth in the Student Health Insurance Manual, located online at <http://health.rutgers.edu/insurance/RUHSInsurancebook.pdf>, and is provided to all new students.

EQUITY IN ATHLETICS DISCLOSURE ACT REPORTS

In compliance with the Equity in Athletics Disclosure Act, Rutgers provides information on men's and women's athletic programs (<http://athletics.rutgers.edu/>), including the number of participants by gender for each varsity team, operating expenses, recruiting expenditures, athletically related student aid, and revenues. The first report was issued in October 1996 with annual updates thereafter. The reports are available at the reference desks of the main branches of the university library system (Alexander Library, Library of Science and Medicine, Robeson Library, and Dana Library), and at the intercollegiate athletics offices.

GRADUATION RATES

The Integrated Postsecondary Education Data System (IPEDS) Graduation Rate Survey is an annual report

of graduation rates of the university's degree-seeking, full-time undergraduate students by gender and race/ethnicity, and by sport for those who received athletically related student aid. This report is available at <http://oirap.rutgers.edu/disclosure.html>.

TEACHER PREPARATION PROGRAM PASS RATES

In compliance with the Higher Education Act, Rutgers provides data on Teacher Preparation Program pass rates and related issues. Detailed information about Rutgers' report to the state can be found at <http://oirap.rutgers.edu/disclosure.html>.

STUDENT RECORDS AND PRIVACY RIGHTS

Rutgers, The State University of New Jersey, complies with the Family Educational Rights and Privacy Act (FERPA). FERPA affords students certain rights with respect to their "education records" as that term is defined in the law. These rights include the following:

1. The student has the right to inspect and review his or her education records within 45 days of the date Rutgers receives a proper request for access to such records.
2. The student has the right to request amendment of education records that the student believes are inaccurate or misleading.
3. Rutgers shall obtain the prior consent of the student before disclosing personally identifiable information contained in the student's education records, except to the extent FERPA authorizes disclosure without consent.
4. The student may direct complaints concerning the alleged failure of Rutgers to comply with the requirements of FERPA to the Office of Compliance, Student Policy, and Judicial Affairs, 3 Bartlett Street, College Avenue campus (732/932-7312), or to the U.S. Department of Education, c/o Family Policy Compliance Office, U.S. Department of Education, 400 Maryland Avenue SW, Washington, DC 20202-4605.

Students wishing to exercise their rights to inspect and review their education records should submit a written request to the appropriate official at the Rutgers office which is custodian of the records they wish to review. Students requesting amendment of education records should first review the policies and procedures of their college or school and/or consult with their dean of students, or equivalent official. FERPA permits disclosure of directory information without a student's consent, unless the student has requested such information be kept confidential. Directory information includes the student's name, address, phone, school of attendance, and several other fields of information. For information on how to keep your directory information confidential, visit the Rutgers Online Directory by using the "Find: People" link of the Rutgers home page (<http://www.rutgers.edu>), or contact the Office of the Registrar on your campus. Rutgers uses a student's social security number as an identification number. While the number is not released as directory information and its confidentiality is protected in the same manner as are other educational records, Rutgers offers students the

opportunity to acquire a substitute number. Students wishing to have a substitute number assigned must go to the registrar's office with two forms of identification and complete the appropriate forms. Rutgers publishes two official notices concerning FERPA at least twice per academic year. The official notices are archived on the Office of Compliance, Student Policy, and Judicial Affairs web site at <http://www.rci.rutgers.edu/~polcomp>. The notices provide full information on Rutgers' compliance with FERPA including the current definition of "directory information." Students with questions about FERPA or the privacy of their records should consult these notices and/or contact the Office of Compliance, Student Policy, and Judicial Affairs, 3 Bartlett Street, College Avenue campus (732/932-7312, cspc@rci.rutgers.edu).

STUDENT RESIDENCY FOR TUITION PURPOSES

A determination of residency status for the purpose of tuition assessment is made by the university based on information provided by the applicant in accordance with the procedure outlined in the policy. A copy of the policy may be secured from the registrar's office or the admissions office.

Procedure

The Initial Determination

At the time an individual initially applies for admission into any graduate or undergraduate college or division of the university, the respective admissions office determines an admitted applicant's resident status for tuition assessment.

The determination made at this time shall prevail for each term unless a change is authorized as provided hereinafter.

After the Initial Determination

The status of residency for tuition purposes of students continuing in a college or division of the university is determined by the registrar of the respective college or division. The determination made by the registrar either conforms to the initial determination of the admissions office or reflects a change as provided hereinafter.

Request for a Change of Status

Requests for a change in residency status are accepted no later than the last day of the term for which changed status is sought. All supporting affidavits, deemed appropriate by the adjudicating official pursuant to New Jersey Administrative Code, Volume 9, Section 5 et seq., must be filed by the petitioner in accordance with the time limit specified in the preceding sentence. In no case may supporting affidavits be filed later than four weeks from the conclusion of the term for which the residency assessment is requested. Failure to comply with this provision, unless judged otherwise by the adjudicating official, voids the petition for the term in question. If, based on the information submitted in the request, the student qualifies for resident tuition assessment, such change relates only to the current and subsequent terms. No adjustments in tuition assessments are made and no refund vouchers are processed for any prior term.

Appeals

Appeals from the initial determination and any determination made after a request by a student for a change in residency status are accepted no later than three months after the date of notification of any such determination. Unresolved appeals are forwarded to either the associate vice president for enrollment management or the university registrar. These officers respond to the student within 30 working days of the receipt of the appeal in the appropriate office. Appeals from this determination should be submitted to the vice president for university budgeting by the student within two weeks after the director of admissions or the university registrar has issued a determination. The decision of the vice president for university budgeting is final.

Students' Responsibilities

Students are responsible for providing relevant information upon which a residency determination can be made. The burden of proving his or her residency status lies solely upon the student. Moreover, it is considered the obligation of the student to seek advice when in doubt regarding eligibility for in-state tuition assessment. If the student neglects to question his or her eligibility status beyond the period specified above, that student forfeits his or her right to a residency assessment to which he or she might have been deemed to be eligible had he or she filed an appeal at the appropriate time.

Penalties

If a student has obtained or seeks to obtain resident classification by deliberate concealment of facts or misrepresentation of facts or if he or she fails to come forward with notification upon becoming a nonresident, he or she is subject to disciplinary action.

RESEARCH POLICY AND RESEARCH CENTERS

Research at the university, apart from that conducted by students in connection with their academic course work, is in general intended to lead to publication in some form so that its results are available to interested persons everywhere. All university-conducted research must be available for public scrutiny and use. The university does not accept grants from or enter into contracts with governmental agencies or any other sponsors for research projects of which the results may not be made publicly accessible.

Most research projects at the university are carried on by faculty members and students within the facilities offered by their own departments. For on-campus research that cannot be conducted in department facilities, laboratories, or the library, the university has provided a number of cooperative research centers and bureaus. A list of the university's research centers may be found in the Divisions of the University chapter.

Many members of these organizations are active in graduate instruction. Information about their programs and activities may be found in *Research at Rutgers*, a handbook and bibliography published by the Research Council, the university agency that sponsors and coordinates faculty research.

PATENT POLICY

All students are governed by the university's patent policy, which is described in a statement available in the Office of Research and Sponsored Programs and the offices of all deans and department chairpersons.

Degree Requirements

This section outlines the minimum requirements of the Graduate School–Camden for each of the advanced degrees under its jurisdiction. The faculty in charge of each program may impose additional requirements of its own. The most significant of these additional requirements are announced in the program descriptions in the Programs, Faculty, and Courses chapter.

MASTER'S DEGREES

General Requirements

Candidates for the M.A., M.P.A., M.S., M.S.T., or M.P.T. degree must satisfy the requirements of both the Graduate School–Camden and those of the program in which they are enrolled. The requirements of the Graduate School–Camden are as follows:

1. A minimum of 30 credits of successful graduate study must be completed.
2. The candidate must successfully complete a final comprehensive examination in the student's field of concentration (does not apply to the M.A. in liberal studies degree).
3. A writing requirement must be satisfied by either a master's thesis or demonstration to the faculty of ability to write a creditable expository or critical essay. This may be fulfilled either as part of a regular course or seminar or in a special assignment designed for such purposes.
4. Two-thirds of the student's degree program in graduate level course work must be completed under the jurisdiction of the Graduate School–Camden.
5. No more than one-third of a student's program may consist of transferred graduate, graded course work.
6. No more than 9 credits with a grade of C or C+ are allowed.
7. No more than 9 credits of advanced Rutgers undergraduate course work (numbered 300 or 400) approved by the graduate program may be taken for graduate credit.
8. No undergraduate transfer credit will be accepted from any outside college or university.

Additional requirements for specific programs are noted in the Programs, Faculty, and Courses chapter.

All programs of study are subject to review by the dean of the Graduate School–Camden and to the approval of the candidate's program faculty.

TIME LIMITS FOR DEGREES

The minimum and maximum lengths of time required to complete a degree, determined by a student's full-time or part-time status, and the number of credits required for the degree are as follows:

<u>Degree</u>	<u>Total Credits</u>	<u>Status</u>	<u>Min.</u>	<u>Years Avg.</u>	<u>Max.</u>
M.A., M.S.	30	Full time	1	1.5	3
M.S.T.		Part time	1	3	5
M.P.A.	42	Full time	1.5	2.5	5
		Part time	2	4	6
M.P.T.	75	Full time	2	2	3
		Part time	3	3	4

GRADUATION

When entering their final term, candidates who anticipate faculty recommendation for conferral of the degree are required to follow the procedures listed below:

1. Ensure that all academic requirements have been or will be completed.
2. Ensure that related fees and any outstanding debts to the university have been or will be paid.
3. Complete degree candidacy and diploma application forms, available from graduate program directors or the Office of the Dean, Graduate School–Camden.
4. Submit an application for admission to degree candidacy to the Graduate School–Camden.
5. Submit a graduate diploma application to the Camden registrar's office. The degree cannot be conferred as scheduled and graduation will be delayed if this form is filed after the deadline. Students *must* refile this form if the deadline has passed.

A candidate who does not wish to attend commencement is asked to indicate that on the graduate diploma application. At the time of commencement, a degree may be conferred *in absentia* only if the candidate has notified the university registrar that he or she is unable to attend the commencement exercises. In all cases, the candidate should indicate the address to which the diploma may be mailed during the months of June and July.

Diplomas are withheld from all students whose financial accounts or library records are not clear or who have other outstanding obligations to the university.

AWARDS

Two awards are granted to graduate students who have demonstrated intellectual excellence in the course of completing the work for a graduate degree. One is funded by the Rutgers–Camden Alumni Association, the other by contributions that were made in memory of Coral Lansbury, a distinguished scholar who served as the first dean of the Graduate School–Camden between 1984 and 1991.

DEADLINES

Both the diploma application and the degree candidacy application are available in the Office of the Dean of the Graduate School–Camden and must be submitted by the dates listed below:

<u>Diploma Date</u>	<u>Diploma Application Deadline</u>	<u>Degree Candidacy Application Deadline</u>
October	October 2	October 2
January	January 2	January 2
May/June	April 2	May 2

The diploma application should be sent to the address shown on page 4 of the form. The degree candidacy application should be signed and approved by the graduate program director and then submitted to the Office of the Dean of the Graduate School–Camden for certification.

It is the responsibility of the student to complete all requirements for graduation by the scheduled dates listed. Each student should consult with the graduate program director of his or her program and with the Office of the Dean of the Graduate School–Camden with respect to the completion of the requirements for graduation. Conferral of degrees and diplomas occurs once a year at the annual spring commencement. However, students who file the applications and complete all other requirements for the degree by the announced October or January dates will have a diploma dated for the respective month, although they will not receive it until the following spring. Students may, therefore, request a temporary certificate (letter) of completion by submitting a written request to the Office of the Dean of the Graduate School–Camden.

Programs, Faculty, and Courses

In this chapter, detailed descriptions of the programs offered by the Graduate School–Camden appear in alphabetical order by subject name. Each program listing identifies the degree or degrees offered, the name and campus address of the graduate program director, a list of the members of the graduate faculty in charge of the program and their associates, a description of the program's special purposes and requirements, and a list of courses.

BIOLOGY 120

Degree Programs Offered: Master of Science

Director of Graduate Program: Joseph V. Martin, Science Building

Members of the Graduate Faculty

Rocco Carsia, Associate Professor of Physiology, UMDNJ; Ph.D., Rutgers

John Dighton, Professor of Ecology; Ph.D., London

Robert C. Evans, Associate Professor of Botany; Ph.D., Ohio State

Dennis J. Joslyn, Professor of Zoology; Ph.D., Illinois

Hsin-Yi Lee, Professor of Zoology; Ph.D., Minnesota

Joseph V. Martin, Associate Professor of Zoology; Ph.D., Southern California

Patrick J. McIlroy, Associate Professor of Physiology; Ph.D., California (Berkeley)

Mark D. Morgan, Professor of Zoology; Ph.D., California (Davis)

Robert G. Nagele, Associate Professor of Molecular Biology, UMDNJ; Ph.D., Rutgers

William M. Saidel, Associate Professor of Zoology; Ph.D., Massachusetts Institute of Technology

Daniel H. Shain, Assistant Professor of Zoology; Ph.D., Colorado State

Programs

While emphasizing the unity of fundamental concepts in biology, the master of science curriculum provides an opportunity for developing a concentration in cell and molecular biology, ecology, neurobiology, or physiology. An emerging focus for interdisciplinary research on the Camden campus is the study of information processing in complex biological systems. A research thesis may be pursued in any of these areas.

Since 1971, more than 150 students have completed the M.S. program at Camden and have gone on to Ph.D. programs in the biological sciences; professional schools; research institutions; and positions of responsibility in industry, education, and environmental management. Most members of the graduate faculty at Camden also are affiliated with Ph.D. programs at Rutgers in New Brunswick or at the University of Medicine and Dentistry of New Jersey in Stratford. A number of students receiving advanced degrees at Camden have continued their doctoral work with one of the Camden faculty through enrollment in one of these programs.

An electron microscope facility, a tissue culture laboratory, and a variety of modern molecular biological and electrophysiological instruments are available for research and instruction at the Camden campus. In addition, there are opportunities for fieldwork at the Pinelands Field Station in the Brendan T. Byrne State Forest. Through arrangements with appropriate Camden faculty, ecological research also can be performed at the Tuckerton Marine Field Station.

Although fully capable of meeting the requirements of the full-time student, the design of the M.S. program, with classes offered in the late afternoon, evening, and on Saturday, has appealed to those students whose outside obligations limit their hours of attendance or the number of courses that can be completed each term.

Admission Requirements

Applications for admission to the graduate program in biology should be submitted no later than March 1 for the fall term if the

applicant wishes to be considered for assistantships, fellowships, or other financial aid. For applicants not requesting financial aid, the application deadline for the fall term is July 1. The application deadline for the spring term is December 1. Applicants to the program must satisfy the following criteria:

1. Complete the baccalaureate degree with a major in sciences, preferably in biology.
2. Submit transcripts showing satisfactory completion of basic biology courses, such as physiology, genetics, developmental biology, ecology, organic chemistry, college physics, and college mathematics through calculus.
3. Submit the results of the Graduate Record Examination.
4. Submit three letters of recommendation to the Office of Graduate and Undergraduate Admissions, Rutgers, The State University of New Jersey, 406 Penn Street, Camden, NJ 08102.
5. Include a personal statement of graduate school plans.
6. Submit other supporting information, such as work or research experience and special skills.

Application forms may be obtained from the Office of Graduate and Undergraduate Admissions, Rutgers, The State University of New Jersey, 406 Penn Street, Camden, NJ 08102.

Degree Requirements

Master of Science Program

Students must complete 30 credits of course work. Up to 8 credits may be earned in advanced undergraduate courses (300 to 400 level) at Rutgers. Up to 12 graduate credits (with grades of B or better) may be transferred from other institutions.

Plan A: Thesis. Up to 6 credits (in the form of 56:120:701,702 Research in Biology) can be awarded for the investigation of a research problem leading to a thesis. Of the remaining 24 credits, a minimum of 16 credits is required in graduate-level (500- to 600-level) courses. Students also are encouraged to report on their research at meetings of professional biologists and to publish their own research results in journals. They are expected to present the results of their research in the graduate program seminar.

Students following Plan A are expected to comply with the following regulations pertaining to thesis work for degree credit:

1. *Decision to Become Involved.* Either the graduate student contacts the Rutgers-Camden faculty member under whose direction he or she would like to work, or a faculty member suggests a particular project to a student. The faculty member must hold an appointment with the Graduate School-Camden.
If the student wishes to pursue a research project at an off-campus location, he or she must suggest this arrangement to a Rutgers-Camden faculty member whose interests are most closely related to the subject matter of the proposed project and who would be able to serve as an on-campus adviser. It is expected that a qualified individual at the off-campus location serves as director of the student's research. The student must, therefore, make arrangements with the appropriate individual(s) at the off-campus location as well as with the Rutgers-Camden faculty member.
2. *Thesis Committee.* This committee will be composed of at least three members who are employees of Rutgers University and shall include the student's adviser who, under normal circumstances, will act as chair. Additional members may be added to the committee as appropriate, with the approval of the Graduate School-Camden dean. Responsibility for the appointment of the committee members and committee chair lies with the program director in consultation with the student and the student's adviser.
3. *Initiation and Conduct of the Thesis Project.* The chairperson of the thesis committee arranges for the student to present to the full committee an outline of the proposed work, which must be in written form. A meeting is arranged between the student and the committee to discuss the outline. The purpose of this procedure is to demonstrate that the student has some knowledge of the area of concentration; that the project is feasible in terms of equipment, materials, and time; and that the student has a goal in mind.

In most instances, the research project outline must receive full committee approval before the student may register for research credits (up to a total of 6 credits toward the degree). If, as the research work progresses, some aspect not covered in the original outline proves more interesting or more profitable to pursue, deviation from the original proposal is possible with committee approval.

At the end of each term following approval of the research proposal, the student prepares a short (one- or two-page) written progress report for the research director. The report is circulated to other committee members for their information and becomes part of the student's file in the Department of Biology.

4. *Completed Thesis.* The thesis must be approved by the director of the student's research and then accepted by the other committee members. It is the student's responsibility to check with the Office of Graduate Studies in Camden to obtain information concerning the final thesis form, number of copies required, and deadlines.

Plan B: Nonthesis. The completion of 30 credits, with a minimum of 22 credits in graduate-level courses, and an essay on some problem in biology of current research interest are required. The essay may be written as part of a regular course or seminar or in a special course designed for such a purpose. The essay must be approved by the student's committee prior to the final comprehensive examination. Guided by his or her departmental adviser, the student has the opportunity to develop a concentration of 12 or more credits in either cell and molecular biology, ecology, neurobiology, or physiology.

Examinations

In both programs, students are expected to complete satisfactorily a final comprehensive examination. The final comprehensive examination is administered by a committee of the graduate faculty. The examination committee is composed of at least three members and includes the student's adviser, who normally acts as chairperson. Responsibility for appointing the committee members lies with the graduate director in consultation with the student and the student's adviser.

The examination normally is taken during the term in which the student completes his or her course of study. It covers the general field of biology but, when appropriate, places emphasis upon the student's area of concentration. It includes a thesis defense for students in Plan A.

The examination may be written, oral, or a combination of both. The student, in consultation with the chairperson of his or her committee, has the option of selecting the method of examination. This decision must be made early in the term in which the examination is to be administered. A written examination of about two to four hours in duration is administered by the chairperson of the student's committee and consists of questions submitted by the student's committee members. An oral examination of about two to three hours in duration is conducted by the student's committee.

An application for admission to candidacy must be filed early in the term in which the final examination is to be administered. Application forms are available from the director of the graduate program in biology. The examination must be completed in accordance with the schedule established by the Office of Graduate Studies in Camden. In the event of an unfavorable decision, the examination may be repeated twice.

Exceptions to Requirements

Any exceptions to course prerequisites must have the instructor's permission.

Any exceptions to program requirements, such as a waiver of preconditions for admission, must be approved by the program faculty.

Scholastic Standing

Academic Warning, Probation, and Dismissal

Each term the Scholastic Standing Committee reviews the scholastic record of all enrolled students and makes recommendations to the director for warning, probationary status, or dismissal of students

in academic difficulty. The director notifies the student in writing of any action taken. Students who receive a grade of C or C+ in any course taken to satisfy degree requirements are notified in writing that no more than 6 credits bearing a grade of C or C+ may be counted toward the degree. Students earning 9 credits (or three courses) or more with a grade of C+ or below are dismissed from the program.

Student Appeals

Student appeals of decisions of the Scholastic Standing Committee, or student grievances related to academic matters, must be presented in writing to the director of the graduate program within one month of the decision(s). Acceptable grounds for appeal are (1) technical error and/or (2) new information and/or (3) extenuating circumstances. Students are allowed to meet with the committee and are permitted to be represented by an adviser from within the university community. In consultation with the Scholastic Standing Committee and all parties to the dispute, the director proposes a resolution of the matter. If this is unsuccessful, the matter is placed before the membership of the graduate program faculty for its decision. While such faculty action usually is final, a student may appeal to the Graduate School-Camden in cases where he or she is dissatisfied with the resolution arrived at in the program.

Student Complaints about Grades

A student with a complaint about a grade must submit the complaint in writing to the course instructor within one week of the receipt of the grade. In the event of an unsatisfactory resolution of the problem, the student may appeal to the graduate program director, or designee selected by the graduate program, whose decision is final. Such appeal must be made in writing, no later than one week following the date of unsatisfactory resolution.

Graduate Courses

Note: The letters (F) or (S), which precede a course title, indicate that the course is offered during the fall or spring term, respectively.

56:120:503. (S) ESTUARINE BIOLOGY (3)

Prerequisites: Ecology, college chemistry, or permission of instructor.

Biology of estuarine organisms, with emphasis on the different behavioral, physiological, mechanical, and structural strategies used to live and reproduce in the species-restrictive estuarine environment. Basic ecological features that make estuaries unique and particularly important as nursery areas for fish and shellfish species are discussed, as well as human impact on estuaries.

56:120:505. (F) MARINE BIOLOGY (4)

Lec. 3 hrs., lab. 3 hrs. Prerequisites: Chemistry and ecology or permission of instructor.

Physical, chemical, and biological description of benthic and pelagic marine ecosystems, with emphasis on ecological factors that allow selected species to survive in particular environments. Several field trips coordinated with class meetings; taught on Saturdays.

56:120:507. (F) PLANT GEOGRAPHY (4)

Sem./lec. 5 hrs. Prerequisites: Botany and ecology.

Vegetation regions and principal subdivisions of North America; environments, ecology, plant cover, flora. Includes a three-day field trip to the northern Appalachians.

56:120:508. (S) CELL PHYSIOLOGY (4)

Lec. 3 hrs., lab. 3 hrs. Prerequisite: General physiology or biochemistry.

Analysis of functional activities of cells, with special emphasis on problems of cell permeability, cell-environment interactions, cell excitability and conduction, and secretion.

56:120:509. (F) CYTOGENETICS (4)

Lec. 3 hrs., lab. 3 hrs. Prerequisite: Genetics.

Topics include chromosome structure and cell division, chromosomes in sex determination, chromosomal aberrations, induction of mutations, and chromosomes as research tools. Laboratory studies include the preparation of metaphase and anaphase chromosomes, banding and labeling procedures, and the analysis of chromosomal abnormalities.

56:120:510. (S) CELL ULTRASTRUCTURE AND FUNCTION (3)

Lec. 2 hrs., lab. 3 hrs. Prerequisites: Microbiology, cell biology or histology.

Introduction to the methodologies employed in the study of cell organelles and their function, using selected cell types to emphasize basic methods of preparation of materials for electron-microscopical, X-ray diffraction, histochemical, and radioautographic studies.

56:120:511. (F) ICHTHYOLOGY (4)

Lec. 3 hrs., lab. 3 hrs. Prerequisite: Permission of instructor.

Classification, anatomy, physiology, ecology, and behavior of fishes, with particular emphasis on ecology and classification of species present in eastern North America and along the Atlantic coast.

56:120:512. (F) MAMMALIAN PHYSIOLOGY (3)

Lec. 3 hrs. Prerequisite: General physiology or human physiology.

Detailed study of several areas in mammalian physiology through lecture and student presentation of selected research reports.

56:120:513. (S) POPULATION GENETICS (3)

Prerequisite: Genetics.

Experimental approaches to measuring gene frequencies in animal and plant populations; changing genetic profiles in evolving populations.

56:120:514. (S) FIELD ECOLOGY (2)

Prerequisite: A course in ecology or permission of instructor. Registration limited. Occurs during 10 days of spring recess.

Field study of major plant and animal communities in the general area of either Everglades National Park, Great Smoky Mountains National Park, or the mid-Atlantic states. Visits to research institutions may be included.

56:120:515. (S) HUMAN GENETICS (3)

Lec. 3 hrs. Prerequisite: Genetics or molecular biology or permission of instructor.

Principles of human heredity. Topics include genetics aspects of health and disease, birth defects, metabolic disorders, modes of inheritance, molecular and biochemical analyses, genomics and proteomics. Case studies will be discussed.

56:120:516. (S) IMMUNOLOGY (3)

Prerequisite: Microbiology or cell biology or cell physiology.

Immunoglobulin gene rearrangements and antibody diversity; antibody structure; antibody-antigen interactions; monoclonal antibodies and immunoconjugates; immunochemistry techniques; cellular immunology; viruses of the immune system.

56:120:521. (F) CELL AND TISSUE CULTURE (3)

Lec. 3 hrs. Prerequisite: Cell biology.

Principles and techniques of cell and tissue culture; review of classical experiments on growth, differentiation, metabolism, and interactions of cells and other components of developing systems.

56:120:523. (S) TOPICS IN QUANTITATIVE BIOLOGY (3)

Prerequisite: Permission of instructor.

Designed primarily for those students without much prior experience in the use of quantitative methods for the analysis and interpretation of biological data; topics include sampling, experimental design, hypothesis testing, and analysis of variance.

56:120:525. (S) ADVANCED AQUATIC ECOLOGY (3)

Prerequisites: Ecology and inorganic chemistry.

Study of biological, chemical, and physical aspects of inland water bodies with emphasis on streams, rivers, and standing water bodies of the region.

56:120:529. (S) MOLECULAR GENETICS OF MICROORGANISMS (4)

Lec. 3 hrs., lab. 3 hrs. Prerequisite: Permission of instructor.

Surveys the genetics of bacteria, bacteriophages, and lower eucaryotes. Topics include general features of the genetic code, phage genetics, structure and replication of phage nucleic acids, extrachromosomal genetic elements, gene transfer in bacteria, and genetic analysis in lower eucaryotes.

56:120:530. (S) MOLECULAR CARCINOGENESIS (3)

Lec. 3 hrs. Prerequisite: Genetics or molecular biology or permission of instructor.

Detailed examination and discussion of the molecular mechanisms underlying the initiation, promotion, and progression of cancer. Topics include cancer genetics, signal transduction, mutagenesis, and molecular therapies.

56:120:531. (F) BIOLOGY OF PARASITIC PROTOZOA (2)

Prerequisite: Invertebrate zoology or parasitology.

Examination of the morphology, cell biology, and life history of various parasitic protozoans of humans and other animals. Topics include immune mechanisms, control measures, pathology, and the social and economic impacts of infection.

56:120:532. (S) BIOLOGY OF PARASITIC WORMS (2)

Prerequisite: Invertebrate zoology or parasitology.

Survey of the parasitic worms infecting humans and other animals. Emphasis placed on the transmission and reproductive strategies of the parasites, immune mechanisms, pathologic consequences, behavioral and other changes in the host, and the social and economic impacts of parasites.

56:120:534. (S) ADVANCED CELL AND DEVELOPMENTAL BIOLOGY (3)

Prerequisites: Cell biology and embryology.

In-depth discussion of selected topics in cell and developmental biology. Topics include gene regulation in development, cell reproductions, cell differentiation, neoplastic transformation, cell interaction, morphogenesis, pattern formation, and cell aging and senescence.

56:120:540. (F) NEUROSCIENCE (4)

Lec. 3 hrs., lab. 3 hrs. Prerequisite: 56:742:510 or permission of instructor.

Advanced study of the human nervous system; its role in normal motor function. Influence of neurophysiology, embryology, and histology in normal and abnormal development explored. Response of nervous system to disease and trauma assessed.

56:120:555-556. (F) NEUROBIOLOGY (3,3)

Prerequisite: General physiology or cell biology.

Study of the structure and function of nervous systems, including membrane properties of electrically excitable cells, mechanisms of synaptic transmission between neurons, and the neuroanatomical and functional organization of the mammalian brain.

56:120:560. (S) ENDOCRINOLOGY (3)

Prerequisite: Cell or systems physiology.

Endocrinology and neuroendocrinology. The structure and function of the endocrine glands, including the hypothalamus, and the biosynthesis and mechanisms of hormones.

56:120:570. (F) GLOBAL CLIMATE CHANGE (3)

Sem./lec. 3 hrs. Prerequisite: Permission of instructor.

Multidisciplinary discussions of a variety of topics concerning climate change: whether it is fact or fiction; the effects of climate change and pollution on ecosystems and populations; prediction of the consequences of climate change; and the ecological, social, economic, and legal repercussions of this worldwide problem.

56:120:575. (F) NEUROCHEMISTRY (3)

Lec. 3 hrs. Prerequisite: General physiology or cell biology.

Topics include properties of membranes, myelination, axonal transport, analysis of neurotransmitter receptor binding, physiological effector mechanisms of receptors, and neurotransmitter synthesis and metabolism.

56:120:580. (F) FUNGI IN ECOSYSTEMS (3)

Lec. 3 hrs. Prerequisite: General ecology or permission of instructor.

Introduction to the complexities of ecosystem function and the role fungi play in these processes. The impact of fungi on primary production, secondary production, population and community regulation, and their interactions with environmental pollutants will be discussed.

56:120:585. (S) RECOMBINANT DNA TECHNOLOGY (3)

Lec. 3 hrs. Prerequisite: Molecular biology or permission of instructor.

Examination of recombinant DNA technology and its utility in specific medical and industrial applications, as well as its use in basic research. Topics include discussion of in vitro mutagenesis, heterologous gene expression in a variety of hosts, disease diagnosis, and gene therapies using genetic engineering, as well as the ecological/societal impacts of DNA technology.

56:120:588. (S) LIFE AT EXTREMES (3)

Prerequisite: Permission of instructor.

Analysis of adaptations of organisms to extreme environments. Principles of evolution and biology as illustrated by unusual adaptations.

56:120:590. (F) POPULATION ECOLOGY (3)

Prerequisite: Ecology.

Emphasis placed on terrestrial vertebrates and arthropods; focus on patterns and determinants of population dynamics, ecological variation among populations, and the processes affecting community organization and species interactions. Three or four Saturday field trips may replace lectures in those respective weeks. Computer simulations of population dynamics (not requiring computer literacy) and a term paper developed from the recent ecological literature are required.

56:120:601,602. SEMINAR IN BIOLOGY (1,1)

Prerequisite: Permission of instructor.

Through discussion of papers developed and presented by students, a single topic from the area of cell biology, physiology, or ecology is investigated in depth.

56:120:619,620. INDIVIDUAL STUDIES IN BIOLOGY (BA,BA)

Prerequisite: Permission of instructor.

Designed to meet the needs of students who wish to conduct original research projects in biology in addition to, or in lieu of, thesis research. The research project is designed and conducted in consultation with a sponsor from the graduate faculty.

56:120:701,702. RESEARCH IN BIOLOGY (BA,BA)

Prerequisite: Permission of thesis adviser.

Open only to students working on an experimental research problem for the thesis.

56:120:800. MATRICULATION CONTINUED (0)

Continuous registration may be accomplished by enrolling for at least 3 credits in standard course offerings, including research courses, or by enrolling in this course for 0 credits. Students actively engaged in study toward their degree who are using university facilities and faculty time are expected to enroll for the appropriate credits.

56:120:866. GRADUATE ASSISTANTSHIP (E6)**56:120:877. TEACHING ASSISTANTSHIP (E6)**

CHEMISTRY 160

Degree Program Offered: Master of Science

Director of the Graduate Program: Paul Maslen

Members of the Graduate Faculty

Georgia Arbuckle-Keil, Professor; Ph.D., Pennsylvania

Luke A. Burke, Professor; D.Sc., Louvain (Belgium)

Thomas Colacot, Lecturer; Ph.D., IIT (India)

Roger Cowley, Professor; Ph.D., Cambridge (U.K.)

John Gagliardi, Associate Professor; Ph.D., Temple

Sidney A. Katz, Professor; Ph.D., Pennsylvania

Paul Maslen, Assistant Professor; Ph.D., Cambridge (U.K.)

Alex J. Roche, Assistant Professor; Ph.D., Durham (U.K.)

External Faculty

Kieron Burke, Ph.D., California (Santa Barbara)

Nancy Hopkins-Evans, Ph.D., Michigan

Jing Li, Ph.D., Cornell

Program

The master of science in chemistry program is designed to accommodate a wide variety of students with diverse backgrounds and needs. The department is small and flexible, but includes several world-renowned chemical research laboratories, where students can learn state-of-the-art techniques from professors and staff. Students may be either full time or part time, as courses meet in the evening. Many students are already working full time, often for chemical companies, and wish to upgrade their existing qualifications. Others are full time, concentrating on research, and often continuing on to Ph.D. programs after their master's. Limited support in the form of teaching and research assistantships is available for these students.

The program can be completed within one and one-half to two years by full-time students, or longer by part-time students. Courses range from traditional lectures and labs to full research courses. The skills learned by graduate students will enhance their value in industry, government, and academia. Most members of the graduate faculty are affiliated with Ph.D. programs on the Newark and New Brunswick campuses, so students can continue on to Ph.D. work with the same adviser on the Camden campus.

The research interests of the department are diverse and include radiation and environmental chemistry (biocatalysis for detoxifying hazardous waste), biochemistry (enzyme structure and function), organic chemistry (synthesis of organofluorine compounds), inorganic chemistry (synthesis of novel inorganic materials, and conducting and electroactive polymers), theoretical physical chemistry (chemical physics and electronic structure), and theoretical organic chemistry (reaction mechanisms, molecular modeling). Faculty and students participate in national and international conferences, and scientific results are published in top journals. Equipment currently used in the department includes a 300 MHz NMR spectrometer, a 2-D FTIR spectrometer, UV-VIS and fluorescent spectrometers, a high performance computing cluster for molecular modeling and visualization, and the latest Silicon Graphics workstations and multiprocessor Sun computer systems.

More information is available at <http://camchem.rutgers.edu> or by calling 856/225-6142.

Admission Requirements

Applications for admission to the graduate program in chemistry should be submitted no later than March 1 for the fall term if the applicant wishes to be considered for assistantships, fellowships, or other financial aid. For applicants not requesting financial aid, the application deadline for the fall term is August 15 and the application deadline for the spring term is January 1. It is sometimes possible to begin the graduate program during Summer Session. Visit <http://camchem.rutgers.edu> for more information.

Applicants must satisfy the following criteria:

1. Complete, by the date of enrollment in the graduate program, a baccalaureate degree with a major in chemistry or a related field.
2. Submit transcripts of all undergraduate and graduate work.
3. If seeking financial aid, submit the results of the Graduate Record Examination (GRE), preferably including the subject test.
4. Submit three letters of recommendation.
5. Submit the completed application form.
6. International students must submit TOEFL test scores.

Students with academic deficiencies in their backgrounds might be admitted on probation and often are required to take an undergraduate chemistry course in their first term, or they might be accepted as nonmatriculated, meaning they must take prescribed undergraduate chemistry courses prior to admission into the graduate chemistry program.

Applicants are requested to consult the preadmission section of the chemistry department's web site, <http://camchem.rutgers.edu/admission.html>, before submitting the university's official application.

Degree Requirements

Students must complete 30 credits of graduate course work, of which at least 18 must be lecture credits. Credit may also be obtained by conducting research and by writing a thesis. Up to

9 graduate credits may be transferred from other institutions, if approved by the program director. Graduate courses offered outside the program may be taken for graduate credit, but only if approved by the graduate faculty.

1. *Research Credit.* Up to 6 credits may be taken in the research courses 56:160:619,620.
2. *Thesis/Nonthesis.* Up to 6 credits may be taken in preparing a research thesis (56:160:701,702). Students not doing a thesis must prepare a short written introduction to some problem of current research interest in chemistry and present a 30- to 45-minute departmental seminar on the topic (1 credit). The seminar will be followed by a comprehensive final examination.
3. *Faculty Adviser and Committee.* All students are urged to find a faculty adviser (by mutual consent) before the start of their second terms, usually one who specializes in their areas of interest. Two other individuals will be appointed to form the student's committee. The committee oversees the selection of a research project, judges the acceptability of the thesis or essay, and conducts the final examination.
4. *Research or Library Project Initiation.* When a student is ready to begin research or a library project, an outline of the proposed topic is given to the graduate faculty for approval.
5. *Completed Thesis.* The thesis must be approved by the director of the student's research committee and then accepted by the other committee members. It is the student's responsibility to check with the Office of Graduate Studies in Camden to obtain information concerning the final thesis form, number of copies required, and deadlines.
6. *Teaching Assistants.* All teaching assistants are required to take at least 6 graduate credits (other than their teaching assistantship) each term. Teaching assistants get 6 E-credits (56:160:877) per term. Teaching assistantships are limited to two years duration.
7. *Research Seminar.* All full-time students must take the research seminar course (56:160:601,602) whenever offered. Part-time students also are encouraged to take this seminar. Up to 2 credits may be taken in the seminar course.
8. *Independent Study Credits.* Independent study credits are not counted as lecture-course credits unless special permission has been granted by the graduate faculty.

Final Examination (Thesis Defense)

All students are required to pass a final oral examination, conducted by their committee. This exam is at least one hour in length and begins with a presentation (open to the public and possibly scheduled as a research seminar) of her or his thesis or essay.

An application for admission to candidacy must be filed early in the term in which the final examination is to be administered. Application forms are available from the director of the graduate program in chemistry. The examination must be completed in accordance with the schedule established by the Office of Graduate Studies in Camden and the chemistry program. In the event of an unfavorable decision, the examination may be repeated twice.

Scholastic Standing

In order to graduate, the cumulative GPA obtained from lecture course credits (only) must be 3.0 or higher. Any student whose average lecture course GPA for a given term falls below 3.0 is automatically put on academic probation, and continued unsatisfactory performance may lead to separation from the program. Only one 2.0 and a maximum of 9 credits from grades of 2.0 and 2.5 can be counted toward the 30 credits. Further grades of 2.0 and 2.5 are not counted as credits and do not affect the cumulative GPA.

Student Appeals

Student appeals of decisions of the Scholastic Standing Committee, or student grievances related to academic matters, must be presented in writing to the director of the graduate program within one month of the decision(s). Acceptable grounds for appeal are (1) technical error and/or (2) new information and/or (3) extenuating circumstances. Students are allowed to meet with the committee and are permitted to be represented by an adviser from within the university community. In consultation with the Scholastic Standing Committee and all parties to the dispute, the director proposes

a resolution of the matter. If this is unsuccessful, the matter is placed before the membership of the graduate program faculty for its decision. While such faculty action usually is final, a student may appeal to the Graduate School-Camden in cases where he or she is dissatisfied with the resolution.

Student Complaints about Grades

A student with a complaint about a grade must submit the complaint in writing to the course instructor within one week of the receipt of the grade. In the event of an unsatisfactory resolution of the problem, the student may appeal to the graduate program director, or designee selected by the graduate program, whose decision is final. Such appeal must be made in writing, no later than one week following the date of unsatisfactory resolution.

Graduate Chemistry Courses

56:160:506. MATERIALS CHEMISTRY (3)

Introduction to the study of materials, including the relationships between the structures and properties of materials.

56:160:511. ADVANCED ORGANIC CHEMISTRY: PHYSICAL CONCEPTS (3)

Prerequisites: 50:160:335,336, or equivalent.

Advanced survey of organic chemistry. Molecular orbital theory, orbital symmetry correlations, structure and stereochemistry of organic molecules, chemistry of reactive intermediates (including free radicals), photochemistry, structure-reactivity relationships, and molecular rearrangements.

56:160:512. ADVANCED ORGANIC CHEMISTRY: SYNTHETIC METHODS (3)

Advanced survey of synthetic transformations and reaction mechanisms.

56:160:513. ORGANIC ANALYSIS (3)

Interpretation and use of infrared, visible, and ultraviolet spectroscopy; mass spectrometry; and nuclear magnetic resonance for the identification of organic compounds. Combination with separation techniques is included.

56:160:514. INTRODUCTION TO MOLECULAR MODELING (3)

Introduction to the use of computer-assisted molecular modeling techniques for the study of chemical problems; lectures on theoretical principles; instruction in use of modern modeling programs; and computer projects involving solution of chemical problems.

56:160:515,516. POLYMER CHEMISTRY I,II (3,3)

Introduction to the physical chemistry of macromolecules, aimed at understanding relations between molecular structures and properties of high polymers.

56:160:517. POLYMER CHEMISTRY LABORATORY (1)

Instruction in the use of major instrumentation for the characterization of physical properties of high polymers.

56:160:519. FLUOROCARBONS (3)

Provides a survey of the chemistry of fluorinated organic molecules emphasizing a broad mechanistic basis. Areas covered include comparisons of fluorinated and hydrocarbon compounds; introduction of organofluorine chemistry; preparation of highly fluorinated molecules; partial and selective fluorination, influence of fluorine and fluorocarbon groups on reaction centers; nucleophilic displacement and elimination from fluorocarbon systems: polyfluoroalkanes, -alkenes, and -alkynes; polyfluoroaromatic compounds; organometallic compounds, and ^{19}F nuclear magnetic resonance.

56:160:522. MOLECULAR SPECTROSCOPY (3)

Principles of electronic and vibrational spectroscopy of polyatomic molecules. Emphasis on the ways in which spectra yield information about molecular properties.

56:160:523. NUMERICAL METHODS IN CHEMISTRY (3)

Numerical integration and differentiation, Taylor series, and Fourier transforms, as used in data analysis in chemistry.

56:160:524. CHEMICAL STATISTICAL MECHANICS (3)

Principles, thermodynamics, Fermi and Bose distributions, nonideal gases, phase equilibria, solutions, reactions, fluctuations, and phase transitions.

56:160:525. DENSITY FUNCTIONAL THEORY AND APPLICATIONS (3)

Fundamentals of density functional theory. Properties of atoms, molecules, solids, and surfaces. Recent advances.

56:160:526. SURFACE CHEMISTRY (3)

Experimental spectroscopies, thermodynamics, chemical analysis, structure, phase transitions, optical properties, physisorption, chemisorption, energy transfer, and reactions at surfaces.

56:160:527. PRINCIPLES OF QUANTUM CHEMISTRY (3)

Schrödinger equation, angular momentum, symmetry, perturbation theory, self-consistent field theory, and molecular quantum mechanics.

56:160:528. THEORY OF SOLIDS (3)

Prerequisite: 56:160:537 or equivalent.

Band theory, thermodynamics, transport, optical properties, phonons, and magnetism.

56:160:531,532. ADVANCED INORGANIC CHEMISTRY I,II (3,3)

Theoretical methods, reaction mechanisms, spectroscopy, magnetism, and stereochemistry, as applied to inorganic compounds. Emphasis on coordination compounds of transition metals.

56:160:533. SYMMETRY APPLICATIONS IN CHEMISTRY (3)

Principles and applications of molecular and crystal symmetry. Topics include point groups, character tables, representations of groups, and other aspects of group theory; symmetry applications in structure and bonding; molecular orbital theory and ligand field theory; and selection rules for electronic, vibrational, and rotational spectroscopy.

56:160:535. X-RAY CRYSTALLOGRAPHY (3)

Introductory course in the principles and applications of X-ray crystallography to structural chemistry. Topics include symmetry properties of crystals, space groups, determination of crystal structure by X-ray diffraction, and analysis of X-ray photographic and diffraction data.

56:160:536. X-RAY CRYSTALLOGRAPHY LABORATORY (1)

Experimental techniques of X-ray crystallography and diffractometry. Data collection using single crystal X-ray diffractometer. Structure solution and refinement by various methods.

56:160:537. SOLID-STATE CHEMISTRY (3)

Theoretical and experimental aspects of solids. Topics include synthetic and crystal growth methods; solid-state structures; structure characterizations; phase diagrams; band theory; and selected chemical, physical, and electric properties of solids.

56:160:538. SOLID-STATE CHEMISTRY LABORATORY (1)

Experimental methods and techniques for the preparation of solid-state materials. Use of X-ray diffraction and optical and thermal instruments for structure analysis and property studies.

56:160:539. INORGANIC CHEMISTRY OF LESS FAMILIAR ELEMENTS (3)

Chemistry and associated correlations with spectroscopy, kinetics, thermodynamics, structure, reaction mechanisms, and chemical properties of the less frequently studied elements.

56:160:541. ELECTROCHEMISTRY (3)

Theory and applications of electrochemical principles and techniques, including voltammetry, potentiometry, chronopotentiometry, and spectroelectrochemistry.

56:160:545. RADIOCHEMISTRY AND RADIATION CHEMISTRY (3)

Prerequisite: 50:160:415 or equivalent.

Interactions of ionizing radiation with matter and the resulting radiation-induced chemical reactions: excitation, ionization, free radical formation and recombination; chemical consequences of nuclear reactions; and "hot atom" chemistry.

56:160:546. RADIATION AND NUCLEAR CHEMISTRY (3)

Study of nuclear reactions, ionizing radiation and its effects on the chemistry of matter. Microscale manipulations, physical aspects, target fabrications, compound syntheses, detectors, and other specialized techniques investigated.

56:160:575,576. SPECIAL TOPICS IN CHEMISTRY (BA,BA)

Subject matter varies according to the interest of the instructor and is drawn from areas of current interest.

Biochemistry Courses**56:115:511,512. BIOCHEMISTRY I,II (3,3)**

Study of the structure and function of proteins and enzymes. Analysis of the chemistry of carbohydrates, lipids, and nucleic acids. Detailed survey of metabolic pathways, with an emphasis on regulation.

56:115:522. PROTEIN STRUCTURE AND FUNCTION (3)

Basic structural principles of polypeptides, mechanisms of enzyme catalysis, biosynthesis and degradation of proteins, biophysical techniques used in the determination of peptide and protein structure, protein folding, protein engineering, catalytic antibodies, peptide and protein *de novo* design, solid-phase peptide synthesis, and interactive computer graphics modeling.

56:115:524. NATURAL PRODUCT CHEMISTRY (3)

Survey of carbohydrates, amino acids, peptides, biopolymers, heteroaromatics, terpenes, steroids, fatty acids, and alkaloids.

56:115:575,576. SPECIAL TOPICS IN BIOCHEMISTRY (BA,BA)

Subject matter varies according to the expertise of the instructor and is drawn from areas of current biochemical interest.

56:115:619,620. INDIVIDUAL STUDIES IN BIOCHEMISTRY (BA,BA)

Designed for students conducting original projects in chemistry in lieu of a research thesis. The project is designed and conducted in consultation with a sponsor from, or designated by, the graduate faculty.

56:115:701,702. RESEARCH IN BIOCHEMISTRY (BA,BA)

Prerequisite: Permission of thesis adviser.

Open only to students working on research for the thesis.

General Interest Courses**56:160:601,602. FIRST-YEAR SEMINAR IN CHEMISTRY (0.5,0.5)**

A variety of topics of current interest regularly presented and discussed by students, faculty, and invited experts.

56:160:603,604. SECOND-YEAR SEMINAR IN CHEMISTRY (0.5,0.5)

Continuation of 56:160:601,602.

56:160:619,620. INDIVIDUAL STUDIES IN CHEMISTRY (BA,BA)

Designed for students conducting original projects in chemistry. The project is designed and conducted in consultation with a sponsor from, or designated by, the graduate faculty.

56:160:701,702. RESEARCH IN CHEMISTRY (BA,BA)

Prerequisite: Permission of thesis adviser.

Open only to students working on research for the thesis.

56:160:800. MATRICULATION CONTINUED (0)

Continuous registration may be accomplished by enrolling for at least 3 credits in standard courses, including research courses, or by enrolling in this course for 0 credits. Students actively engaged in study toward their degree who are using university facilities and faculty time are expected to enroll for the appropriate credits.

56:160:866. GRADUATE ASSISTANTSHIP (E6)**56:160:877. TEACHING ASSISTANTSHIP (E6)****CRIMINAL JUSTICE 202**

Web Site: <http://sociology.camden.rutgers.edu/>

Degree Program Offered: Master of Arts

Director: Drew Humphries, 322 Armitage Hall

Members of the Graduate Faculty

Gail Caputo, Assistant Professor of Criminology; Ph.D., Rutgers-Newark

James A. Dunn, Jr., Professor of Political Science; Ph.D., Pennsylvania

James L. Garnett, Professor of Public Policy and Administration; Ph.D., Syracuse (Maxwell School)

Ted Goertzel, Professor of Sociology; Ph.D., Washington

Sharon Gramby-Sobukwe, Assistant Professor of Political Science; Ph.D., Temple

Richard Harris, Professor of Political Science; Ph.D., Pennsylvania

Russell Harrison, Associate Professor of Political Science; Ph.D., North Carolina

Drew Humphries, Professor of Sociology; Ph.D., California (Berkeley)

Michelle Meloy, Assistant Professor of Criminology; Ph.D. Delaware

Joni'a Meyer, Associate Professor of Criminology; Ph.D., California (Irvine)

Jane Siegel, Assistant Professor of Criminology; Ph.D., Pennsylvania

Program

The graduate program offers a curriculum in the administration of criminal justice designed for those seeking career opportunities or advancement in justice-related fields.

The master of arts in criminal justice builds on the multidisciplinary strength of the faculty. The public administration faculty offers courses designed to equip students with the skills to oversee complex public agencies. The criminal justice faculty emphasizes social science theories and methods to impart a comprehensive understanding of crime and the justice system. Faculty members in the School of Law and in history and liberal studies provide the program with a wide array of justice-related electives.

Students take courses in public management and budgeting and acquire a broad understanding of the criminal justice system, including contemporary issues affecting it, and the analytic skills required to conduct and to apply research and to assess public policy. In addition, students choose electives from designated offerings in public administration, history, law, and criminal justice.

The program is open to part-time and full-time students.

Courses are offered in the evening hours so that students with outside obligations can complete the degree in a timely fashion.

Dual-Degree Program

The graduate programs in criminal justice and in public policy and administration offer a dual M.A./M.P.A. degree. Students who complete the 30-credit curriculum in criminal justice may go on to earn an M.P.A. by taking 18 additional credits in public policy and administration. Special admission procedures may apply, so students interested in the dual-degree program must consult with advisers in both programs prior to admission.

Admission Requirements

Application forms may be obtained from the Office of Graduate and Undergraduate Admissions, Rutgers, The State University of New Jersey, 406 Penn Street, Camden, NJ 08102-1400, or at the web site <http://gradstudy.rutgers.edu>.

Application to the program may be made for the fall or spring term. May 1 is the deadline for fall admission, December 1 is the deadline for spring admission. Prospective students should be aware that a limited number of placements may favor fall applicants over spring applicants. All applicants must apply for admission for graduate study to the Office of Graduate and Undergraduate Admissions.

Students are encouraged to submit the results of the Graduate Record Examination (GRE) for consideration by the admission committee. Applicants who have worked in the field of criminal justice or who are not recent graduates are not, however, required to submit GRE results.

Prior to admission, all students are expected to have completed an undergraduate course in 50:920:301 Methods and Techniques of Social Research or an equivalent social science research course, as well as introductory course work in criminal justice. Those who have not will be expected to complete this course work prior to admission.

In addition to submitting the application form, students making application to the degree program must

1. possess a B.A. or B.S. from an accredited college or university
2. submit an official transcript showing all undergraduate and graduate course work
3. submit three letters of recommendation
4. submit a statement about personal and professional goals and about how this program will help fulfill them
5. provide a brief résumé if your work experience is relevant to the application

Nonmatriculated Status

The program accepts a limited number of students on a nonmatriculated basis. To apply as a nonmatriculated student, students must

1. possess a B.A. or B.S. from an accredited college or university
2. submit an official transcript showing all undergraduate and graduate course work
3. submit a personal statement about goals and the reasons for seeking nonmatriculated status
4. submit three letters of recommendation
5. submit a statement about personal and professional goals and about how this program will help you fulfill them
6. submit the list of courses you plan to take (*Note: Nonmatriculated students may not enroll in more than two courses per term and in no more than a total of four 3-credit courses.*)

Applicants who are accepted into the program as nonmatriculated students may take no more than 12 credits, all of which must be chosen from core courses. Advancement to degree status requires approval of the director and a minimum *B* grade in each core course.

Degree Requirements

To receive a master of arts in criminal justice, graduates must have

1. satisfactorily completed 30 credits of course work with a minimum cumulative average of *B*
2. demonstrated competence in appropriate fields
3. completed a research or evaluation project, culminating in a written analysis of a significant administrative or policy problem in criminal justice through courses 56:202:600 and 601
4. submitted the independent research project to a faculty committee for review and approval

The master of arts in criminal justice requires students to take a common core of 15 credits as follows:

- 56:202:500 Policy Analysis in Criminal Justice
- 56:202:515 Introduction to Public Budgeting and Finance
- 56:202:525 Public Management
- 56:202:600 Research Methods in Criminal Justice
- 56:202:601 Data Analysis in Criminal Justice

In addition, students are required to take 15 credits from among criminal justice elective courses. Elective courses marked with asterisks (*) are offered by the School of Law–Camden. Students should be aware that the law school term begins and ends on different dates than does the term for the Graduate School–Camden. Students should also recognize that law school courses may be especially demanding.

Transfer Credits

Students may apply to transfer up to 10 credits toward their M.A. in criminal justice degree at the Graduate School–Camden provided they satisfy the conditions for transfer credits described in the section on Academic Policies and Procedures.

Scholastic Standing

All students are required to maintain an average of *B* (3.0) or higher throughout the criminal justice curriculum.

Each term, a faculty committee reviews the academic record of enrolled students and makes recommendations to the program director for warning, probationary status, or dismissal of students. The director notifies the student in writing of any action taken.

Warnings: A student is warned if his or her total GPA falls below the minimum 3.0 and is required to meet with the program director to resolve any problems.

Probation: A student is placed on probation if he or she has not earned a minimum cumulative grade-point average of 3.0 after completion of 12 credits of course work. Students on probation are limited to a less-than-full-time load, and their class schedules must be approved by the program director.

Dismissal: A student is subject to dismissal if he or she has not earned a minimum cumulative grade-point average of 3.0 after completion of 18 credits of course work.

Incomplete Grades: All of the rules of the Graduate School–Camden regarding incomplete grades apply to the program in criminal justice. Whereas a student may acquire two grades of *Incomplete (IN)*, a student who acquires a third *IN* is placed on probation and is required to appear before the faculty review committee to explain the reasons for his or her difficulties in completing course work.

Student Appeals: If a student presents written evidence of technical error or the existence of extenuating circumstances that were not taken into consideration at the time the academic decision was made, an academic review of the scholastic standing decisions may be granted by a faculty committee. The faculty committee has the option of requiring remedial work or setting other conditions for continuation in the graduate program.

Student Complaints about Grades: A student with a complaint about a grade for a course must submit the complaint in writing to the course instructor within one week of the receipt of the grade. In the event of an unsatisfactory resolution of the dispute, the student may appeal to the program director. Such appeals must be made in writing no later than one week following the date of the unsatisfactory resolution. A further appeal within one week of the director's decision may be made to the dean of the Graduate School–Camden.

Graduate Courses

56:202:500. POLICY ANALYSIS IN CRIMINAL JUSTICE (3)

Entry level course, required for all entering students

The development, implementation, and evaluation of criminal justice policy. Ethics of law enforcement, court processes, and corrections. Evaluation of research on topics such as race, class, and gender disparities; capital punishment; gun control; drug policy; pornography; and gambling.

56:202:501. FOUNDATIONS OF POLICY ANALYSIS (3)

The logic of action, decision making, and belief; epistemological issues underlying scientific and policy research; causality, probability, statistics, and public policy; the role of problem definition, description, theory, model building, explanation, and prediction in policy research and decision making. Reviews major substantive theories of public choice and public policy making and critically examines them from a logical and theoretical perspective.

56:202:503. LAW AND PUBLIC POLICY (3)

The place of law in the formulation, articulation, and enforcement of public policy; legal sources, such as constitutions, statutes, cases, administrative rulings, and agency practices; federal, state, and local sources and materials examined for policy inconsistencies, contradictions, and overlap; the effectiveness of fees, taxes, licenses, labeling, injunctions, and other legal sanctions.

56:202:505. ORGANIZATIONAL BEHAVIOR (3)

Examines organizational behavior—or individuals and group/teams—and the organization context in which that behavior takes place. Organization theories as well as behavior theories and approaches discussed, including seminal historical works and more current treatments.

56:202:513. CRIMINOLOGY (3)

Explanation of crime and delinquency in American society. Topics include deterrence theory, biological explanations for crime, sociological theories, and conflict-based theories. Emphasis on social causes of crime.

56:202:515. INTRODUCTION TO PUBLIC BUDGETING AND FINANCE (3)

Combines readings with the development of a budget for a hypothetical city to demonstrate budget formats, the politics of budgeting, and methods of projecting expenditures and revenues. Administration and criteria for selecting taxes.

56:202:525. PUBLIC MANAGEMENT (3)

Contemporary management approaches, techniques, and skills for managing various kinds of public organizations. Decision making, administrative leadership, planning, implementation, evaluation, ethics, and budgeting are key topics.

56:202:536. PUBLIC INFORMATION SYSTEMS (3)

Management-oriented computer methods including personal productivity systems and office automation; database management; and the analysis, supervision, and coordination of the management information systems department within the larger organizational culture.

56:202:540. VICTIMOLOGY (3)

Study of the role and treatment of victims in the criminal justice system. Emphasis on risk factors and impact of crime on victims.

56:202:541. STUDIES OF CULTURAL DIVERSITY (3)

Either in historical or contemporary perspective, treatment of issues pertaining to gender, race, or ethnicity within western societies or examination of various developments in one or more nonwestern societies.

56:202:553. FINANCIAL MANAGEMENT OF PUBLIC PROGRAMS (3)

Prerequisite: 56:202:515.

Examines budgetary processes, municipal bonds, cash management, and intergovernmental fiscal relations as they apply to financial management of public programs. Topics include cost-benefit, cost-revenue, and cost-effectiveness analyses, as well as contemporary issues such as privatization and liability insurance.

56:202:557. HUMAN RESOURCE MANAGEMENT (3)

The relationship between employers, employees, and their labor relations organizations in government, health and human services, and the nonprofit sector; leadership and direction of employees; impact of collective negotiations on critical issues of public policy; civil service organizations.

56:202:558. EXECUTIVE LEADERSHIP AND COMMUNICATION SKILLS (3)

Strengths and limitations of various leadership theories. Awareness of personal learning, leadership, influence, and communication styles. Develops leadership skills through interpersonal exercises and through course projects involving current managerial and political issues. Communication skills involving writing, speaking, meetings, media relations, and strategic planning emphasized.

56:202:570. LABOR-MANAGEMENT RELATIONS (3)

Analysis of the structure and development of labor-management relationships in the United States and abroad, focusing on both private industry and governmental organizations. Explores history and the surrounding law while focusing on the negotiation and administration of collective bargaining agreements, related micro- and macroeconomic problems, and issues that accompany the growth of the nonunion sector in both private and public sectors.

56:202:571. AMERICAN LEGAL HISTORY I (3)

Survey of developments in American law from the colonial era through Reconstruction; special emphasis on the role of social, economic, and political development in fostering legal change. Topics include historical origins of American constitutionalism; tensions between judicial authority and popular rule; the law's role in American economic development; slavery, race, and law; status of women in American legal history; and history of American criminal justice.

56:202:572. AMERICAN LEGAL HISTORY II (3)

Overview of major themes dominating American legal history from 1870 to the present, including changing standards of legal education; admission to the bar and the practice of law; legal responses to social, technological, and economic changes; jurisprudential experiments such as Progressive-Pragmatism and American Legal Realism; and race relations.

***56:202:590. RACE AND AMERICAN LAW (3)**

Examines the role that law has played within the systematic subordination of racial minorities and in the formal elimination of racial badges of servitude. Materials are designed to provoke class discussion at both the scholarly level and at the more pragmatic level that students should find useful as they attempt to fashion legal remedies for future clients who, having won the eradication of overt racial barriers, seeks the substance of equal opportunity. Topics to be examined include voting rights, educational equality, contemporary miscegenation problems, employment discrimination, affirmative action, race and freedom of expression, race and intersectionality (with other differences such as class and gender), and race and reproductive rights. All of these subjects are studied in an historical context designed to aid understanding of current racial developments and its identification of continuing problems of race.

56:202:600. RESEARCH METHODS IN CRIMINAL JUSTICE (3)

Foundation in research methods commonly used in criminal justice and the social sciences. Includes methods of inquiry, causality, sampling, research instrument design, coding, and ethics and research procedures, e.g., survey research, experiments, fieldwork, and interview studies. Students design a research project, write a research proposal, and plan data collection for analyses, which are undertaken in 56:202:601.

56:202:601. DATA ANALYSIS IN CRIMINAL JUSTICE (3)

Prerequisite: 56:202:600.

Data analysis procedures and techniques needed for completion of the project designed in 56:202:600. Includes methods of testing hypotheses and various statistical techniques, with an emphasis on how to choose and execute appropriate procedures and interpret results utilizing statistical software. Students analyze data and draft results in preparation for submitting the completed paper for approval to a faculty review committee.

***56:202:624. SEX DISCRIMINATION AND THE LAW (3)**

Examines the law as a cause of and as a remedy for sex discrimination. Considers problems of sex discrimination in historical, economic, sociological, and political contexts. Topics include constitutional law, reproduction and sexuality, employment, family and property laws, and criminal law. Considers litigation and legislation as tools for the elimination of sex discrimination, with emphasis on lawyering skills and strategic concerns.

* Course is offered by School of Law-Camden. The starting and ending dates for the law school's term differ from those of the graduate program at Camden. Law school courses may be especially challenging.

***56:202:631. EMPLOYMENT LAW (3)**

A survey of common law, statutory and constitutional regulation of the employment relationship in both the private and public sectors, with primary attention to issues not covered in courses on collective bargaining or employment discrimination. Considerable time is devoted to the study of wrongful discharge law. Other topics covered may include job applicant screening process, restrictions on employee speech and conduct, employee privacy rights, statutory wages and family leave policies, employer-provided fringe benefits (e.g., health insurance and retirement benefits), workers' compensation laws, plant closing laws, employee stock ownership plans, and government provided employee benefits (e.g., unemployment insurance and social security).

***56:202:655. CRIMINAL PROCEDURE: THE INVESTIGATORY PROCESS (3)**

An in-depth study of the investigatory stage of the criminal process. Focuses on the power of the courts to shape criminal procedure and their capacity to control police investigatory practices, such as arrest, search and seizure, interrogation, and identification, through the 4th, 5th, 6th, and 14th amendments. Discusses the role of counsel in this process and explores competing theories of criminal procedure and related systems of social control, such as the juvenile justice system and civil commitment of the mentally ill.

***56:202:691. EVIDENCE (3)**

A study of the law and rules (with particular attention given to the Federal Rules of Evidence) governing the proof of disputed issues of fact in criminal and civil trials, including the functions of judge and jury; relevancy; real and demonstrative evidence, authentication and production of writings; the examination, competency, and privileges of witnesses; hearsay; impeachment; and burden of proof, presumptions, and judicial notice.

***56:202:695. LABOR LAW (3)**

A study of the common law's response to employees' efforts to organize and take concerted action to improve their wages, hours, and other employment conditions. The course traces the evolution of a national labor policy in this country through the New Deal and later federal legislation. Focus of the protections afforded by the federal law to union organizational activities; the procedures established by federal law for the selection of representatives for the purposes of collective bargaining; federal regulation of concerted economic activity by unions, such as strikes, boycotts, and picketing, and of countervailing employer action; and the extent of federal preemption of state regulation in the labor area.

56:202:800. MATRICULATION CONTINUED (0)

Continued registration may be accomplished by enrolling for at least 3 credits in standard course offerings or by enrolling in this course for 0 credits. Students who are using university facilities and faculty time are expected to enroll for the appropriate credits.

ENGLISH 350, 352

Degree Program Offered: Master of Arts

Director of the Graduate Program: Tyler Hoffman, Armitage Hall

Members of the Graduate Faculty

Joseph Barbarese, Assistant Professor; Ph.D., Temple
Holly Blackford, Assistant Professor; Ph.D., California (Berkeley)
Betsy Bowden, Professor; Ph.D., California (Berkeley)
Marie C. Cornelia, Associate Professor; Ph.D., Fordham
Richard Epstein, Associate Professor; Ph.D., California (San Diego)
Christopher J. Fitter, Associate Professor; Ph.D., Oxford
M.A. Rafeq Habib, Associate Professor; Ph.D., Oxford
Tyler B. Hoffman, Associate Professor; Ph.D., Virginia
William D. Lutz, Professor; Ph.D., Nevada (Reno); J.D., Rutgers
Timothy P. Martin, Associate Professor; Ph.D., Pennsylvania
Donald L. Mull, Associate Professor; Ph.D., Yale

* Course is offered by School of Law-Camden. The starting and ending dates for the law school's term differ from those of the graduate program at Camden. Law school courses may be especially challenging.

Robert M. Ryan, Professor; Ph.D., Columbia

Geoffrey M. Sill, Associate Professor; Ph.D., Pennsylvania State

Carol J. Singley, Associate Professor; Ph.D., Brown

Lisa Zeidner, Professor; M.A., Johns Hopkins

Program

The program offers four tracks leading to the M.A. degree: literature, creative writing, the teaching of writing, and Whitman studies. Each track includes 56:350:503 Introduction to Graduate Literary Study, a course in philology, and at least four literature courses, but also allows for four additional courses in a specialized area. The literature track is intended for students who want to pursue a general interest in literature or to prepare for doctoral study at another institution; the creative writing track is designed for students with interests in writing and publishing; the teaching of writing track equips students to teach composition and literature in secondary schools and community colleges; and the Whitman studies track offers an interdisciplinary approach to the literary and historical contexts of Camden's famous resident, Walt Whitman.

Teaching Certification

Students interested in teaching secondary school may work simultaneously toward the master's degree in English and secondary teaching certification.

In consultation with the graduate program director and the Teacher Preparation Program at Rutgers-Camden, students will determine those undergraduate and graduate courses needed to fulfill the general requirements in light of previous undergraduate and graduate coursework completed. A total of 30 credits in the subject area of English, including those earned at the undergraduate level, is required.

Admission Requirements

Applicants for admission to the program must complete the bachelor of arts degree with an undergraduate major in English or its near equivalent by the time they commence their graduate study. Applicants must submit results of the Graduate Record Examination (general test) and a writing sample that exhibits a mastery of English prose style, literary analysis, and documentation methods; students undertaking the creative writing option must submit a sample of their creative writing. The application is evaluated by a committee of graduate faculty from the Department of English. Evaluation is based on academic records, GRE scores, letters of recommendation, and the writing sample.

Application forms may be obtained from the Office of Graduate and Undergraduate Admissions, Rutgers, The State University of New Jersey, 406 Penn Street, Camden, NJ 08102.

Degree Requirements

The program's formal requirements are the completion of 10 term courses, including 56:350:503 Introduction to Graduate Literary Study and at least one course in philology, and a final comprehensive examination in English and American literature. No more than 6 credits of C or C+ may be used in meeting the requirements of the master's degree.

Students may enroll in a maximum of four graduate-level writing courses, which may include one term of independent study, in addition to five graduate-level literature courses and a linguistics or rhetoric course, in order to complete the 30 credits required for the master's degree in English. Permission of the instructor and the graduate program director is required for enrollment in the third and fourth writing courses. Students who complete four writing courses may be allowed to offer a substantial collection of poetry, prose, or playwriting in partial fulfillment of the final comprehensive examination requirement.

Up to 6 credits approved by the graduate program director and the graduate dean may be transferred from another graduate school once the student has satisfactorily completed 12 credits in the master's program in Camden.

International Study

Students may take up to two courses that include a short-term study tour abroad conducted by a member of the graduate faculty.

Scholastic Standing

Academic Warning, Probation, and Dismissal

Each term the Scholastic Standing Committee reviews the scholastic record of all enrolled students and makes recommendations to the director for warning, probationary status, or dismissal of students in academic difficulty. The director notifies the student in writing of any action taken. Students who receive a grade of C or C+ in any course taken to satisfy degree requirements are notified in writing that no more than 6 credits bearing a grade of C or C+ may be counted toward the degree. Students earning 9 credits or more with the grade of C+ or below are dismissed from the program.

Student Appeals

Student appeals of decisions of the Scholastic Standing Committee, or student grievances related to academic matters, must be presented in writing to the director of the graduate program within one month of the decision(s). Acceptable grounds for appeal are (1) technical error and/or (2) new information and/or (3) extenuating circumstances. Students are allowed to meet with the committee and are permitted to be represented by an adviser from within the university community. In consultation with the Scholastic Standing Committee and all parties to the dispute, the graduate program director proposes a resolution to the matter. If this is unsuccessful, the matter is placed before the membership of the graduate program faculty for its decision. While such faculty action usually is final, a student may appeal to the Graduate School-Camden in cases where he or she is dissatisfied with the resolution.

Student Complaints about Grades

A student with a complaint about a grade must submit the complaint in writing to the course instructor within one week of the receipt of the grade. In the event of an unsatisfactory resolution of the problem, the student may appeal to the graduate program director, or designee selected by the graduate program, whose decision is final. Such appeal must be made, in writing, no later than one week following the date of unsatisfactory resolution.

Graduate Courses (English 350)

56:350:501,502. INDIVIDUAL STUDIES IN BRITISH LITERATURE (3,3)

Available only by special arrangement.

Individual study in directed readings.

56:350:503. INTRODUCTION TO GRADUATE LITERARY STUDY (3)

Required of all students in the program, this course prepares students for graduate study through practice in current methods of research, interpretation, and criticism.

56:350:504. INTRODUCTION TO LINGUISTICS (3)

Methods of inquiry in phonology, morphology, syntax, semantics, and sociolinguistics. Analysis of the structures of various languages.

56:350:505-506. INTERNATIONAL STUDY (3,3)

A short-term study tour abroad focusing on an author or authors or on a literary theme.

56:350:507. STUDIES IN FICTION (3)

Narrative forms and their relation to the novel, with attention to theory of fiction.

56:350:508. CRITICAL THEORY (3)

Study of 20th-century debates in America and Europe: new criticism, Marxist theory, structuralism, and deconstruction.

56:350:510. STUDIES IN DRAMATIC FORM (3)

Studies in theater styles and conventions focusing on various periods of English or American drama.

56:350:511. STUDIES IN POETRY (3)

Styles, themes, genres, and conventions of poetry in English; nature and scope of individual achievement in relation to poetic traditions.

56:350:512. STRUCTURE OF THE ENGLISH LANGUAGE (3)

Linguistic analysis of the grammar of modern American English: phonetics, morphology, syntax, and semantics.

56:350:513. HISTORY OF THE ENGLISH LANGUAGE (3)

Evolution of English syntax and course of phonemic change; social and political contexts in which English has developed.

56:350:516. CREATIVE WRITING: PERSONAL ESSAY (3)

Techniques for writing autobiographical prose and memoir, focusing on strategies for transforming personal material.

56:350:517,518. CREATIVE WRITING: FICTION (3,3)

Exploration of traditional and nontraditional narrative forms and techniques, including point of view, character delineation, and dialogue. Some readings assigned, but emphasis is on development of students' own works; manuscripts are discussed in workshops and in individual conferences with the instructor.

56:350:519,520. CREATIVE WRITING: POETRY (3,3)

Using a variety of forms from sonnet and sestina to free verse, students experiment with poetic techniques and voices in a workshop format; students read their own works and receive critical responses from other students and from the instructor.

56:350:521,522. SPECIAL TOPICS IN CREATIVE WRITING (3,3)

May be repeated for credit with different topic.

Courses in the history and practice of particular genres of writing (consult the program director to determine course content).

56:350:523,524. INDIVIDUAL STUDY IN CREATIVE WRITING (3,3)

Closely supervised work on a sustained project in fiction, nonfiction, or poetry.

56:350:525. PROBLEMS IN ADVANCED WRITING (3)

Intensive workshop for advanced writers.

56:350:526. LITERARY CRITICISM: THE MAJOR TEXTS (3)

Study of conventions and current problems in critical discourse from Aristotle to the present.

56:350:528. APPLIED LINGUISTICS (3)

Practical application of linguistic theory to problems in various areas: professional contexts, media, advertising, and language acquisition. Other topics include analysis of spoken discourse, comparison of written and spoken language, and language standardization.

56:350:529. OLD ENGLISH LANGUAGE AND LITERATURE (3)

Introduction to Old English grammar, with readings from selected texts.

56:350:530. LINGUISTICS AND LITERATURE (3)

Application of concepts of linguistic analysis to the interpretation of literary texts. Topics include metaphor, speech acts, politeness, inference, point of view, and speech/thought presentation.

56:350:531. INTRODUCTION TO PUBLISHING AND EDITING (3)

Introduction to the editorial and production procedures involved in the publication of a literary or academic journal.

56:350:532. CHAUCER (3)

Readings in the *Canterbury Tales*, *Troilus and Criseyde*, and selected minor poems.

56:350:535. MEDIEVAL LITERATURE (3)

Major works of medieval English poetry and prose, including Chaucer.

56:350:539. THE RENAISSANCE (3)

Major prose and poetry of the English Renaissance.

56:350:542. NATURE AND CULTURE (3)

Study of the relations between human communities and the natural world, primarily in the works of British, American, and Native American writers.

56:350:543. ELIZABETHAN AND JACOBEAN DRAMA (3)

Development of the drama from 1580 to 1642, including works by Marlowe, Jonson, Dekker, Webster, and Middleton.

56:350:545. SHAKESPEARE (3)

Close reading of selected major plays.

56:350:549. SEVENTEENTH-CENTURY LITERATURE (3)

Poetry of Donne, Jonson, Herbert, Marvell, and others and selected prose works.

56:350:554. MILTON (3)

Poems and selected prose.

56:350:557. RESTORATION AND 18TH-CENTURY DRAMA (3)

Drama in the context of Restoration and Georgian England, 1660–1800.

56:350:559. EIGHTEENTH-CENTURY LITERATURE (3)

Neoclassical poetry, Augustan prose forms, and the early English novel.

56:350:569. THE ROMANTIC PERIOD (3)

Major romantic poets and selected prose works.

56:350:571,572. VICTORIAN LITERATURE (3,3)

Major Victorian poets, novelists, and essayists viewed in the context of the period's intellectual development.

56:350:573. INTRODUCTION TO LITERARY THEORY (3)

Introduction to contemporary literary theory, including formalism, structuralism, poststructuralism, Marxism, and other approaches.

56:350:581. CONSIDERING THE CANON (3)

Investigation of verbal art recorded in writing in Europe, North Africa, and the Middle Ages for the 2,500 years ending ca. 1400, with attention to the problems of reading and teaching translations.

56:350:583. TWENTIETH-CENTURY BRITISH FICTION (3)

Selected works of modern and contemporary British writers.

56:350:586. TWENTIETH-CENTURY BRITISH POETRY (3)

Major British poets of the 20th century.

56:350:587,588. CREATIVE WRITING: LITERARY NONFICTION (3,3)

Exploration of the essay, with an emphasis on journalistic non-fiction and subjects of contemporary interest.

56:350:589,590. PROBLEMS IN ADVANCED WRITING (3,3)

Methods and approaches in dealing with problems of advanced composition.

56:350:591. CREATIVE WRITING: PLAYWRITING (3)

Exploration of traditional and nontraditional approaches to writing plays, with emphasis given to completing the first draft of a two-act play.

56:350:592. LITERARY BIOGRAPHY (3)

Reading and discussion of the important modes of literary biography in the 19th and 20th centuries.

56:350:593,594. SPECIAL TOPICS IN BRITISH LITERATURE (3,3)

Readings in a specific field chosen by the instructor.

56:350:595,596. SPECIAL TOPICS IN LINGUISTICS (3,3)

Readings in a specific topic chosen by the instructor.

56:350:597,598. INDIVIDUAL STUDIES IN LINGUISTICS (3,3)

Available only by special arrangement.

Independent study in directed readings.

56:350:800. MATRICULATION CONTINUED (0)

Continuous registration may be accomplished by enrolling for at least 3 credits in standard course offerings, including research courses, or by enrolling in this course for 0 credits. Students actively engaged in study toward their degree who are using university facilities and faculty time are expected to enroll for the appropriate credits.

56:350:877. TEACHING ASSISTANTSHIP (BA)

Practicum for students holding teaching assistantships.

Graduate Courses (American Literature 352)

56:352:501,502. INDIVIDUAL STUDIES IN AMERICAN LITERATURE (3,3)

Available only by special arrangement.

Independent study in directed readings.

56:352:509,510. STUDIES IN AMERICAN LITERATURE (3,3)

Selected major writers seen in their historical or intellectual relationships.

56:352:511. AMERICAN LITERATURE TO 1900 (3)

Selected major authors, such as Hawthorne, Melville, Dickinson, and James.

56:352:522. TWENTIETH-CENTURY AMERICAN FICTION (3)

Selected works of modern and contemporary American writers.

56:352:525. TWENTIETH-CENTURY AMERICAN POETRY (3)

Major American poets of the 20th century.

56:352:529. STUDIES IN AFRICAN-AMERICAN LITERATURE (3)

Study of major black poets, fiction writers, and dramatists.

56:352:550. TEACHING READING: THEORY AND PRACTICE (3)

Theories, methods, and materials for the teaching of reading.

56:352:551. THEORY OF COMPOSITION (3)

Recent theories of composition, with attention to invention, arrangement, and style. Emphasis on application in teaching composition.

56:352:552. TEACHING WRITING: THEORY AND PRACTICE (3)

Teaching writing in English courses and in other academic disciplines. New theories of rhetoric and their relevance to the development of curriculum and the improvement of pedagogy.

56:352:553. READINGS IN CLASSICAL AND MODERN THEORIES OF RHETORIC (3)

Basic texts in the rhetorical tradition from Aristotle to the 20th century; the use of these theories in the teaching of writing and literature.

56:352:554,555. SPECIAL TOPICS IN RHETORIC (3,3)

Readings in a specific topic chosen by the instructor.

56:352:556,557. INDIVIDUAL STUDIES IN RHETORIC (3,3)

Available only by special arrangement.

Independent study in directed readings.

56:352:558. PRACTICUM IN TEACHING WRITING (3)

Practice in teaching writing at a local county college.

56:352:559. TOPICS IN TEACHING WRITING (3)

Readings in a specific issue in the teaching of writing. Topics vary from term to term.

56:352:593,594. SPECIAL TOPICS IN AMERICAN LITERATURE (3,3)

Readings in a specific field chosen by the instructor.

HISTORY 512

Degree Program Offered: Master of Arts

Director of the Graduate Program: Philip Scranton, Armitage Hall

Members of the Graduate Faculty

Jeffrey M. Dorwart, *Professor of History; Ph.D., Massachusetts*
Katherine Carte Engel, *Assistant Professor of History; Ph.D., Wisconsin*
Howard F. Gillette, Jr., *Professor of History; Ph.D., Yale*
Wayne Glasker, *Associate Professor of History; Ph.D., Pennsylvania*
Janet Golden, *Associate Professor of History; Ph.D., Boston*
Xiao-bin Ji, *Assistant Professor of History; Ph.D., Princeton*
Andrew Lees, *Professor II of History; Ph.D., Harvard*
William Lubenow, *Professor of History, Richard Stockton College; Ph.D., Iowa*
Margaret Marsh, *Professor of History; Ph.D., Rutgers*
Lisa Rosner, *Chair, Department of History, Richard Stockton College; Ph.D., Johns Hopkins*
Philip B. Scranton, *Professor II, Board of Governors Professor of History; Ph.D., Pennsylvania*
Jacob Soll, *Assistant Professor of History; Ph.D., Cambridge*
Gerald Verbrugghe, *Associate Professor of History; Ph.D., Princeton*
Allen L. Woll, *Professor of History; Ph.D., Wisconsin*

Associate Member of the Graduate Faculty

N.E.H. Hull, *Professor of Law; Ph.D., Columbia*

Adjunct Members of the Graduate Faculty

John Alвити, *Senior Curator, Franklin Institute; M.A., Wisconsin*
Bruce Lavery, *Curator of Architecture, Athenaeum of Philadelphia; B.S., LaSalle*

Program

The graduate program in history offers the master of arts degree with concentrations in American, American legal, or public history. The concentration in American history is designed for students who desire increased competence in historical studies preparatory or supplementary to teaching in that field on the high school or community college level, who seek qualification for admission to a doctoral program at another institution, and who wish to pursue a liberal education at an advanced level.

The concentration in public history is designed to be rigorously intellectual and thoughtfully practical, blending the customary curriculum for preparing scholars and teachers with courses on applied history. The specialized public history track is for students who plan to work as historians outside the academic setting as employees of historical societies and commissions, archives, documentary filmmaking companies, museums, governmental offices, or private firms.

Admission Requirements

Application for September admission to the program must be completed no later than July 1. For January admission, applications must be completed by November 15. Applicants to the program must satisfy the following criteria:

1. Submit transcripts showing satisfactory completion of undergraduate courses. Applicants should normally exhibit a B average in their previous academic work with evidence of distinction in their work in history.
2. Submit the results of the Graduate Record Examination.
3. Submit three letters of recommendation to the Office of Graduate and Undergraduate Admissions, Rutgers, The State University of New Jersey, 406 Penn Street, Camden, NJ 08102.

Application forms may be obtained from the Office of Graduate and Undergraduate Admissions, Rutgers, The State University of New Jersey, 406 Penn Street, Camden, NJ 08102.

Degree Requirements

American History Requirements

The formal degree requirements are the completion of 30 credits, including 56:512:531 Introduction to Public History and Historical Methods, 56:512:548 Readings in American History, 56:512:550 The Craft of History; 18 credits in American history colloquia (at least 6 of which must be research-focused colloquia and at least 3 of which must be in a colloquium with a comparative focus);

and a 3-credit research/writing seminar. Passing a comprehensive oral examination is the final degree requirement.

In addition to the 30-credit degree program, students may choose to write an M.A. thesis by enrolling in a 2-credit independent research course after taking the writing seminar.

American Legal History Requirements

The formal degree requirements are the completion of 30 credits, including: 56:512:531 Introduction to Public History and Historical Methods, 56:512:548 Readings in American History, 56:512:550 The Craft of History; a 3-credit research/writing seminar; 9 credits in legal history courses; and 9 credits in colloquia (at least 3 of which must be from a research-focused colloquium). Passing a comprehensive oral examination is the final degree requirement.

In addition to the 30-credit degree requirement, students may choose to write an M.A. thesis by enrolling in a 2-credit independent research course after taking the writing seminar.

Public History Requirements

The formal degree requirements are the completion of 33 credits, including 56:512:531 Introduction to Public History and Historical Methods, 56:512:548 Readings in American History, 56:512:550 The Craft of History; 9 credits in American history colloquia; 9 credits in public history electives; a 3-credit public history internship; and a 3-credit research/writing seminar. Passing a comprehensive oral examination is the final degree requirement.

General Requirements

No more than 9 credits of C or C+ may be used to meet the requirements of the master's degree. Up to 6 credits may be earned in advanced undergraduate (300 and 400 level) courses at Rutgers, with approval from the graduate program director. Up to 9 graduate credits (with grades of B or better) may be transferred from other institutions, with the approval of the graduate program director.

Full-time, matriculated graduate students in good standing may take up to 6 credits of their elective courses from other Rutgers graduate programs, upon approval of their adviser and the graduate program director. Specific courses in the M.A. program in English, the master of public administration program, and the J.D. program of the School of Law-Camden are appropriate choices for such cross-registration.

Scholastic Standing

Academic Warning, Probation, and Dismissal

Each term the Graduate Faculty Committee reviews the scholastic record of all enrolled students and makes recommendations for warning, probationary status, or dismissal of students in academic difficulty. The director notifies the student in writing of any action taken. Students who receive a grade of C or C+ in any course taken to satisfy degree requirements may be warned that their work is unsatisfactory or placed on probation. A student receiving a grade of C or C+ in more than 6 credits of course work may be dismissed from the program.

Student Appeals

Student appeals of decisions of the Graduate Faculty Committee, or student grievances related to academic matters, must be presented in writing to the director of the graduate program within one month of the decision(s). Acceptable grounds for appeal are (1) technical error and/or (2) new information and/or (3) extenuating circumstances. Students are allowed to meet with the committee and are permitted to be represented by an adviser from within the university community. In consultation with the Graduate Faculty Committee and all parties to the dispute, the graduate program director proposes a resolution to the matter. If this is unsuccessful, the matter is placed before the membership of the graduate program faculty for its decision. While such faculty action usually is final, a student may appeal to the Graduate School-Camden in cases where he or she is dissatisfied with the resolution.

Student Complaints about Grades

A student with a complaint about a grade must submit the complaint in writing to the course instructor within one week of the receipt of the grade. In the event of an unsatisfactory resolution of the problem, the student may appeal to the graduate program director, or designee selected by the graduate program, whose decision is final. Such appeal must be made, in writing, no later than one week following the date of unsatisfactory resolution.

Graduate Courses

56:512:501. COLLOQUIUM IN SOCIAL AND ECONOMIC HISTORY (3)

Introduction to American social and economic history, with emphasis on the family, class structure, economic institutions and development, conflict, and culture.

56:512:502. COLLOQUIUM IN AMERICAN LEGAL HISTORY (3)

Open to all history graduate students; preference given to students enrolled in the American legal history concentration.

Reading and presentation of original research by visiting scholars and graduate and law students enrolled in 56:512:651 Seminar in American Legal History.

56:512:503. COLLOQUIUM IN CULTURAL AND INTELLECTUAL HISTORY (3)

Assessment of enduring themes in American cultural and intellectual discourse.

56:512:513. COLLOQUIUM IN URBAN HISTORY (3)

Evaluation of the urbanization process in America, with attention to spatial development, social and economic processes, ethnicity, mobility, and politics.

56:512:525. COLLOQUIUM IN THE HISTORY OF WOMEN (3)

Overview of the issues and concepts of women's history; focus on the American experience.

56:512:526. COLLOQUIUM IN AFRICAN-AMERICAN HISTORY (3)

Systematic review of the black experience in America; topics such as slavery, free blacks and the labor market, family and culture, religion, and reform.

56:512:527. COLLOQUIUM IN AMERICAN POLITICAL HISTORY (3)

Problems and concepts in American political history, including political culture, state and party formation, authority and legitimacy.

56:512:528. COLLOQUIUM IN MILITARY AND DIPLOMATIC HISTORY (3)

Topics relating to the development of American foreign policy and national defense.

56:512:529. COLLOQUIUM IN COMPARATIVE HISTORY (3)

Analysis of one or more developments that have occurred both inside and outside the United States, with a view to illuminating the American experience in the light of foreign experience.

56:512:530. COLLOQUIUM IN LOCAL HISTORY (3)

Extensive examination of readings and sources for nearby history, with the goal of preparing a research paper on some aspect of southern New Jersey, Philadelphia, or Delaware Valley history.

56:512:531. INTRODUCTION TO PUBLIC HISTORY AND HISTORICAL METHODS (3)

Problems and concepts in public history; archival, bibliographic, research, presentation, and computer skills germane to the discipline.

56:512:548. READINGS IN AMERICAN HISTORY (3)

Major problems and most significant historical works in the field of American history. Generates awareness of the central themes in American history and introduces diversity and vitality of recent historical scholarship.

56:512:550. THE CRAFT OF HISTORY (3)

Study of historical theory and method, focusing on important figures in American historical tradition.

56:512:570. AMERICAN LEGAL HISTORY I (3)

Survey of developments in American law from the colonial era through Reconstruction; special emphasis on the role of social, economic, and political developments in fostering legal change. Topics include historical origins of American constitutionalism; tensions between judicial authority and popular rule; the law's role in American economic development; slavery, race, and law; status of women in American legal history; and history of American criminal justice.

56:512:571. AMERICAN LEGAL HISTORY II (3)

Overview of major themes dominating American legal history from 1870 to the present, including changing standards of legal education; admission to the bar and the practice of law; legal responses to social, technological, and economic changes; jurisprudential experiments such as Progressive-Pragmatism and American Legal Realism; and race relations.

56:512:580. COLLOQUIUM IN DOCUMENTARY FILM (3)

The documentary film from 1898 to the present; a traditional American mode of public history; how media presents history to the American public. Students evaluate both filmed and written documents.

56:512:582. RECORDS AND ARCHIVES MANAGEMENT (3)

Records and archives management in both private and public sectors; term project involves work with previously unorganized collections and the preparation of a finding guide.

56:512:586. MUSEUMS AND HISTORICAL INTERPRETATION (3)

Organization and management of historical institutions and collections, including acquisitions, cataloging, historical interpretation of artifacts to the public, historical site identification, and presentation.

56:512:588. MATERIAL CULTURE IN AMERICA (3)

Examination of material forms and uses in American history, including artifacts, the built environment, and domestic and public spaces.

56:512:650. SEMINAR IN AMERICAN HISTORY (6)

Workshop for the preparation and evaluation of a major research paper on an aspect of American history.

56:512:651. SEMINAR IN AMERICAN LEGAL HISTORY (3)

Workshop for the preparation and evaluation of a major research paper on an aspect of American legal history. Taken in sequence with 56:512:502 Colloquium in American Legal History for students enrolled in the American legal history concentration.

56:512:677. ADVANCED TOPICS IN AMERICAN HISTORY (3)

Special topics colloquium in American history.

56:512:679. ADVANCED TOPICS IN PUBLIC HISTORY (3)

Special topics elective in public history.

56:512:681. INDIVIDUAL READINGS (3)

Permission of faculty member and graduate program director required.
Independent readings course for advanced students.

56:512:698. INDEPENDENT STUDY IN HISTORY (BA)

56:512:700. INTERNSHIP IN PUBLIC HISTORY (3)

Supervised work experience in a public history office or private institutional setting, involving project work for one term or a summer.

56:512:701. RESEARCH IN HISTORY (2)

Permission of faculty member and graduate program director required.
Independent readings and research course for students intending to complete an M.A. thesis in history. Course must be taken in the term prior to taking 56:512:650 Seminar in American History.

56:512:800. MATRICULATION CONTINUED (0)

Continuous registration may be accomplished by enrolling for at least 3 credits in standard course offerings, including research courses, or by enrolling in this course for 0 credits. Students actively engaged in study toward their degree who are using university facilities and faculty time are expected to enroll for the appropriate credits.

Other Course

56:834:503. LAW AND PUBLIC POLICY (3)

The place of law in the formulation, articulation, and enforcement of public policy; legal sources, such as constitutions, statutes, cases, administrative rulings, and agency practices; federal, state, and local sources and materials examined for policy inconsistencies, contradictions, and overlap; the effectiveness of fees, taxes, licenses, labeling, injunctions, and other legal sanctions.

LIBERAL STUDIES 606

Degree Program Offered: Master of Arts

Director of the Graduate Program: Robert M. Ryan, Armitage Hall

Members of the Graduate Faculty

Beth Adelson, Associate Professor of Psychology; Ph.D., Harvard
Carol Avins, Professor of Russian; Ph.D., Yale
Julianne Baird, Professor of Music; Ph.D., Stanford
Laurie Bernstein, Associate Professor of History; Ph.D., California
Myra Bluebond-Langner, Professor of Anthropology; Ph.D., Illinois
Stuart Z. Charme, Professor of Religion; Ph.D., Chicago
Marie Cornelia, Associate Professor of English; Ph.D., Fordham
Christine Cosentino-Dougherty, Professor of German; Ph.D., Columbia
Christopher J. Fitter, Associate Professor of English; Ph.D., Oxford
Howard Gillette, Professor of History; Ph.D., Yale
Janet Golden, Associate Professor of History; Ph.D., Boston
M.A.R. Habib, Associate Professor of English; Ph.D., Oxford
Richard Harris, Professor of Political Science; Ph.D., Pennsylvania
Louise K. Horowitz, Professor of French; Ph.D., CUNY
Wilbert Davis Jerome, Professor of Music; Ph.D., Bryn Mawr
Andrew Lees, Professor of History; Ph.D., Harvard
William D. Lutz, Professor of English; Ph.D., Nevada; J.D., Rutgers
James Rushing, Associate Professor of German; Ph.D., Princeton
Robert M. Ryan, Professor of English; Ph.D., Columbia
Geoffrey Sill, Professor of English; Ph.D., Pennsylvania State
Carol Singley, Associate Professor of English; Ph.D., Brown
Roberta K. Tarbell, Associate Professor of Art; Ph.D., Delaware
G. Alan Tarr, Professor of Political Science; Ph.D., Chicago
William Tucker, Professor of Psychology; Ph.D., Princeton
Jesse William Whitlow, Jr., Professor of Psychology; Ph.D., Yale
Allen Woll, Professor of History; Ph.D., Wisconsin

Program

The graduate program in liberal studies offers a curriculum at an advanced level in the humanities for adult, part-time students, leading to a master of arts degree. It incorporates broad exposure to such areas of study as history, literature, philosophy, religion, the social sciences, and the arts. It is coherently structured but also designed to meet the needs and interests of men and women from a variety of educational and professional backgrounds as flexibly as possible. Some may be seeking career advancement, while others may simply be seeking personal enrichment. All should develop not only a greater fund of general knowledge but also a greater ability to read and think critically.

Admission Requirements

To be admitted, applicants must have a bachelor's degree from an accredited college or university. They should have attained a minimum cumulative grade-point average of 3.0 for the last 60 credits of undergraduate work. GRE scores are optional. Prospective students must submit official transcripts, two letters of recommendation, a personal statement, and a writing sample. Applications for the fall term should be submitted no later than August 15; for the spring term, no later than December 15.

Application forms may be obtained from the Office of Graduate and Undergraduate Admissions, Rutgers, The State University of New Jersey, 406 Penn Street, Camden, NJ 08102 (856/225-6104).

For additional information, potential applicants may call Dr. Robert M. Ryan at 856/225-6700.

Degree Requirements

A total of 10 courses is required to complete the program:

1. Four interdisciplinary colloquia through which students are exposed to a variety of cultural developments in the history of western civilization (56:606:501-502, 511-512, 521-522, 531-532).
2. Colloquium on either nonwestern cultures or issues pertaining to gender and minorities (56:606:541-542).
3. Four other courses from among the following offerings: elective colloquia in liberal studies; colloquia offered by the graduate programs in English, history, law, and public policy (subject to the approval of the directors of these programs); and up to two approved undergraduate courses from a wide variety of liberal arts and sciences disciplines (in which graduate students are required to do more work than is required of the undergraduate students). Enrollment in an undergraduate course requires prior approval by the graduate program director.
4. Capstone course of independent study, which requires a research paper on a topic of particular interest to the individual student (56:606:689).

No more than two courses with grades lower than a B may be counted toward the degree.

Up to 9 graduate credits (with grades of B or better) may be transferred from other programs, with the approval of the graduate program director.

Scholastic Standing

Academic Warning, Probation, and Dismissal

Each term the Program Committee reviews the scholastic record of all enrolled students and makes decisions regarding warnings, probationary status, or dismissal of students in academic difficulty. The graduate program director notifies students of any action taken. Students who receive a grade lower than a B in more than two courses taken in the program are dismissed from the program.

Student Appeals

Student appeals of decisions made by the Program Committee, or student grievances related to academic matters, must be presented in writing to the director of the graduate program within one month of the decision(s). Acceptable grounds for appeal are (1) technical error and/or (2) new information and/or (3) extenuating circumstances. Students are allowed to meet with the committee and are permitted to be represented by an adviser from within the university community. In consultation with the other members of the committee and all parties of the dispute, the graduate program director proposes a resolution to the matter. While such action usually is final, a student may appeal to the dean of the Graduate School-Camden in cases where he or she is dissatisfied with the resolution.

Student Complaints about Grades

A student with a complaint about a grade must submit the complaint in writing to the course instructor within one week of the receipt of the grade. In the event of an unsatisfactory resolution of the problem, the student may appeal to the graduate program director, or designee selected by the Program Committee, whose decision is final. Such appeal must be made, in writing, no later than one week following the date of unsatisfactory resolution.

Graduate Courses

56:606:501,502. STUDIES OF THE ANCIENT AND MEDIEVAL ERAS (3,3)

The foundations of western thought in classical antiquity and the Middle Ages. Topics vary from term to term. Treatment of themes such as the individual and society in ancient Athens; pagans and Christians before and after the fall of Rome; cultures in conflict in the Near East.

56:606:511,512. STUDIES OF THE EARLY MODERN ERA (3,3)
Cultural development between about 1500 and 1789. Topics vary from term to term. Focus on topics such as the Italian Renaissance, the world of William Shakespeare, the scientific revolution of the 17th century, and the French enlightenment of the 18th century.

56:606:521,522. STUDIES OF THE AGE OF REVOLUTIONS (3,3)
Interrelationships between social and cultural development between the French Revolution and the First World War. Attention given to such phenomena as debates about industrialization, the social novel, and the depiction of urban society in the visual arts.

56:606:531,532. STUDIES OF THE 20TH CENTURY (3,3)
Various aspects of the era that began with the outbreak of the First World War. Topics vary from term to term. Exploration of themes such as war and tyranny in literature, conflicting ideas about science and technology, and the rise of popular culture in Europe and America.

56:606:541,542. STUDIES OF CULTURAL DIVERSITY (3,3)
Either in historical or contemporary perspective, treatment of issues pertaining to gender, race, or ethnicity within western societies or examination of various developments in one or more nonwestern societies.

56:606:601,602. STUDIES OF IDEAS (3,3)
Examination of ideas about the natural world and the human conditions that are rooted in the past but still have enduring significance.

56:606:611,612. STUDIES OF THE ARTS AND LITERATURE (3,3)
Opportunity to explore a particular theme in the history of culture. Course may focus heavily on influential contemporary developments.

56:606:613,614. INTERNATIONAL STUDY ABROAD (3,3)
Short-term study trip abroad focusing on a literary figure or theme, some aspect of art or architecture, or a particular component of foreign language or culture.

56:606:621,622. STUDIES OF POLITICS AND SOCIETY (3,3)
Exploration of one or more problems rooted in the past that continue to cause controversy in the present, such as nationalism, dictatorship, freedom, poverty, and health and illness.

56:606:631,632. STUDIES OF CULTURE AND CRITICISM (3,3)
Exploration of some aspect of modern culture or the arts and the varieties of criticism exercised upon it.

56:606:689,690. RESEARCH IN LIBERAL STUDIES (3,3)
Independent study of a topic of special interest to the student, under supervision of an adviser chosen in consultation with the program director. If this course is taken for one term, the project culminates in a paper about 30 pages in length. If the course is taken for two terms, a more substantial paper is required.

56:606:800. MATRICULATION CONTINUED (0)
Continuous registration may be accomplished by enrolling for at least 3 credits in standard course offerings, including research courses, or by enrolling in this course for 0 credits. Students actively engaged in study toward their degree who are using university facilities and faculty time are expected to enroll for the appropriate credits.

MATHEMATICAL SCIENCES 645

Degree Program Offered: Master of Science
Director of Graduate Program: Mahesh Nerurkar, Business and Science Building

Members of the Graduate Faculty

E. Roger Cowley, Professor of Physics; Ph.D., Cambridge
Siqi Fu, Associate Professor of Mathematics; Ph.D., Washington
Joseph L. Gerver, Associate Professor of Mathematics; Ph.D., California (Berkeley)
Howard Jacobowitz, Professor of Mathematics; Ph.D., New York

Martin L. Karel, Associate Professor of Mathematics; Ph.D., Chicago
Will Y.K. Lee, Associate Professor of Mathematics; Ph.D., SUNY (Stony Brook)
Haisheng Li, Associate Professor of Mathematics; Ph.D., Rutgers
Mahesh G. Nerurkar, Professor of Mathematics; Ph.D., Minnesota
Gabor Toth, Professor of Mathematics; Ph.D., Eötvös Loránd (Hungary)

Associate Members of the Graduate Faculty

Haydee Herrera, Assistant Professor of Mathematics; Ph.D., SUNY (Stony Brook)
Yuchung J. Wang, Associate Professor of Statistics; Ph.D., Rutgers

Adjunct Member of the Graduate Faculty

Stephen M. Alessandrini; Ph.D., Rutgers

Program

The program in mathematical sciences allows specialization in pure mathematics, industrial applied mathematics, mathematical computer science, or teaching in mathematical sciences. The pure mathematics track is a broad approach, suitable for, among others, high school teachers seeking advanced study. The industrial applied mathematics track is for individuals seeking to develop professional careers in the industry. It is a blend of advanced mathematical methods, computational techniques, and their scientific applications in industry. The mathematical computer science track offers broad yet rigorous training in diverse areas where mathematics provides powerful applications in computer science, such as combinatorial optimization, encryption, signal processing, and parallel supercomputing.

Although fully capable of meeting the requirements of the full-time student, the program, in its design, offers most courses in the evening to suit those students whose outside obligations limit their hours of attendance or the number of courses they are able to complete each term. Graduates of any track will be prepared to enter a Ph.D. program.

Admission Requirements

Applications for admission to the graduate program in mathematics should be submitted no later than March 1 for the fall term if the applicant wishes to be considered for assistantships, fellowships, or other financial aid. For applicants not requesting financial aid, the application deadline for the fall term is July 1, and the application deadline for the spring term is December 1. It sometimes is possible to begin the program in the summer term; contact the director for details. Applicants must satisfy the following criteria:

1. Completed, by the date of enrollment in the graduate program, a baccalaureate degree with a major in mathematics or a related field.
2. Submit transcripts of all undergraduate and graduate work.
3. Submit the results of the Graduate Record Examination (GRE).
4. Submit three letters of recommendation.
5. Submit the application form.
6. Applicants for the industrial applied mathematics track must submit a statement indicating that they are proficient in at least one of the following programming languages: Fortran, C, C++, or an equivalent.
7. Applicants for the mathematical computer science track should be proficient in the programming language C or C++.

Application forms may be obtained from the Office of Graduate and Undergraduate Admissions, Rutgers, The State University of New Jersey, 406 Penn Street, Camden, NJ 08102, or at <http://gradstudy.rutgers.edu>.

Degree Requirements

Each track requires 30 credits (10 courses, with an opportunity to substitute a thesis for one course). The pure mathematics and the teaching in mathematical sciences tracks have a common required core of five courses. The industrial applied mathematics track has a required core of six courses. The mathematical computer science track has a required core of eight courses.

In accordance with Graduate School–Camden regulations, a student who elects not to write a thesis is required to submit an expository paper. Each student also must pass a comprehensive examination based on three courses of the student's choosing.

Any grade of *IN* (incomplete) must be resolved before a student will be scheduled for the comprehensive examination.

Pure Mathematics

Required Courses

- 56:645:503 Theory of Functions of a Complex Variable I (3)
- 56:645:505-506 Analysis I,II (3,3)
- 56:645 549-550 Linear Algebra and Applications I,II (3,3)

Elective Courses

- 56:645:504 Theory of Functions of a Complex Variable II (3)
- 56:645:530 Manifolds (3)
- 56:645:531 Geometry (3)
- 56:645:532 Differential Geometry (3)
- 56:645:545 Topology (3)
- 56:645:551-552 Abstract Algebra I,II (3,3)
- 56:645:570 Special Topics in Pure Mathematics (3)
- 56:645:575 Qualitative Theory of Ordinary Differential Equations (3)
- 56:645:698 Independent Study in Pure Mathematics (3)
- 56:645:700 Thesis in Pure Mathematics (3)

Industrial Applied Mathematics

Required Courses

- 56:645:560 Industrial Mathematics (3)
- 56:645:561 Optimization Theory (3)
- 56:645:562 Mathematical Modeling (3)
- 56:645:563 Statistical Reasoning (3)
- 56:645:571-572 Computational Mathematics I,II (3,3)

Elective Courses

- 56:645:527-528 Methods of Applied Mathematics I,II (3,3)
- 56:645:533-534 Introduction to the Theory of Computation I,II (3,3)
- 56:645:537 Computer Algorithms (3)
- 56:645:538 Combinatorial Optimization (3)
- 56:645:540 Computational Number Theory and Cryptography (3)
- 56:645:541 Introduction to Computational Geometry (3)
- 56:645:554 Applied Functional Analysis (3)
- 56:645:556 Visualizing Mathematics by Computer (3)
- 56:645:557 Signal Processing (3)
- 56:645:571-572 Computational Mathematics I,II (3,3)
- 56:645:574 Control Theory and Optimization (3)
- 56:645:575 Qualitative Theory of Ordinary Differential Equations (3)
- 56:645:577 Quality Engineering (3)
- 56:645:580 Special Topics in Applied Mathematics (3)
- 56:645:699 Independent Study in Applied Mathematics (3)
- 56:645 701 Thesis in Applied Mathematics (3)

Mathematical Computer Science

Required Courses

- 56:645:533-534 Introduction to the Theory of Computation I,II (3,3)
- 56:645:535-536 Algebra for Computer Scientists I,II (3,3)
- 56:645:537 Computer Algorithms (3)
- 56:645:538 Combinatorial Optimization (3)
- 56:645:571-572 Computational Mathematics I,II (3,3)

Elective Courses

- 56:645:540 Computational Number Theory and Cryptography (3)
- 56:645:541 Introduction to Computational Geometry (3)
- 56:645:542 Parallel Supercomputing (3)
- 56:645:543 Mathematics on the Web (3)

- 56:645:556 Visualizing Mathematics by Computer (3)
- 56:645:557 Signal Processing (3)
- 56:645:558 Theory and Computation in Probability and Queuing Theory (3)
- 56:645:560 Industrial Mathematics (3)
- 56:645:561 Optimization Theory (3)
- 56:645:562 Mathematical Modeling (3)
- 56:645:563 Statistical Reasoning (3)

Teaching in Mathematical Sciences

Required Courses

- 56:645:503 Theory of Functions of a Complex Variable I (3)
- 56:645:505 Analysis I (3)
- 56:645:507 Contemporary Issues, Teaching Beyond Regurgitation (3)
- 56:645:549-550 Linear Algebra and Applications, I, II (3,3)
- 56:645:556 Visualizing Mathematics by Computer (3)

Elective Courses

- 56:645:504 Theory of Functions of a Complex Variable II (3)
- 56:645:506 Analysis II (3)
- 56:645:530 Theory of Manifolds (3)
- 56:645:531 Geometry (3)
- 56:645:532 Differential Geometry (3)
- 56:645:543 Mathematics on the Web (3)
- 56:645:545 Topology (3)
- 56:645:551-552 Abstract Algebra I, II (3,3)
- 56:645:562 Mathematical Modeling (3)
- 56:645:570 Special Topics in Pure Mathematics (3)
- 56:645:575 Qualitative Theory of Ordinary Differential Equations (3)
- 56:645:698 Independent Study in Pure Mathematics (3)
- 56:645:700 Thesis in Pure Mathematics (3)

This track also offers a Teacher Preparation Program (TPP), leading to New Jersey State Teacher's certification. The course and other requirements for TPP depend on individual cases. Details can be obtained upon consultation with the program director.

With the approval of the graduate program director, courses from one track may be used to meet the requirements of the other, and up to two undergraduate courses (6 credits) may be taken and counted toward the required 30 credits. A student may transfer up to 12 credits from graduate courses taken at other institutions in which a grade of *B* or better was obtained. No more than 9 credits with grades of *C+* or lower may be used in meeting the requirements of the master's degree.

The program is designed to be completed in two and a half years of part-time study but also may be pursued at a slower pace. A full-time student can complete the program in one academic year plus one summer by writing a thesis or enrolling in independent study courses.

Scholastic Standing

Academic Warning, Probation, and Dismissal

Each term the graduate committee, meeting without the director of the graduate program, reviews the scholastic records of all enrolled students and makes recommendations for warning, probationary status, or dismissal of students in academic difficulty. The director notifies affected students in writing of any action taken. Students who receive a grade of *C+* or lower in any course taken to satisfy degree requirements may be warned that their work is unsatisfactory or may be placed on probation. A student receiving a grade of *C+* or lower in 9 credits of course work may be dismissed from the program.

Student Appeals

Student appeals of decisions of the graduate committee, or student grievances related to academic matters, must be presented in writing to the director of the graduate program within one month of the decision(s). Acceptable grounds for appeal are (1) technical error and/or (2) new information and/or (3) extenuating circum-

stances. Students are allowed to meet with the committee and are permitted to be represented by an adviser from within the university community. In consultation with the graduate committee and all parties to the dispute, the director of the graduate program proposes a resolution to the matter. If this is unsuccessful, the matter is placed before the membership of the graduate program faculty for its decision. While such faculty action usually is final, a student may appeal to the dean of the Graduate School–Camden in cases where the student is dissatisfied with the resolution.

Student Complaints about Grades

Student complaints about grades are handled according to the regulations of the Graduate School–Camden. The faculty committee referred to in these regulations will be the graduate committee, meeting without the director of the program.

Graduate Courses

56:645:501-502. THEORY OF FUNCTIONS OF A REAL VARIABLE (3,3)

Set theory and the real number system, Lebesgue measure and integration, differentiation and integration theorems. Fourier series and transforms.

56:645:503-504. THEORY OF FUNCTIONS OF A COMPLEX VARIABLE (3,3)

Analytic functions and the Cauchy Integral Theorem. Conformal mappings. Laplace transforms.

56:645:505-506. ANALYSIS (3,3)

Infinite series, especially Fourier series. Examples and counter-examples. Numerical explorations using Maple. Measure theory and integration.

56:645:507. CONTEMPORARY ISSUES—TEACHING BEYOND REGURGITATION (3)

Discusses traditional as well as contemporary approaches to teaching mathematics. Comparisons within these contexts will be investigated. The intricate connections between geometry and algebra will be serve as a segue to a deeper analysis of calculus and linear and abstract algebra. Selected readings from NCTM publications will be a course requirement.

56:645:510. MATHEMATICAL COMMUNICATION AND TECHNOLOGY (3)

New technologies for doing and teaching mathematics and for creating mathematical documents for print and World Wide Web distribution.

56:645:511. COMPUTER SCIENCE (3)

Algorithms, recursive functions, theory of computability, Turing machines. Applications to discrete mathematics: searching, sorting, and factoring.

56:645:527-528. METHODS OF APPLIED MATHEMATICS (3,3)

Pre- or corequisite: 56:645:549.

Derivation of the heat and wave equations. Existence theorems for ordinary differential equations, series solutions. Bessel and Legendre equations. Sturm-Liouville Theorem.

56:645:530. MANIFOLDS (3)

Topological and differential manifolds. Surfaces. Fundamental groups and coverings. Differential forms and de Rham cohomology.

56:645:531. GEOMETRY (3)

Review and reevaluation of Euclid's geometry. Axiomatic development of Euclidean and hyperbolic geometries. The parallel postulate. The impossibility of trisecting an angle or duplicating a cube.

56:645:532. DIFFERENTIAL GEOMETRY (3)

Curves and surfaces in Euclidean space. Riemannian manifolds, connections, and curvature.

56:645:533-534. INTRODUCTION TO THE THEORY OF COMPUTATION I,II (3,3)

645:533. Introduction to formal languages, automata, and computability: regular languages and finite state automata; context-free grammars and languages; pushdown automata; the Church-Turing thesis; Turing machines; decidability and undecidability; Rice's theorem. 645:534. Second course in the sequence; addresses key topics in computability and complexity theory, such as recursive and recursively enumerable sets; the Recursion Theorem; Turing reductions and completeness; Kolmogorov complexity; Space and Time complexity; NP-completeness; hierarchy theorems; probabilistic complexity classes, and interactive proof systems.

56:645:535-536. ALGEBRA FOR COMPUTER SCIENTISTS I,II (3,3)

Linear and abstract algebra, including group theory, with applications to image processing, data compression, error correcting codes, and encryption.

56:645:537. COMPUTER ALGORITHMS (3)

Algorithm design techniques: divide-and-conquer, greedy method, dynamic programming, backtracking, and branch-and-bound. Advanced data structures, graph algorithms, algebraic algorithms. Complexity analysis, complexity classes, and NP-completeness. Introduction to approximation algorithms and parallel algorithms.

56:645:538. COMBINATORIAL OPTIMIZATION (3)

Algorithmic techniques for solving optimization problems over discrete structures, including integer and linear programming, branch-and-bound, greedy algorithms, divide-and-conquer, dynamic programming, local optimization, simulated annealing, genetic algorithms, and approximation algorithms.

56:645:540. COMPUTATIONAL NUMBER THEORY AND CRYPTOGRAPHY (3)

Primes and prime number theorems and numerical applications; the Chinese remainder theorem and its applications to computers and Hashing functions; factoring numbers; cryptography; computation aspects of the topics emphasized. Students required to do some simple programming.

56:645:541. INTRODUCTION TO COMPUTATIONAL GEOMETRY (3)

Algorithms and data structures for geometric problems that arise in various applications, such as computer graphics, CAD/CAM, robotics, and geographical information systems (GIS). Topics include point location, range searching, intersection, decomposition of polygons, convex hulls, and Voronoi diagrams.

56:645:542. PARALLEL SUPERCOMPUTING (3)

Fundamental issues in the design and development of programs for parallel supercomputers; programming models and performance optimization techniques; application examples and programming exercises on a contemporary parallel machine; cost models and performance analysis and evaluation.

56:645:543. MATHEMATICS ON THE WEB (3)

Using the World Wide Web for finding mathematical information and communicating mathematics.

56:645:545. TOPOLOGY (3)

Point set topology, fundamental group and coverings. Singular homology and cohomology, the Brouwer degree and fixed-point theorems, the sphere retraction theorem, invariance of domains.

56:645:549-550. LINEAR ALGEBRA AND APPLICATIONS (3,3)

Finite dimensional vector spaces, matrices, and linear operators. Eigenvalues, eigenvectors, diagonalizability, and Jordan canonical form. Applications.

56:645:551-552. ABSTRACT ALGEBRA (3,3)

Pre- or corequisite: 56:645:549.

Introductory topics in rings, modules, groups, fields, and Galois theory.

56:645:554. APPLIED FUNCTIONAL ANALYSIS (3)

Infinite dimensional vector spaces, especially Banach and Hilbert vector spaces. Orthogonal projections and the spectral decomposition theorem. Applications to differential equations and approximation methods.

56:645:555. GLIMPSES OF MATHEMATICS (3)

The intuitive beginnings and modern applications of key ideas of mathematics, such as polyhedra and the fundamental theorem of algebra. Extensive use of computer-generated films to help visualize the methods and results.

56:645:556. VISUALIZING MATHEMATICS BY COMPUTER (3)

Introduction to symbolic computational packages and scientific visualization through examples from calculus and geometry. Covers 2-D, 3-D, and animated computer graphics using Maple, Mathematica, and Geomview. No programming knowledge required.

56:645:557. SIGNAL PROCESSING (3)

Signal modeling: periodic, stationary, and Gaussian signals. System representation: Volterra representation, state space representation, simulation. Themes in system design: least square estimation, system identification, adaptive signal processing. Representation of discrete causal signals: role of Fourier analysis, convolutions, fast Fourier transforms. Realization of linear recurrent structures: controllability, observability and minimal realization, frequency domain analysis of signals, and the role Laplace transforms. Stability analysis: Lyapunov and linearization methods. Prediction, filtering, and identification: linear prediction, the LQR problem, Kalman filter.

56:645:558. THEORY AND COMPUTATION IN PROBABILITY AND QUEUEING THEORY (3)

Basic probability structures, probability distributions, random number generations and simulations, queueing models, analysis of single queue, queueing networks, applications of queueing theory.

56:645:560. INDUSTRIAL MATHEMATICS (3)

Monte Carlo methods, Wavelets, data acquisition and manipulation, filters, frequency domain methods, fast Fourier transform, discrete Fourier transform.

56:645:561. OPTIMIZATION THEORY (3)

Linear programming: optimization, simplex algorithm, nonlinear programming, game theory.

56:645:562. MATHEMATICAL MODELING (3)

Perturbation methods, asymptotic analysis, conservation laws, dynamical system and chaos, oscillations, stability theory. Applications may include traffic flow, population dynamics, combustion.

56:645:563. STATISTICAL REASONING (3)

Random variables, uniform, Gaussian, binomial, Poisson distributions, probability theory, stationary processes, central limit theorem, Markov chains, Taguchi quality control.

56:645:570. SPECIAL TOPICS IN PURE MATHEMATICS (3)

Prerequisite: Permission of instructor. Course may be taken more than once.
Topics vary from term to term.

56:645:571-572. COMPUTATIONAL MATHEMATICS I,II (3,3)

Newton's method, curve and surface fitting. Numerical solutions of differential equations and linear systems, eigenvalues and eigenvectors. Fast Fourier transform.

56:645:574. CONTROL THEORY AND OPTIMIZATION (3)

Controllability, observability, and stabilization for linear and nonlinear systems. Kalman and Nyquist criteria. Frequency domain methods, Liapunov functions.

56:645:575. QUALITATIVE THEORY OF ORDINARY DIFFERENTIAL EQUATIONS (3)

Cauchy-Picard existence and uniqueness theorem. Stability of linear and nonlinear systems. Applications to equations arising in biology and engineering.

56:645:577. QUALITY ENGINEERING (3)

Introduction to statistical tools, such as data analysis, and their use in the testing of product design and minimization of uncontrollable variation.

56:645:580. SPECIAL TOPICS IN APPLIED MATHEMATICS (3)

Prerequisite: Permission of instructor. Course may be taken more than once.
Topics vary from term to term.

56:645:698. INDEPENDENT STUDY IN PURE MATHEMATICS (3)

Study of a particular subject independently but with frequent consultations with a faculty member.

56:645:699. INDEPENDENT STUDY IN APPLIED MATHEMATICS (3)

Study of a particular subject independently but with frequent consultations with a faculty member.

56:645:700. THESIS IN PURE MATHEMATICS (3)

Expository paper written under the close guidance of a faculty member.

56:645:701. THESIS IN APPLIED MATHEMATICS (3)

Expository paper written under the close guidance of a faculty member.

56:645:800. MATRICULATION CONTINUED (0)

Continuous registration may be accomplished by enrolling for at least 3 credits in standard course offerings, including research courses, or by enrolling in this course for 0 credits. Students actively engaged in study toward their degree who are using university facilities and faculty time are expected to enroll for the appropriate credits.

56:645:877. TEACHING ASSISTANTSHIP (E6)

PHYSICAL THERAPY 742

Degree Program Offered: Master of Physical Therapy

Director of the Graduate Program: Marie Koval Nardone,

Primary Care Center, Suite 228, 40 East Laurel Road, Stratford, NJ 08084-1353

Members of the Graduate Faculty

Robert Dekerlegand, Assistant Professor; Allegheny, P.T., C.C.C.

Jodi Handler, Assistant Professor; D.P.T., Creighton

David Kietrys, Assistant Professor; M.S., Hahnemann

Dennise Krencicki, Assistant Professor; M.A., Columbia

Joseph V. Martin, Associate Professor of Zoology; Ph.D., Southern California

Marie Koval Nardone, Associate Professor; M.S., Duke; Ed.D., Delaware

Kathryn N. Oriel, Assistant Professor; Ed.D., Idaho State

Adjunct Members of the Graduate Faculty

Mary Ellen O'Neill, Clinical Assistant Professor; M.S., Hahnemann

Donna M. Ziarkowski, Clinical Associate Professor; M.Ed., Temple

Program

The master of physical therapy degree program is offered jointly with the University of Medicine and Dentistry of New Jersey-School of Health Related Professions. A master of physical therapy degree is awarded jointly by the two universities to students who successfully complete all requirements for graduation.

Full-time students are accepted for entrance into the program each summer. Students normally complete the degree requirements in six consecutive terms. Twenty-six full-time students are enrolled each year. Students are expected to complete the program in a maximum of two calendar years from the time of initial matriculation.

No transfer or nonmatriculated students are accepted into the program.

The mission of the program is to educate students as physical therapy generalists who are committed to humanistic principles through education, scholarship, community service, and clinical practice. The curriculum is designed to provide a student's first degree in physical therapy. Graduates may participate in a special program with UMDNJ—Newark to earn the D.P.T. with four additional courses.

The program is accredited by the Commission on Accreditation in Physical Therapy Education of the American Physical Therapy Association.

Admission Requirements

Admissions are conducted on a rolling basis with priority given to applications that are received by December 15 for admission the following summer term. Applicants must manage their applications to assure receipt of all required credentials in the Office of Graduate and Undergraduate Admissions at Rutgers–Camden. The completed application form, fee, and all supporting documentation should be submitted at the same time. Supporting documentation includes all of the following:

- Two official transcripts of all postsecondary college credits, including undergraduate degree and program prerequisite courses. Students must have earned an undergraduate degree prior to entering the physical therapy program.
- Official results of the Graduate Record Examination (general test). Test scores must be received directly from the Educational Testing Service. Applicants are responsible for ensuring that their official scores are received by the admissions office.
- Three letters of reference, including one from a college instructor and one from a physical therapist. Applicants may request that reference letters be placed in sealed envelopes and returned directly to the applicant to be submitted with the completed application form directly to the admissions office.
- A one-page, typed personal statement of the applicant's interest in physical therapy, personal characteristics, participation in community service activities, and professional goals.
- Evidence of completion of all program prerequisite courses prior to the beginning of classes. A maximum of four prerequisite courses, including a maximum of two science prerequisite courses, may be outstanding at the time of application. A program prerequisite verification form must be submitted with the application.
- A typed list of all physical therapy experience—volunteer or paid—including type of facility and duration of each experience.
- International Applicants: TOEFL (Test of English as a Foreign Language) scores must be received directly from the Educational Testing Service. Transcripts of all courses must include English translations of course titles and conversion to the American credit system. Evidence of adequate financial resources is required for nonimmigrant students.

All of the above documentation and a completed application form must be received in the admissions office. Only completed applications will be considered. Application forms may be obtained from the Office of Graduate and Undergraduate Admissions, Rutgers, The State University of New Jersey, 406 Penn Street, Camden, NJ 08102.

Degree Requirements

The master of physical therapy degree requires the completion of 86 credits. Students must comply with all program policies while enrolled and assume costs for scheduled clinical internships. Students must complete an acceptable major project under the direction of a faculty adviser and perform satisfactorily on a comprehensive examination. Students must complete all scheduled clinical internships and required medical examinations. The program plan is as follows:

Year One		Credits
56:742:503	Physical Therapy Seminar I	2
56:742:505	Psychosocial Aspects of Physical Therapy	2
56:742:506	Therapeutic Interventions I	3
56:742:507	Exercise Science	2
56:742:508	Functional Assessment in Physical Therapy	2
56:742:509	Therapeutic Interventions II	2
56:742:510	Human Anatomy	6
56:742:511	Kinesiology and Biomechanics	5
56:742:513	Medical Considerations in Orthopedics	1
56:742:514	Scientific Inquiry in Physical Therapy	2
56:742:515	Medical Interventions	2
56:742:516	Cardiopulmonary Physical Therapy I	3
56:742:517	Musculoskeletal Physical Therapy I	5
56:742:518	Applied Statistics for Physical Therapy	1
56:742:519	Medical Considerations in Rehabilitation I	2
56:742:521	Development through the Life Span	1
56:742:522	Neurological Physical Therapy I	3
56:742:523	Master's Project I	1
56:742:525	Clinical Education I	1
56:742:540	Neuroscience	4
		<hr/> 50
Year Two		Credits
56:742:603	Pediatric Physical Therapy	3
56:742:604	Prosthetics and Orthotics	3
56:742:610	Special Topics in Physical Therapy	1-3
56:742:614	Physical Therapy Seminar II	2
56:742:615	Management	3
56:742:616	Cardiopulmonary Physical Therapy II	2
56:742:617	Musculoskeletal Physical Therapy II	2
56:742:619	Medical Considerations in Rehabilitation II	1
56:742:622	Neurological Physical Therapy II	3
56:742:623	Master's Project II	1
56:742:624	Master's Project III	1
56:742:625	Clinical Education II	3
56:742:626	Clinical Education III	4
56:742:627	Clinical Education IV	6
56:742:628	Master's Project IV	1
		<hr/> 36-38

Scholastic Standing

Academic Standing, Warning, Probation, and Dismissal

All students are required to attain a grade-point average of 3.0 (*B*) or higher throughout the physical therapy curriculum. In all courses that require laboratory practical examinations of patient assessment skills, students must earn a grade of at least *B* in each practical examination in order to pass the courses. Courses designated as *Pass/Fail* require the equivalent of a *B* grade to pass. Students may earn one grade of *C+* during the curriculum, as long as the overall grade-point average remains at a 3.0.

Each term the faculty reviews the scholastic record of all enrolled students and makes recommendations to the director for warning, probationary status, or dismissal of students. The graduate program director notifies the student in writing of any action taken.

Student Appeals

Academic decisions are not appealable. An academic review may be granted if the student presents written evidence of technical error or the existence of extenuating circumstances that were not taken into consideration at the time the academic decision was made. Students should consult the *Student Handbook* of the University of Medicine and Dentistry of New Jersey—School of Health Related Professions for further information.

Graduate Courses

56:742:503. PHYSICAL THERAPY SEMINAR I (2)

Introduction to physical therapy. Discussion of issues of importance to physical therapists, including development and history of the profession and professional association, legal and ethical issues, health professionals and their roles, and delegation of authority and clinical decision making. Introduction to principles of teaching, learning, and current professional issues.

56:742:505. PSYCHOSOCIAL ASPECTS OF PHYSICAL THERAPY (2)

Introduction to the psychosocial aspects of patient care. Emphasis on the patient's response to illness. Development of interpersonal skills and strategies for therapeutic intervention.

56:742:506. THERAPEUTIC INTERVENTIONS I (3)

Principles of patient care including massage and thermal agents. Emphasis on theoretical understanding of techniques coupled with practical experience in the laboratory setting.

56:742:507. EXERCISE SCIENCE (2)

Introduction to principles of exercise science. Emphasis on assessment and interpretation of client's response to exercise. Introduction to vital signs monitoring.

56:742:508. FUNCTIONAL ASSESSMENT IN PHYSICAL THERAPY (2)

Physical therapy assessment of gait, transfers, and activities of daily living. Body mechanics, proper positioning, safety, documentation, and functional assessment tools considered. Emphasis on clinical decision making. Application of concepts in clinical site visits.

56:742:509. THERAPEUTIC INTERVENTIONS II (2)

Clinical decision making and utilization of electrophysiological evaluation and electrotherapy.

56:742:510. HUMAN ANATOMY (6)

Advanced course in gross human anatomy. Detailed study of vascular, thoracic, bony, neuromuscular, and articular structures. Readings and classroom sessions closely integrated with human cadaver dissection and models.

56:742:511. KINESIOLOGY AND BIOMECHANICS (5)

Prerequisite: 56:742:510.

Study of biomechanics, kinesiology, and ergonomics. Clinical skills such as passive range of motion, goniometry, manual muscle testing, and posture and gait analysis explored. Integrated study of neuromusculoskeletal tissue biomechanics, microtrauma, and injury.

56:742:513. MEDICAL CONSIDERATIONS IN ORTHOPEDICS (1)

Medical management of disorders of the musculoskeletal system. Basic radiological principles presented. The role of the physical therapist in the management of patients with orthopedic dysfunction discussed.

56:742:514. SCIENTIFIC INQUIRY IN PHYSICAL THERAPY (2)

Introduction to research process. Critical analysis of the literature. Basic concepts of research design and approaches examined for clinically relevant questions.

56:742:515. MEDICAL INTERVENTIONS (2)

Consideration of principles of selected elements of medical science, including pharmacology. Applications to selected patient populations.

56:742:516. CARDIOPULMONARY PHYSICAL THERAPY I (3)

Integrated consideration of the medical science of cardiovascular and pulmonary care, evaluation, and treatment. Problem-oriented patient evaluation and treatment planning emphasized through coordinated classroom, laboratory, and clinical sessions. Consideration of clinical decision making in planning patient programs.

56:742:517. MUSCULOSKELETAL PHYSICAL THERAPY I (5)

Prerequisite: 56:742:511.

Problem-oriented evaluation, treatment planning, and documentation for patients with musculoskeletal system dysfunction. Evaluation process and joint mobilization techniques for all spinal and extremity joints. Selected topics in therapeutic exercise.

56:742:518. APPLIED STATISTICS FOR PHYSICAL THERAPY (1)

Interpretation of methods of statistical inference with focus on interpretation of research data.

56:742:519. MEDICAL CONSIDERATIONS IN REHABILITATION I (2)

Interrelationship of physical therapy and medical profession in management of clients with neurological disorders. Central nervous system pathology and its sequelae emphasized. Examination and treatment of neuromuscular pathology explored through presentation of patient problems.

56:742:521. DEVELOPMENT THROUGH THE LIFE SPAN (1)

Normal and abnormal development throughout the life span. Topics include pediatric and adolescent medicine and women's health care. Normal aging process with emphasis on management of geriatric clients in physical therapy settings.

56:742:522. NEUROLOGICAL PHYSICAL THERAPY I (3)

Models of rehabilitation available for treatment of adults with neurological pathology. Scientific and theoretical bases for clinical application of traditional therapeutic interventions with introduction to motor learning and other current treatment approaches. Integrated lecture, laboratory, and clinic.

56:742:523. MASTER'S PROJECT I (1)

Students develop literature review under the direction of a faculty adviser.

56:742:525. CLINICAL EDUCATION I (1)

Introduction to the clinical education environment, clinical education policies and procedures, legal and contractual issues, and clinical instructor roles. Strategies for patient care management, group process skills, and concepts of critical thinking. Discussion of universal precautions, OSHA blood-borne pathogen guidelines, and first aid. One week clinical affiliation.

56:742:540. NEUROSCIENCE (4)

Prerequisite: 56:742:510.

Advanced study of human nervous system; its role in normal motor function. Influence of neurophysiology, embryology, and histology in normal and abnormal development explored. Response of the nervous system to disease and trauma assessed.

56:742:603. PEDIATRIC PHYSICAL THERAPY (3)

Problem-oriented patient evaluation and treatment planning for children. Special consideration of pediatric diseases.

56:742:604. PROSTHETICS AND ORTHOTICS (3)

Introduction to the use of prosthetic and orthotic devices. Emphasis on patient evaluation and treatment planning skills through coordinated classroom, laboratory, and clinical sessions. Application of basic gait analysis to individuals using prosthetic devices.

56:742:610. SPECIAL TOPICS IN PHYSICAL THERAPY (1-3)

Enrollment in one special topics course prior to graduation is required.

In-depth consideration of special topics in physical therapy. Scheduled class and/or laboratory or independent study project.

56:742:614. PHYSICAL THERAPY SEMINAR II (2)

Problem-solving seminar integrating clinical practice. Consideration of contemporary issues and topics in health care.

56:742:615. MANAGEMENT (3)

Introduction to management principles and their application. Discussion of the role of the physical therapist in the contemporary health care system.

56:742:616. CARDIO/PULMONARY PHYSICAL THERAPY II (2)

Prerequisite: 56:742:516.

An integrated consideration of the medical science of cardiovascular and pulmonary care, the evaluation techniques, and treatment procedures.

56:742:617. MUSCULOSKELETAL PHYSICAL THERAPY II (2)

Prerequisite: 56:742:517.

Advanced consideration of musculoskeletal system dysfunction through coordinated classroom and laboratory activities. Topics include specialized approaches to management of spinal disorders, repetitive stress, patellofemoral joint and adverse neural tension disorders, and common postsurgical conditions.

56:742:619. MEDICAL CONSIDERATIONS IN REHABILITATION II (1)

Interrelationship of physical therapy and the medical profession in management of clients with infectious diseases and psychiatric, integumentary, metabolic, endocrine, and oncological problems.

56:742:622. NEUROLOGICAL PHYSICAL THERAPY II (3)

Prerequisite: 56:742:522.

Advanced study of physical therapy for adults with neurologic pathology. Balance, perception, and cognition examined. Application of motor learning principles and integration of biomechanics explored. Critical review of applicable literature. Integrated lecture, classroom, and clinic.

56:742:623. MASTER'S PROJECT II (1)

Prerequisite: 56:742:523.

Students work with faculty adviser in refining master's project.

56:742:624. MASTER'S PROJECT III (1)

Prerequisite: 56:742:623.

Continued work on master's project under the direction of faculty adviser.

56:742:625. CLINICAL EDUCATION II (3)

Students participate in a long-term, full-time clinical experience under the direction of a clinical instructor.

56:742:626. CLINICAL EDUCATION III (4)

Exploration of the clinical environment under the direction of a clinical instructor. Full-time, long-term clinical affiliation.

56:742:627. CLINICAL EDUCATION IV (6)

Continued exploration of the clinical education environment. Full-time, long-term clinical affiliation.

56:742:628. MASTER'S PROJECT IV (1)

Prerequisite: 56:742:624.

Completion of major project under the direction of a faculty adviser.

56:742:800. MATRICULATION CONTINUED (0)

Continuous registration may be accomplished by enrolling for at least 3 credits in standard course offerings, including research courses, or by enrolling in this course for 0 credits. Students actively engaged in study toward their degree who are using university facilities and faculty time are expected to enroll for the appropriate credits.

PUBLIC POLICY AND ADMINISTRATION 834

Web Site: <http://www.camden.rutgers.edu/dept-pages/pubpol/>

Degree Program Offered: Master of Public Administration
Chairperson of the Graduate Department: Michael Lang

Members of the Graduate Faculty

Gloria Bonilla-Santiago, Professor of Public Policy and Administration; Ph.D., City University of New York–Graduate Center

Christine Thurlow Brenner, Assistant Professor of Public Policy and Administration; Ph.D., Texas (Arlington)

James A. Dunn, Jr., Professor of Political Science; Ph.D., Pennsylvania

James L. Garnett, Professor of Public Policy and Administration; Ph.D., Syracuse (Maxwell School)

Sharon Gramby-Sobukwe, Assistant Professor of Political Science; Ph.D., Temple

Richard A. Harris, Professor of Political Science; Ph.D., Pennsylvania

Russell Harrison, Associate Professor of Political Science; Ph.D., North Carolina

Jainaba Kah, Assistant Professor of Public Policy and Administration; Ph.D., Rutgers

Michael Lang, Professor of Urban Studies; Ph.D., London School of Economics

Patrice Mareschal, Assistant Professor of Public Policy and Administration; Ph.D., Oklahoma

Sanjay K. Pandey, Assistant Professor of Public Policy and Administration; Ph.D., Syracuse (Maxwell School)

Jay A. Sigler, Professor Emeritus of Public Policy and Administration; Ph.D., Rutgers

Jon Van Til, Professor of Urban Studies; Ph.D., California (Berkeley)

Visiting Professor

Janet V. Thomas, Assistant Professor of Education Policy; Ph.D., Illinois (Urbana-Champaign)

Associate Members of the Graduate Faculty

Myra Bluebond-Langner, Professor of Sociology; Ph.D., Illinois

Edmund L. Erde, Professor of Family Practice (University of Medicine and Dentistry of New Jersey); Ph.D., Texas

David M. Frankford, Professor of Law; J.D., Chicago

Drew Humphries, Professor of Criminology; Ph.D., California (Berkeley)

Donald W. Light, Professor of Psychiatry (University of Medicine and Dentistry of New Jersey); Ph.D., Brandeis

Rand Rosenblatt, Professor of Law; J.D., Yale

Adjunct Members of the Graduate Faculty

Norton Bonaparte, Township Manager; M.P.A., Cornell

William E. Bryan, Assistant Vice President for Strategic Planning and Marketing, Kennedy Memorial Hospital and University Medical Center; Ed.D., Wayne State

Michael Dennis, Chief Strategic Officer, Conner Communication; M.A., Rider

Dianne M. Garyantes, International Affairs Consultant; M.P.A., Rutgers (Camden)

Kevin Lyons, Purchasing Specialist; M.A., Sunderland (U.K.)

Program

The Department of Public Policy and Administration graduate program offers multidisciplinary professional education in management and public policy to prepare people for careers in government, health and human services, nonprofit organizations, and education. The M.P.A. degree program is accredited by the National Association of Schools of Public Affairs and Administration. The program provides students a firm foundation in both public administration and public policy. Toward this end, the core curriculum emphasizes managerial professionalism, leadership, decision making, analytic skills, substantive knowledge, and ethics, as well as specific competencies in such areas as public finance and information systems. It is assumed that students will bring to their studies basic knowledge of economics, American government, and statistics.

In addition to the common core of course work in public policy and administration, all students must select one of four concentrations: public management, health care management and policy, international public service and development, or education policy and leadership. The public management concentration is geared toward government service or work in the nonprofit sector. The concentration in health care management and policy is designed to equip people who have medical or health backgrounds with essential policy and management knowledge and skills. The international public service and development program is designed for those seeking career opportunities in the fields of international development policy and administration. This program is a more specialized course of study that includes overseas service in the Peace Corps or work in an international development organization. The education policy and leadership concentration is designed for certified teachers seeking to upgrade their management and leadership skills and to obtain a degree which will help qualify them for a principal's certificate. All concentrations lead to the award of an M.P.A. degree.

Dual-Degree Programs

B.A./M.P.A. Dual-Degree Program

This accelerated dual-degree program at Rutgers–Camden is designed to allow students to earn both a baccalaureate and a master's degree in five years. The combined bachelor of arts in political science and master of public administration in the Graduate Department of Public Policy and Administration prepares students for professional careers in government and public service or for further study in law or doctoral programs. It also provides the training and credentials necessary for career advancement in the public sector. Since students in this innovative program

begin the transition to graduate studies in their final undergraduate year, only highly motivated individuals with strong academic records should consider this option.

Ordinarily, earning a B.A. and an M.P.A. at Rutgers–Camden would require six years and 162 credits (120 undergraduate and 42 graduate credits) of full-time study. Under this accelerated program, the same result can be achieved in five years with 150 credits by counting three courses for the M.P.A. as well as for the B.A. Once accepted into the B.A./M.P.A. program, a student maintaining a 3.0 average and having completed satisfactorily the three prerequisite courses in American government, statistics, and economics is guaranteed admission to the master's program. Admission must occur during the first term of the student's final year, at which time he or she will file formally an application to the M.P.A. program and be cleared to begin graduate studies in the following term.

For additional information, contact:

Chairperson, Department of Political Science
401 Cooper Street, Camden, NJ 08102

or

Chairperson, Graduate Department of Public Policy
and Administration
401 Cooper Street, Camden NJ 08102.

D.O./M.P.A. Dual-Degree Program (See section on Health Care Management and Policy Concentration.)

The University of Medicine and Dentistry of New Jersey–School of Osteopathic Medicine and the Graduate School–Camden of Rutgers, The State University of New Jersey, cooperatively offer the first program in the country leading to the dual degree of Doctor of Osteopathic Medicine/Master of Public Administration. This program was designed to enable medical students to acquire managerial and policy skills during their osteopathic training before they have established themselves in demanding and perhaps inflexible jobs. It also prepares students, early on in their careers, who wish to obtain positions requiring managerial or policy-related skills.

The curriculum of the joint-degree program consists of the full course work currently required for the D.O. degree and the course work required for the M.P.A. degree (42 credits). However, standard D.O. courses, "Community Medicine I" and "Community Medicine II," together will count for one elective course (3 credits) in the M.P.A. program. In addition to traditional courses, courses required for the M.P.A. include a practicum experience (combined with a seminar to discuss these experiences), and a directed study project that is carried out by the student under the supervision of a professor.

Students take one year off between the second and third years of the D.O. curriculum in order to matriculate at Rutgers and complete the M.P.A. requirements. It is recommended that students who have prerequisites to fulfill begin the M.P.A. course work during the summer between year one and year two. This will ease their load during the intensive M.P.A. year (although students who cannot start early may still participate in the program).

Applications are considered by the Health Care Management and Policy Concentration Admissions and Academic Standing Committee, which has equal representation from the UMDNJ–School of Osteopathic Medicine and Rutgers, The State University of New Jersey.

For admissions information, contact Warren S. Wallace, Ed.D., associate dean for admissions and student affairs, UMDNJ–SOM, at wallace@umdnj.edu, or Dr. Deborah Bowles, director of admissions, Rutgers–Camden, at bowles@asb-ugadmin.rutgers.edu.

J.D./M.P.A. Dual-Degree Program

The four-year law and M.P.A. program, administered jointly with Rutgers' School of Law–Camden, leads to J.D. and M.P.A. degrees. Students interested in this course of study must be accepted independently by both the School of Law–Camden and the Graduate School–Camden's Department of Public Policy and Administration. For further information, please contact:

Chairperson, Graduate Department of Public Policy
and Administration
401 Cooper Street, Camden, NJ 08102

M.A./M.P.A. Dual-Degree Program

The graduate programs in criminal justice and in public policy and administration offer a dual M.A./M.P.A. degree. Students who complete the 30-credit curriculum in criminal justice may go on to earn an M.P.A. by taking 18 additional credits in public policy and administration. Special admission procedures may apply, so students interested in the dual-degree program must consult with advisers in both programs prior to admission.

Admission Requirements

Application to the program may be made for the fall or spring term for the public management and health care management concentrations. Applications for the international public service and development and educational policy and leadership concentrations should be submitted for the fall term only. All applicants must meet the following requirements:

1. Complete a baccalaureate degree from an accredited undergraduate school.
2. Submit official transcripts showing all course work from undergraduate and graduate schools.
3. Complete, with a grade of C or better, introductory-level course work in economics, American government, and statistics.
4. Submit the results of the Graduate Record Examination (GRE). Results must be received directly from the Educational Testing Service. Results of law school (LSAT) or business (GMAT) exams may be submitted in lieu of the GRE. All results must be submitted within three years of the test date. The GRE requirement is waived for applicants holding a graduate degree and for B.A./M.P.A. applicants.
5. Submit three letters of recommendation.
6. Submit a statement regarding the applicant's personal and professional goals and experience. (This statement should be prepared carefully since it weighs heavily in admissions considerations.)
7. Submit a current résumé.
8. Submit a completed application to the Office of Graduate and Undergraduate Admissions, Rutgers, The State University of New Jersey, 406 Penn Street, Camden, NJ 08102. Included in the application must be the application form, three letters of recommendation, the required application fee, and all supplemental information requested on the application or by the Graduate School–Camden.

Application materials may be obtained through the Office of Graduate and Undergraduate Admissions, Rutgers, The State University of New Jersey, 406 Penn Street, Camden, NJ 08102.

Nonmatriculated Status

The department accepts a limited number of students on a nonmatriculated basis. To apply for nonmatriculated enrollment status, a student must:

1. Complete a baccalaureate degree from an accredited undergraduate school.
2. Submit an application for Nonmatriculated (Nondegree) Graduate Study, copies of which may be obtained from the Office of Graduate and Undergraduate Admissions.
3. Submit a written statement listing personal and professional goals and why he or she is applying for nonmatriculated status.
4. Submit official transcripts showing all course work and degree(s) from all undergraduate and graduate institutions.
5. Submit a check for the required application fee.
6. Indicate the courses that he or she plans to enroll in. (Note: Nonmatriculated students may not enroll in more than two courses per term and in no more than a total of four 3-credit courses as a nonmatriculated student.)
7. Submit a current résumé.

A student who has been rejected for regular admission may not apply to take classes on a nonmatriculated basis within one year from the date of rejection.

No student will be approved to take classes on a nonmatriculated basis unless his or her application has been received by August 1 for the fall term and by December 1 for the spring term.

Applicants who are accepted as nonmatriculated students may take no more than 12 credits, all of which must be chosen from core courses (see Degree Requirements). Questions concerning admission should be directed to the chairperson of the graduate program.

Degree Requirements

The master of public administration degree requires all students to

1. satisfactorily complete 42 credits of course work with a minimum cumulative grade-point average of 3.0
2. satisfactorily complete a research study culminating in a written analysis of a significant administrative or policy problem

The 42 credits of course work are divided into 21 credits required under the core courses and 21 credits of specialized courses, electives, seminars, internships, specialized courses for concentration, and research requirement. The exact mix, as well as some specific courses a student must take, is determined by the concentration chosen.

Students may enroll in elective courses through the School of Law–Camden, the School of Business–Camden, and other departments on the Camden, New Brunswick, and Newark campuses. Students wishing to take such electives must obtain, in writing, the approval of *both* the Department of Public Policy and Administration and the school or department in which the proposed elective is to be taken.

Educational Policy and Leadership Concentration

The educational policy and leadership concentration is oriented toward educational administrators who display the potential and motivation necessary to assume responsibilities as school principals. The two year program includes rigorous course work, seminars, and a one year internship under the supervision of a qualified mentor principal and a Rutgers faculty mentor. Upon completion of the program, successful participants will have earned an M.P.A. degree with an educational policy and leadership concentration, and will have fulfilled the requirements for a certificate of eligibility as school principal, including (1) written examination (administered through ETS) and (2) assessment (incorporated into the program requirements through the administration of the PROFILOR and offered directly through Rutgers–Camden).

Students in this program must complete the core courses (21 credits) for the M.P.A. degree, as well as the specialized educational policy seminars and a one-year internship. Degree requirements are as follows:

- 56:834:501 Foundations of Policy Analysis (3)
- 56:834:503 Law and Public Policy (3)
- 56:834:505 Organizational Behavior (3)
- 56:834:515 Introduction to Public Budgeting and Finance (3)
- 56:834:525 Public Management (3)
- 56:834:535 Research Methods (3)
- 56:834:536 Public Information Systems (3)

In addition to the above core courses, all educational policy and leadership students are required to complete four specialized seminars (12 credits) from among the following:

- 56:834:557 Human Resources Management (3)
- 56:834:558 Executive Leadership and Communication Skills (3)
- 56:834:611 Evaluation Research Seminar (3)
- 56:834:612 or 56:834:613 Colloquium in Educational Policy and Leadership (3) *Topics may include systematic school reform, partnerships and school improvement managing change, and leadership strategies for transforming schools.*

Nine additional credits are required in the educational policy and leadership internship. Students will be placed under the mentoring and supervision of a school principal to gain additional administrative and research expertise through individual fieldwork.

- 56:834:543 Educational Policy and Leadership Internship I (6)
- 56:834:544 Educational Policy and Leadership Internship II (3)

Health Care Management and Policy Concentration

The health care management and policy concentration is oriented toward people who are currently in positions requiring managerial and policy skills or who aspire to such positions. It is a cooperative effort of the Graduate School–Camden's Department of Public Policy and Administration and the University of Medicine and Dentistry of New Jersey–School of Osteopathic Medicine located in Stratford, New Jersey. Some courses in the concentration are offered on the Rutgers–Camden campus and others on the School of Osteopathic Medicine Stratford campus. Students in the health care management and policy concentration must complete the following core courses:

- 56:834:501 Foundations of Policy Analysis (3)
- 56:834:503 Law and Public Policy (3)
- 56:834:505 Organizational Behavior (3)
- 56:834:520 Health Care Financial Management (3)
- 56:834:535 Research Methods (3)
- 56:834:536 Public Information Systems (3)
- 56:834:552 Health Care Management (3)

In addition to these seven core courses, students are expected to complete the following specialized courses:

- 24:601:614 Health Law (3)
- 56:834:557 Human Resources Management (3)
- 56:834:561 Ethical Issues in Health Care Delivery (3)
- 56:834:608 Seminar: Social and Policy Contexts of Health Care (3)
- 56:834:609 Research Seminar in Health Care Management and Policy (3)
- Two electives (6)

International Public Service and Development Concentration

The international public service and development concentration combines graduate-level studies in public policy and administration with course work on community service, international development policy and administration, and nonprofit management. Students in this concentration serve a placement in the Peace Corps or other approved international development organizations (one-year minimum). Students who serve a Peace Corps placement will receive a Certificate of Completion from the Peace Corps in addition to the M.P.A. degree.

Students in the international public service and development concentration are required to complete the following core courses during one academic year in residence:

- 56:834:501 Foundations of Policy Analysis (3)
- 56:834:503 Law and Public Policy (3)
- 56:834:505 Organizational Behavior (3)
- 56:834:515 Introduction to Public Budgeting and Finance (3)
- 56:834:525 Public Management (3)
- 56:834:535 Research Methods (3)
- 56:834:536 Public Information Systems (3)

In addition to the core courses, all international public service and development students are required to take:

- 56:834:556 International Community Development (3)
- 56:834:605 Nongovernmental Organization Management and Development (3)
- 56:834:606 Colloquium: International Economic Development (3)
- 56:834:607 Colloquium: International Development Administration (3)
- 56:834:676 International Public Service Internship and Directed Study (3)

Public Management Concentration

The public management concentration is designed to provide public employees or those preparing for service in the public sector with essential knowledge and skills in administration, budgeting and finance, communications, information systems, law, leadership, personnel, and policy analysis that are important for effective management in local, state, and federal agencies or nonprofit organizations.

Students in the public management concentration are required to complete the following core courses during their first two terms (full-time students) or three terms (part-time students):

- 56:834:501 Foundations of Policy Analysis (3)
- 56:834:503 Law and Public Policy (3)
- 56:834:505 Organizational Behavior (3)
- 56:834:515 Introduction to Public Budgeting and Finance (3)
- 56:834:525 Public Management (3)
- 56:834:535 Research Methods (3)
- 56:834:536 Public Information Systems (3)

In addition to the 21 credits of core courses, students in the public management concentration must take:

- 56:834:541 Internship I (3) *
- 56:834:553 Financial Management of Public Programs (3)
- 56:834:557 Human Resources Management (3)
- 56:834:558 Executive Leadership and Communication Skills (3)
- 56:834:675 Research Workshop (3)
- Two electives and/or seminars (6)

Transfer Credits

Students may apply to transfer up to 12 credits toward their M.P.A. degree at the Graduate School–Camden provided they satisfy the following conditions: (1) complete 12 credits as a matriculated M.P.A. student; (2) transfer only courses from approved graduate programs; and (3) obtain approval of both the chairperson of the graduate Department of Public Policy and Administration and the dean of the Graduate School–Camden. Only grades of *B* and above may be counted for transfer credits.

Scholastic Standing

Academic Warning, Probation, and Dismissal

Students who have earned two grades of *C* or one grade of *F* are placed on academic probation. Students who do not earn a minimum cumulative grade-point average of 3.0 after completion of 12 credits of course work also are placed on probation. Students on probation are limited to a less-than-full course load, and their class schedule must be approved by the associate chairperson of the graduate program.

A student on probation who receives a *C* or lower grade is dismissed from the program. Students may appeal their dismissals to the Department of Public Policy and Administration graduate program's Scholastic Standing Committee.

Incomplete Grades

All of the rules of the Graduate School–Camden regarding incomplete grades apply to Department of Public Policy and Administration graduate students. In addition, a student may not acquire more than two grades of *Incomplete (IN)* during his or her course of study in the graduate program. A student receiving a third *IN* grade is placed on academic probation and is required to appear before the Scholastic Standing Committee to explain the reasons for the student's inability to complete course work on schedule.

Student Appeals

At a meeting of the Scholastic Standing Committee, a student appealing dismissal must present in writing any information he or she deems relevant to the case. This may include, but is not limited to, circumstances outside the student's control that may account for the poor performance. Members of the committee may question the student.

All members of the committee have one vote on the disposition of appeals. The fact that a member of the committee has given the student a *C* or lower grade shall disqualify him or her from voting.

The committee has the option of requiring remedial work or setting other conditions for continuation in the graduate program.

* A student may, with the approval of the chairperson of the graduate department, substitute 56:834:650 Special Problems in Public Policy and Administration, 56:834:601-607 Colloquium in Public Policy and Administration, or other elective for the internship requirement. Also, students with no public or nonprofit sector experience or with special educational needs or experience may apply to take an extra 3 credits of internship in lieu of one 3-credit elective or seminar.

Student Complaints about Grades

A student with a complaint about a grade for a course must submit the complaint, in writing, to the course instructor within one week of the receipt of the grade. In the event of an unsatisfactory resolution of the dispute, the student may appeal to the chairperson of the graduate Department of Public Policy and Administration. Such appeals must be made in writing no later than one week following the date of unsatisfactory resolution. A further appeal within one week of the chairperson's decision may be made to the dean of the Graduate School–Camden.

Financial Aid

Students interested in financial aid should contact the Office of Financial Aid at the time of application. Research assistantships, scholarships, and graduate assistantships are available. Those students wishing to be considered for financial aid should contact the chairperson of the Department of Public Policy and Administration.

Graduate Courses

56:834:501. FOUNDATIONS OF POLICY ANALYSIS (3)

The logic of action, decision making, and belief; epistemological issues underlying scientific and policy research; causality, probability, statistics, and public policy; the role of problem definition, description, theory, model building, explanation, and prediction in policy research and decision making. Reviews major substantive theories of public choice and public policy making and critically examines them from a logical and theoretical perspective.

56:834:503. LAW AND PUBLIC POLICY (3)

The place of law in the formulation, articulation, and enforcement of public policy; legal sources, such as constitutions, statutes, cases, administrative rulings, and agency practices; federal, state, and local sources and materials examined for policy inconsistencies, contradictions, and overlap; the effectiveness of fees, taxes, licenses, labeling, injunctions, and other legal sanctions.

56:834:505. ORGANIZATIONAL BEHAVIOR (3)

Examines organization behavior—of individuals and groups/teams—and the organization context in which that behavior takes place. Organization theories as well as behavior theories and approaches discussed, including seminal historical works and more current treatments.

56:834:515. INTRODUCTION TO PUBLIC BUDGETING AND FINANCE (3)

Combines readings with the development of a budget for a hypothetical city to demonstrate budget formats, the politics of budgeting, and methods of projecting expenditures and revenues. Administration and criteria for selecting taxes.

56:834:520. HEALTH CARE FINANCIAL MANAGEMENT (3)

Overview of financial management of health care organizations, including macro financing of the health care delivery system by patients, governments, insurance carriers, corporations, and other third-party payers, as well as prospective changes in health financing. Key financial management issues such as capital financing and budgeting, cash flow management, third-party reimbursement, and health cost accounting addressed.

56:834:521. DIRECTED STUDY (3)

Prerequisites: Approval of M.P.A. chairperson, permission of instructor.

Requires a public policy paper or written administrative analysis. May be substituted for Research Workshop when, for good cause, a student is unable to attend the workshop. The topic and an outline of the paper must be filed with the chairperson by the end of the third week of the student's final term.

56:834:525. PUBLIC MANAGEMENT (3)

Contemporary management approaches, techniques, and skills for managing various kinds of public organizations. Decision making, administrative leadership, planning, implementation, evaluation, ethics, and budgeting are key topics.

56:834:530. ANALYTICAL METHODS FOR HEALTH SERVICES (3)

Survey of methods to support effective service delivery and evaluation. Topics include appropriate statistics as well as health system data and analysis issues.

56:834:535. RESEARCH METHODS (3)

Pre- or corequisite: Introductory statistics course.

Research as a practical skill for public administrators. Topics include research design, descriptive and differential statistics, multiple regression, and qualitative research. Use of a computer statistical package.

56:834:536. PUBLIC INFORMATION SYSTEMS (3)

Management-oriented computer methods including personal productivity systems and office automation; database management; and the analysis, supervision, and coordination of the management information systems department within the larger organizational culture.

56:834:538. HEALTH CARE INFORMATION SYSTEMS (3)

Information needs of health care organizations for making decisions about strategic direction; financial, capital, operational, and regulatory planning; patient care; human resources management; and service evaluation. Design, implementation, and assessment of computerized and noncomputerized information systems along with key political, security, legal, and other issues relevant to information management.

56:834:541,542. INTERNSHIP I,II (3,3)

Prerequisite: 56:834:501 or permission of instructor.

Direct experience with public agencies; individual internships, under faculty supervision, in policymaking agencies.

56:834:543. EDUCATIONAL POLICY AND LEADERSHIP INTERNSHIP I (6)

For students in the educational policy and leadership concentration and required for principal certification. The following will be covered: curriculum leadership, supervision of instruction, pupil personnel service, personnel management, community relations, technical administrative skills, and student services. Interns work in schools in direct coordination with school principals in all phases of the internship.

56:834:544. EDUCATIONAL POLICY AND LEADERSHIP INTERNSHIP II (3)

For students in the educational policy and leadership concentration and required for principal certification. The following will be covered: facilities management, school finance, and school law. Interns work in schools in direct coordination with school principals in all phases of the internship.

56:834:552. HEALTH CARE MANAGEMENT (3)

Introduces theory, history, and organization of the health care delivery system. Key ethical, legal, technological, financial, and organizational issues that confront health care organizations addressed. Introduction to key managerial functions of health care administrators: planning and strategy making, organizing, quality and administrative control, financial management, and human resources management. Emphasis on external trends and forces affecting health care organizations.

56:834:553. FINANCIAL MANAGEMENT OF PUBLIC PROGRAMS (3)

Prerequisite: 56:834:515.

Examines budgetary processes, municipal bonds, cash management, and intergovernmental fiscal relations as they apply to financial management of public programs. Topics include cost-benefit, cost-revenue, and cost-effectiveness analyses, as well as contemporary issues such as privatization and liability insurance.

56:834:556. INTERNATIONAL COMMUNITY DEVELOPMENT (3)

Primarily for international public service and development students. To be completed over two terms.

Introductory analysis of current community development theory and practice and examination of its application to developing world situations and U.S. communities. Introduction and application of community development and project management tools and approaches. Requires a minimum of four hours of community service weekly.

56:834:557. HUMAN RESOURCES MANAGEMENT (3)

The relationship between employers, employees, and their labor relations organizations in government, health and human services, the nonprofit sector; leadership and direction of employees; impact of collective negotiations on critical issues of public policy; civil service organizations.

56:834:558. EXECUTIVE LEADERSHIP AND COMMUNICATION SKILLS (3)

Strengths and limitations of various leadership theories. Awareness of personal learning, leadership, influence, and communication styles. Develops leadership skills through interpersonal exercises and through course projects involving current managerial and political issues. Communication skills involving writing, speaking, meetings, media relations, and strategic planning emphasized.

56:834:559. ETHICS IN GOVERNMENT (3)

Study of the federal, state, and local laws governing the conduct of public officials, and of ethical standards beyond the boundaries of law. Relates professional standards of public administration to ethical problems in government.

56:834:560. MANAGERIAL SURVIVAL SKILLS (3)

Conceptual and practical approach to acquiring and refining managerial skills. Coping with organizational politics, managing job stress, managing limited time, delegating effectively, and building and managing a professional career. Readings, lectures, hands-on skill practice, and evaluation of performance.

56:834:561. ETHICAL ISSUES IN HEALTH CARE DELIVERY (3)

Exploration of ethical perspectives that can be applied to leading ethical issues in health, such as allocation of scarce and expensive medical resources, patient rights and organizational responsibilities, implications of health technology, and issues surrounding death.

56:834:570. LABOR-MANAGEMENT RELATIONS IN THE PRIVATE AND PUBLIC SECTORS (3)

Analysis of the structure and development of labor-management relationships in the United States and abroad, focusing on both private industry and governmental organizations. Explores history and the surrounding law while focusing on the negotiation and administration of collective bargaining agreements, related micro- and macroeconomic problems, and issues that accompany the growth of the nonunion sector in both private and public sectors.

56:834:601,602,603,604,606,607. COLLOQUIUM IN PUBLIC POLICY AND ADMINISTRATION I,II,III,IV,V,VI(3,3,3,3,3,3)

Intensive examination of a specific area of public-policy concern or of specific trends in public-policy analysis; individual research. Specific seminar topics include health administration, transportation, housing policy, productivity, energy policy, judicial management, international management, international financial management, administrative communication, environmental policy, community leadership, and comparative public policy.

56:834:605. NONGOVERNMENTAL ORGANIZATION MANAGEMENT AND DEVELOPMENT (3)

Examines conceptual and analytic issues related to managing nongovernmental organizations (NGOs) both in the United States and abroad, and how these issues are addressed. Develops skills in the use of several basic management techniques and tools particularly relevant to NGO strategic management, fund-raising, and governance.

56:834:608. SEMINAR: SOCIAL AND POLICY CONTEXTS OF HEALTH CARE (3)

Examines social and policy forces that shape health and health care in the United States. Assists health care professionals in understanding the larger context of health care, which professionals help shape and which, in turn, shapes their daily activities and outcomes. Responds to contemporary trends and issues. Topics may include the nature, definition, and measurement of health and illness; sociological and political perspectives on patterns of health and disease; the illness experience; the nature and role of health care providers; characteristics of and trends in the U.S. health care system; and forces shaping the health care system.

56:834:609. RESEARCH SEMINAR IN HEALTH CARE MANAGEMENT AND POLICY (3)

Students will conduct an in-depth study of an issue, problem, or topic of their choice in health management or policy. This course will be an intensive structured research experience in which peer review processes will be an integral element and research will proceed in a series of clearly delineated steps. Students will submit a written report and make a class presentation of their research. To be eligible to enroll in this course, students must have completed at least 21 credit hours, including Foundations of Policy Analysis, Principles of Health Care Management (or Principles of Public Management), Organizational Behavior, and Research Methods (or an approved substitute). In rare cases, students with a compelling need may petition the program coordinator of the health care management and policy concentration for permission to enroll with fewer than 21 hours, but not less than 15 completed credits.

56:834:611. EVALUATION RESEARCH SEMINAR (3)

Prerequisite: 56:834:535.

Nature, logic, and the role of evaluation research in the policy-analysis and policy-research process; evaluation design, criteria, units of measurement, and ways of devising appropriate social indicators and measures; strategies for implementing research designs; logical problems of analysis.

56:834:612,613. COLLOQUIUM IN EDUCATIONAL POLICY AND LEADERSHIP (3,3)

Open to students in the educational policy and leadership concentration. Courses will cover various areas of study in educational policy and administration.

24:601:614. HEALTH LAW (3)

Examines health law, focusing on such issues as the separate health care system for the poor; financing of health services; patients' rights; quality-care standards; the role of the physician; physician-patient relations; Medicaid; claims review; the impact of health maintenance organizations (HMOs) and other prepayment mechanisms; national health insurance; health planning; and the political economy of the health care system. Offered by the Rutgers School of Law-Camden.

56:834:650. SPECIAL PROBLEMS IN PUBLIC POLICY AND ADMINISTRATION (3)

Prerequisites: Completion of core examination and approval of M.P.A. chairperson.

Available in lieu of internships and conducted by arrangement with specific instructor.

56:834:675. RESEARCH WORKSHOP (3)

Prerequisites: 56:834:501, 505, 525, 535, and permission of instructor.

Guides students in formulating, researching and writing a capstone research paper. Integrates the skills and concepts from the core courses as students use quantitative and qualitative methods to analyze a selected policy or administrative problem. Students must have completed 21 M.P.A. credits.

56:834:676. INTERNATIONAL PUBLIC SERVICE INTERNSHIP AND DIRECTED STUDY (3)

Prerequisite: Permission of instructor.

Guides, integrates, and assesses the lessons of the overseas field placement through a system of advising, e-discussions, and written reports which require students to document and assess their international experiences. This web-based course enhances proficiency through the analysis of a specific project, program, or policy relevant to the international placement. It offers the opportunity to apply program management tools in "real life" situations. Covers topics such as needs assessment; stakeholder analysis; participatory strategies; feasibility studies; SWOT analysis; program/project design including objectives and logical framework; implementation strategies; monitoring and evaluation; lessons learned; and recommendations for program or policy change.

56:834:800. MATRICULATION CONTINUED (0)

Continuous registration may be accomplished by enrolling for at least 3 credits in standard course offerings, including research courses, or by enrolling in this course for 0 credits. Students actively engaged in study toward their degree who are using university facilities and faculty time are expected to enroll for the appropriate credits.

56:834:866. GRADUATE ASSISTANTSHIP (E-BA)

School of Business–Camden

Web Site: <http://camden-sbc.rutgers.edu>

MISSION STATEMENT

The mission of the School of Business is to generate and disseminate knowledge related to the improvement of management while seeking to be a recognized leader in delivering high quality, cost-effective business education in southern New Jersey. Activities essential to the performance of this mission are guided by the following beliefs and values:

The School of Business values the strength of scholarship among the faculty, who

- publish in national and international scholarly journals
- possess original thinking and knowledge about business fields and disciplines that can be used to enrich the quality of information disseminated to students
- develop theory combined with practical application to improve critical thinking and problem solving

The School of Business values effective teaching, especially

- the use of diverse instructional methods and employment of advanced technology
- the preparation of students for careers in general management, as well as the functional areas of business

The School of Business values the strength of service

- in the external community, the professions, the university, and the School of Business

The School of Business values the enhancement of the quality of life, due to

- a responsive and innovative learning environment
- collegiality among people
- creative use of small size in developing new opportunities and programs

MASTER OF BUSINESS ADMINISTRATION

Degree Program Offered: Master of Business Administration

Dean of the School: Milton Leontiades, Ph.D.

Director of the Graduate Program: Izzet Kenis, Ph.D.; Business and Science Building, Room 221

Members of the Graduate Faculty

Snehamay Banerjee, Associate Professor of Management; Ph.D., Maryland

Alok Baveja, Associate Professor of Management Science; Ph.D., SUNY (Buffalo)

Barbara Bickart, Associate Professor of Marketing; Ph.D., Illinois (Urbana–Champaign)

John Broussard, Associate Professor of Finance; Ph.D., Louisiana State

Diana L. Day, Associate Professor of Management; Ph.D., Columbia

Chon-Huat Goh, Associate Professor of Management; Ph.D., Texas (Austin)

Franklin S. Houston, Associate Professor of Marketing; Ph.D., Purdue

Emel Kahya, Associate Professor of Accounting; Ph.D., Rice

Carol Kaufman-Scarborough, Associate Professor of Marketing; Ph.D., Temple

Julie E. Kendall, Associate Professor of Management; Ph.D., Nebraska (Lincoln)

Kenneth E. Kendall, Professor of Management; Ph.D., SUNY (Buffalo)

Izzet Kenis, Associate Professor of Accounting; Ph.D., New York

Sung Soo Kim, Associate Professor of Accounting; Ph.D., CUNY

Milton Leontiades, Professor of Management; Ph.D., American

Briance Mascarenhas, Professor of Management; Ph.D., California (Berkeley)

Maureen Morrin, Associate Professor of Marketing; Ph.D., New York

Emeka Nwaeze, Associate Professor of Accounting; Ph.D., Connecticut

Eugene A. Pilotte, Associate Professor of Finance; Ph.D., Indiana

Gayle Porter, Associate Professor of Management; Ph.D., Ohio State

Samuel Rabinowitz, Associate Professor of Management; Ph.D., Michigan State

Rakesh B. Sambharya, Associate Professor of Management and International Business; Ph.D., Temple

Robert Schindler, Associate Professor of Marketing; Ph.D., Massachusetts

Panayiotis Theodossiou, Professor of Finance; Ph.D., CUNY

Uzi Yaari, Professor of Finance; Ph.D., Chicago

Associate Members of the Graduate Faculty

Lucy Ford, Assistant Professor of Management; Ph.D., Virginia Commonwealth

Jungsoo Han, Assistant Professor of Accounting; A.B.D., Pittsburgh

Muhammadou M.O. Kah, Assistant Professor of Management/MIS; Ph.D., Stevens Institute of Technology

Arun Kumaraswamy, Assistant Professor of Management; Ph.D., New York

Sung Soo Kwon, Assistant Professor of Accounting; Ph.D., Michigan State

Richard Michelfelder, Assistant Professor of Finance; Ph.D., Fordham

Julie Ruth, Assistant Professor of Marketing; Ph.D., Michigan

Chester Spell, Assistant Professor of Management; Ph.D., Georgia Institute of Technology

Ahmad Telfah, Assistant Professor of Finance; A.B.D., New Orleans

Qin Jennifer Yin, Assistant Professor of Accounting; Ph.D., Houston

Master of Business Administration (M.B.A.) Program

The master of business administration program at the School of Business is designed to provide students with a broad professional education in business administration that prepares them for the increasingly complex demands of management. The program gives students an appreciation of the total enterprise as well as the basic functions of business, such as accounting, decision making, finance, information systems marketing, management and organizational behavior, and policy and strategy. Additionally, students have the opportunity to concentrate in a specific area of interest by taking elective courses in accounting, finance, health care management, international business, management, management information systems, ecommerce technology, and marketing. Graduates of the program typically seek employment with industrial and service businesses, government, and nonprofit organizations.

The program is offered in the evening, and students typically complete the program in four to eight terms. Courses are offered in Camden and Atlantic City.

Accreditation

The M.B.A. program is accredited by AACSB–International, the Association to Advance Collegiate Schools of Business.

Admission Requirements

Admission to the master of business administration program is made for the fall, spring, or summer term. Applicants to the program should have completed their baccalaureate degree prior to beginning their graduate program. Admission to the M.B.A. program is based on evidence of each candidate's ability, aptitude, and potential for success in the program. The program director and the admissions committee review the applicant's undergraduate transcripts, Graduate Management Admissions Test (GMAT) score, letters of recommendation, and statement of career objectives. The candidate's history of leadership and management experience also are evaluated. In general, a GMAT score of 500 or higher and an undergraduate cumulative grade-point average of 2.5 or higher are required for admission.

Application forms may be obtained from the M.B.A. Director, School of Business–Camden, Rutgers, The State University of New Jersey, 227 Penn Street, Camden, NJ 08102-1656.

Nondegree/Nonmatriculated Students

A limited number of nonmatriculated students who submit a complete application may be permitted to enroll in M.B.A. classes for one term before they satisfy the GMAT requirement and matriculate.

Degree Requirements

The M.B.A. curriculum consists of a minimum of 60 credits divided into two parts: a required core program, which is based on the premise that there is a common body of knowledge important for managerial decision making, and elective courses selected by the

student after completion of appropriate prerequisite courses. The program includes 12 required core courses (36 credits) and 8 elective courses (24 credits). The specific course requirements and the basic structure of the program follow.

Required Core Courses (36 credits)

1. *Basic Skills Courses (9 credits)*
 - 53:135:500 Foundation of Global Business Economics (3)
 - 53:135:501 Business Communication and Computers (3)
 - 53:135:502 Quantitative Tools (3)
2. *Functional Courses (24 credits)*
 - 53:010:502 Accounting for Financial Analysis (3)
 - 53:010:503 Accounting for Management (3)
 - 53:390:506 Business Finance (3)
 - 53:620:504 Management Science (3)
 - 53:620:505 Organizational Behavior (3)
 - 53:620:506 International Business Environment (3)
 - 53:623:510 Management Information Systems (3)
 - 53:630:508 Marketing Management (3)
3. *Integrative Capstone Course * (3 credits)*
 - 53:620:672 Management Policy and Strategy (3)

Electives (24 credits)

1. *Breadth Courses (9 credits)*
One course from each of three of the following four areas: e-commerce and information technology, finance, management, and marketing.
2. *Free Electives (15 credits)*
Five courses from the offerings of the M.B.A. program or from the School of Law–Camden or from the health care management and policy track offered by the Department of Public Policy and Administration of the Graduate School–Camden

Waivers of basic skills and functional courses may be allowed for previous graduate or undergraduate work. However, a minimum of 12 graduate courses or 36 credits must be completed in the Rutgers–Camden M.B.A. program with a cumulative grade-point average of 3.0 or higher for graduation. At least one required or elective course in each of the areas of accounting, finance, management, management information systems, and marketing must be completed in the Rutgers–Camden M.B.A. program.

Concentrations

Concentration in a specific area of business is not required for graduation. However, students may choose a concentration in accounting, e-commerce and information technology, finance, health care management, international business, management, or marketing. A concentration consists of four elective courses (excluding the required core courses) taken in one of the areas mentioned.

Students must inform the M.B.A. program director in writing on their application for graduation about the choice of concentration, if any, in order for it to be recognized on their transcript.

Concentration in Health Care Management. M.B.A. students who are interested in developing their managerial and policy skills in the health care industry are recommended to explore the offerings of the Health Care Management and Policy Track offered by the Department of Public Policy and Administration at the Graduate School–Camden. With permission from the track coordinator, M.B.A. students who are interested in concentrating in health care management can take four courses, or 12 credits, selected from the following list and use them as free electives toward the completion of the M.B.A. program:

- 56:834:520 Health Care Financial Management (3)
- 56:834:530 Analytical Methods for Health Services (3)
- 56:834:538 Health Care Information Systems (3)
- 56:834:552 Health Care Management (3)
- 56:834:561 Ethical Issues in Health Care Delivery (3)
- 56:834:608 Seminar: Social and Policy Contexts of Health Care (3)
- 56:834:609 Research Seminar in Health Care Management and Policy (3) or any other health care related course offered by the program

Concentration in International Business. M.B.A. students may obtain a concentration in international business by taking 12 credits (typically four elective courses) from the following list offered by the M.B.A. program, the School of Law–Camden, and the Department of Public Policy and Administration of the Graduate School–Camden. At least 6 credits (two courses) in this concentration must be taken from the offerings of the M.B.A. program.

- 53:010:535 Seminar in International Accounting (3)
- 53:390:514 Multinational Financial Management (3)
- 53:390:552 Global Financial Markets (3)
- 24:601:630 International Business Transactions (3) (law school)
- 24:601:663 International Aspects of U.S. Income Taxation (2) (law school)
- 24:601:688 International Business Planning (3) (law school)
- 53:620:515 International Management (3)
- 53:623:515 Seminar in Global Ecommerce Policy (3)
- 53:623:544 Global Operations Information Technology (3)
- 53:630:515 Global Marketing Strategy (3)
- 56:834:606 International Economic Development (3) (public policy)

Any other approved course related to international business

J.D./M.B.A. Dual-Degree Program

The School of Law–Camden and the School of Business–Camden offer a J.D./M.B.A. dual-degree program. Students who are interested in pursuing the J.D./M.B.A. degree must apply and be admitted independently to both the M.B.A. program and the J.D. program.

The M.B.A. program awards up to 12 credits of course work toward the M.B.A. degree for credits earned at the School of Law–Camden from among a list of courses specified by the M.B.A. committee. In order to receive credit toward the M.B.A. degree, students must achieve grades of C or better in their law courses. Courses taken in the J.D. program, however, will not be included in the computation of the cumulative grade-point average for the M.B.A.

The School of Law–Camden also will transfer up to 12 credits of course work toward the J.D. degree for credits earned in the M.B.A. program in courses approved in advance for each student by the Law School Committee on the Curriculum. In order to receive credit toward the J.D. degree, students must achieve grades of C or better in the M.B.A. courses. Courses taken in the M.B.A. program, however, will not be included in the computation of the cumulative grade-point average for the J.D. degree. Students enrolled in the J.D./M.B.A. program must comply with the rules and regulations of each program, and must meet the requirements for each degree except insofar as joint credit is awarded in accordance with the rules stated above.

Scholastic Standing

Graduation with Honors

M.B.A. students who complete their course work with a cumulative grade-point average of 3.75 to 3.84 graduate with honors, 3.85 to 3.94 graduate with high honors, and students who attain a GPA of 3.95 or higher graduate with highest honors.

Time Limit

The maximum number of years permitted to complete the M.B.A. program is six years. However, under certain circumstances, such as travel, illness, or relocation, this can be extended one year by the director of the graduate program. Students need to petition the graduate program director to have such an extension.

Matriculation Continued

M.B.A. students are permitted to take a maximum of two terms of leave of absence (Matriculation Continued) back-to-back and a maximum of four terms of leave of absence in the entire program. Under certain situations, such as extended travel, illness, and other extenuating circumstances, leave of absence requirements stated above can be waived by the M.B.A. program director. Students need to petition the program director for such waivers.

* Capstone course cannot be waived and should be taken in the final term.

Probation and Dismissal

Students who qualify for the master of business administration degree must earn grades of *B* or better in their course work. Students who earn two grades below *B* or one grade of *F* are automatically placed on probation. Three grades below *B* or two grades of *F* automatically cause a review of the academic record by the Scholastic Standing Committee. The Scholastic Standing Committee reserves the right to recommend dismissal in those cases where the student has less than a 3.0 cumulative grade-point average. A student will not be recommended for graduation with either three or more grades of *C* (including *C+*) or a grade of *F* remaining on his or her record. An overall cumulative grade-point average of 3.0 also is required for graduation.

Course Repetition

Students, with permission from the graduate program director, may retake any course with a grade below *B* once to improve the course grade. Both grades remain on the transcript, but the higher grade replaces the lower grade for the purpose of grade-point average calculation and meeting the 3.0 cumulative grade-point average requirement for graduation.

Incomplete Grades

An incomplete grade may be awarded at the option of the instructor. This work may be made up, and a change of grade may be authorized by the instructor, within any period agreed to by the instructor and the student up to one year after the end of the course. After that date, no change may be made and the incomplete grade remains on the permanent record. Required courses that have not been completed must be repeated in order to receive credit toward the degree.

Student Appeals

All students' appeals and grievances may be presented to the M.B.A. program director *only* after appeal has been made to the individual faculty member involved. The Scholastic Standing Committee, chaired by the M.B.A. program director, meets to determine only if the appeal/grievance has any validity. The committee presents its recommendation to the dean of the School of Business–Camden, who then determines if further action is necessary.

Graduate Courses (Accounting 010)

53:010:502. ACCOUNTING FOR FINANCIAL ANALYSIS (3)

Introduction to basic concepts, standards, and practices of financial reporting. Basic financial statements, inventories, long-term productive assets, bonds and other liabilities, and stockholders' equities.

53:010:503. ACCOUNTING FOR MANAGEMENT (3)

Prerequisite: 53:010:502.

Accounting for investments and business combinations and financial ratios, budgeting, cost-volume-profit analysis, cost control, and the analysis and measurement of divisional performance.

53:010:512. CASES IN COST AND MANAGERIAL ACCOUNTING (3)

Prerequisite: 53:010:503 or equivalent.

Advanced techniques used to analyze managerial accounting information for decision making; profit planning and control emphasized. Cases and current readings on budgeting, cost control, standards, and performance evaluation covered.

53:010:520. TAXATION FOR MANAGERIAL DECISION MAKING (3)

Prerequisite: 53:010:502.

Introduction to the federal tax system and tax-related decision making for managers. Explores the statutory, administrative, and judicial structure from which federal tax law evolves.

53:010:521,522. DIRECTED STUDY IN ACCOUNTING (BA,BA)

Prerequisite: 53:010:502.

Directed study supervised by an individual faculty member and approved by the director of the M.B.A. program.

53:010:523. ADVANCED AUDITING (3)

Prerequisite: 52:010:415 or equivalent.

Theory of the attest function and advanced practical applications with attention to methods and procedures for evidence gathering, evaluation, and reporting. Philosophy, statistical sampling, EDP auditing, fraud examination, professional ethics, and audit research cases emphasized.

53:010:525. PROBLEMS IN FINANCIAL REPORTING (3)

Prerequisite: 53:010:503.

Intensive examination of financial statements from the point of view of the user. Focus on accounting institutions, standards, and methodology; the interpretation of accounting data, revenue and expense recognition, and reporting. Issues in debt and equity financing.

53:010:532. ACCOUNTING INFORMATION SYSTEMS (3)

Prerequisite: 53:010:502 or equivalent.

Examines concepts, principles, and components of computerized accounting information systems. Topics include information concepts, data flow diagrams, data dictionaries, a model information system, system flowcharts, internal controls, hardware and software study, structured systems analysis, structured systems design, systems implementation and operation, and AIS applications.

53:010:533. MANAGEMENT CONTROL SYSTEMS (3)

Prerequisite: 53:010:503 or equivalent.

Examines the nature and structure of the management control process. Readings and cases, with emphasis on cost, profit, and investment management systems through programming, budgeting, and standard and performance appraisals.

53:010:535. SEMINAR IN INTERNATIONAL ACCOUNTING (3)

Prerequisite: 53:010:502.

International accounting phenomena. Topics include historical and conceptual development of international accounting; diversity of accounting practices focusing on selected countries; multinational enterprises; international accounting standards setting; national accounting standards setting models; legal environment and regulation models in selected countries; relations between economic, cultural, and political factors and accounting rules and practices focusing on selected countries; multilisting of stocks; accounting professions; and audit environment.

53:010:561. GOVERNMENT AND NONPROFIT ACCOUNTING (3)

Detailed study of accounting for federal and local governments, agencies, educational and health care institutions, charities and religious organizations, and other not-for-profit organizations. Environment, evolution, budgetary systems, auditing, and various alternatives of fund accounting emphasized. Government and nonprofit accounting as it relates to government, colleges and universities, and voluntary health and welfare programs.

53:010:564. ACCOUNTING THEORY AND POLICY (3)

Prerequisite: 52:010:306 or equivalent.

Contemporary theories explaining accounting and auditing phenomena. Alternative hypotheses and views to explain existing and emerging issues and observations in areas relating to the markets for accounting and auditing services. Accounting regulations, rule setting, and the accounting profession.

53:010:565. FINANCIAL STATEMENT ANALYSIS (3)

Analysis, understanding, and interpretation of financial statements; simple skills and methods for making common sense of the elaborate financial statements and financial reports prepared according to existing accounting standards and conventions. Skills relevant to credit analyses, lending decisions, security analyses, investment decisions, and other decisions that rely on financial data.

53:010:566. INTERNATIONAL ACCOUNTING (3)

Prerequisite: 53:010:502 or equivalent.

Covers accounting and reporting principles and practices in various countries, as well as accounting considerations in international business operations, such as foreign currency translation, auditing, accounting systems, taxation, and sensitive payments.

53:010:584. ADVANCED TAXATION (3)

Prerequisite: 52:010:383 or equivalent.

Analysis of the federal tax laws as they apply to the income of partnerships, decedents, estates and trusts, and corporations. Focus on corporate distributions, especially taxed corporations, capital changes, liquidations, and corporate reorganizations.

53:010:670. SPECIAL TOPICS IN ACCOUNTING (3)

Prerequisite: 53:010:502.

Topics vary from term to term. Consult the director of the M.B.A. program for specific content each term. Students may enroll in more than one special topics course.

Graduate Courses (Basic Skills 135)**53:135:500. FOUNDATION OF GLOBAL BUSINESS ECONOMICS (3)**

Basic micro- and macroeconomic analysis topics. Microeconomic topics include supply and demand analysis, pricing policies, competitive and monopolistic markets, and government regulation. Macroeconomic topics are employment, inflation, economic growth, and fiscal and monetary policies. Global perspective of economics emphasized.

53:135:501. BUSINESS COMMUNICATION AND COMPUTERS (3)

Spoken and written communication in business, including audience analysis, formatting information style, readability, and editing techniques; designing documents such as letters, reports, proposals, and manuals; presentations and negotiating. Examines effects of computers on business communication, including email, the World Wide Web, document conferencing, hypertext links, and computer graphics.

53:135:502. QUANTITATIVE TOOLS (3)

Basic mathematical and statistical tools needed for the study of many subject areas in business and for business decision making. Topics covered include algebraic functions, differentiation techniques, optimization, integration, probability distributions, nonparametric methods, regression analysis, and time-series forecasting.

Graduate Course (Business Law 140)**53:140:504. COMMERCIAL BUSINESS LAW (3)**

Covers various aspects of the uniform commercial code, with emphasis on the following topics: formation, operation, and discharge of contracts; agency; commercial paper; debtor-creditor relationships, including bankruptcy; property, partnerships and corporations with respect to liability, the power of corporate officers, and the rights of stockholders; negotiable instruments and bailment; and other aspects of federal legislation that impact business operations.

Graduate Courses (Finance 390)**53:390:506. BUSINESS FINANCE (3)**

Prerequisites: 53:135:500, 502.

The business environment, determinants of interest rates, the time value of money, amortization schedules, risk and return analysis, bond and stock valuation, the cost of capital, capital budgeting techniques, financial and operating leverages.

53:390:513. FINANCIAL MANAGEMENT AND POLICY (3)

Prerequisites: 53:010:502, 53:390:506, and at least concurrent enrollment in 53:390:540.

Advanced issues in capital budgeting—replacement policy, optimal investment horizon, and budgeting under taxes and inflation; financial leverage, firm valuation, and the cost of capital; earnings distribution policy, corporate acquisitions.

53:390:514. MULTINATIONAL FINANCIAL MANAGEMENT (3)

Prerequisite: 53:390:506.

Financial management for the multinational firm—measuring and managing foreign exchange exposure, current asset management, multinational capital budgeting, financing of international projects, financing of trade, political risk management, taxation, and international transfer pricing.

53:390:521,522. DIRECTED STUDY IN FINANCE (BA,BA)

Prerequisite: 53:390:506.

Directed study supervised by an individual faculty member and approved by the director of the M.B.A. program.

53:390:540. INVESTMENTS AND PORTFOLIO MANAGEMENT (3)

Prerequisite: 53:390:506.

The investment setting, organization, and functioning of securities markets. Efficient capital markets, modern portfolio management, asset pricing models, security valuation principles and practices, analysis and management of bonds and common stocks, derivative securities, evaluation of portfolio performance.

53:390:550. FINANCIAL MARKETS AND INSTITUTIONS (3)

Prerequisite: 53:390:506.

Financial institutions and their markets; government regulation; term structure of interest rates; monetary policy; innovation in financial markets—futures, options, swaps, and securitization; management of credit risk; interest rate risk and foreign exchange risk; international banking.

53:390:552. GLOBAL FINANCIAL MARKETS (3)

Prerequisite: 53:390:506.

International monetary system, measurement of international trade and investment, global banking, Eurocurrency markets, global securities markets, foreign exchange markets, emerging capital markets, and global portfolio management.

53:390:560. FUTURES AND OPTIONS (3)

Prerequisite: 53:390:506 and at least concurrent enrollment in 53:390:540.

Futures and options markets for financial and real assets; institutional setting and trading; analysis and valuation of futures, options, and other derivative securities; and hedging and simulation techniques for portfolio rebalancing.

53:390:570. STATISTICAL FINANCIAL ANALYSIS (3)

Prerequisites: 53:010:502, 53:390:506.

Model building and analysis of financial data using statistical techniques and computer software such as SAS or SPSS. Topics include models for predicting business failures, mergers and acquisitions, evaluating consumer and business loans, estimation of portfolio inputs, evaluation of portfolio performance, sales and earnings forecasting, and time-series analysis of financial data.

53:390:670. SPECIAL TOPICS IN FINANCE (3)

Prerequisite: 53:390:506.

Topics vary from term to term. Consult the director of the M.B.A. program for specific content each term. Students may enroll in more than one special topics course.

Graduate Courses (Management 620)**53:620:501. SOCIAL RESPONSIBILITY OF MANAGEMENT (3)**

A business organization's relationships with the external environment; the influence of consumers and labor organizations; ethics; governmental influences, such as taxation, rules and regulations, and antitrust policy; the role of business in the economy. Problems and cases used to illustrate the decision process necessitated in various environmental situations.

53:620:504. MANAGEMENT SCIENCE (3)

Prerequisite: 53:135:502.

Application of quantitative models and their related mathematical techniques to the solution of business problems. Single- and multiple-criteria decision methods.

53:620:505. ORGANIZATIONAL BEHAVIOR (3)

Focuses on the behavior of individuals in organizations; application of concepts, theories, methods of inquiry, and empirical generalizations from the behavioral sciences to the observation of behavioral phenomena in organizations.

53:620:506. INTERNATIONAL BUSINESS ENVIRONMENT (3)

Introduction to the context of international business. Overview of the economic, environmental, ethical, cultural, legal, and political issues that affect operations in the global arena. Various modes of entering foreign countries. International institutions, national competitiveness, market reform, and emerging trends in the global environment. Various regions explored.

53:620:513. PRODUCTION AND OPERATIONS MANAGEMENT (3)

Prerequisite: 53:620:504.

Analytical techniques for managing the operations of both manufacturing and service organizations. Inventory management; operations planning and control; forecasting; quality assurance; project management scheduling; and material requirements planning.

53:620:514. LABOR-MANAGEMENT RELATIONS IN THE PRIVATE AND PUBLIC SECTORS (3)

Prerequisite: 53:620:505.

Analysis of structure and development of labor-management relationships in the United States and abroad, focusing on both private industry and governmental organizations. History and the surrounding law studied while focusing on the negotiation and administration of collective bargaining agreements, related micro- and macroeconomic problems, and the issues that accompany the growth of the nonunion sector in both private and public sectors.

53:620:515. INTERNATIONAL MANAGEMENT (3)

Prerequisite: 53:620:506.

Planning, organization, staffing, coordination, research, and development in international companies. International business government interactions and their management. Cross-cultural management and negotiating techniques analyzed. Various strategies of global firms and their sources of competitive advantage. Examination of the use and management of strategic alliances.

53:620:516. TOTAL QUALITY MANAGEMENT (3)

Total quality management (development, practice, and process) in the United States. Focus on increasing productivity through continuous improvements in quality. Case studies and role-playing exercises.

53:620:517. ENTREPRENEURSHIP: NEW VENTURE CREATION (3)

Contemporary definition of entrepreneurship; its application and potential ramifications for companies, large and small, young and old, private and public. Entrepreneurial process; resource requirements, including the evaluation of the fiscal demands of new or existing ventures; and preparation of a business plan.

53:620:518. PUBLIC POLICY (3)

Identification of important public issues and their management by Congress, the president, the courts, and agencies of state and local governments.

53:620:519. URBAN APPLICATIONS OF MANAGEMENT SCIENCE (3)

Prerequisite: 53:620:504.

Bridges the gap between methodological courses and applications courses in operations management and management science. Problems considered in actual urban settings and include (but are not limited to) logistically oriented deployment of urban systems such as emergency, maintenance, transportation, and pickup and delivery services. Several tools, including linear programming, queuing theory, and networks enhanced to model actual real-world situations.

53:620:520. LEADERSHIP IN ORGANIZATIONS (3)

Prerequisite: 53:620:505.

Personal development to lead; workshop-style sessions target skill acquisition; study of prominent business leaders encourages understanding the multiple views of leadership and leadership styles; and theories of how and why leaders succeed define the potential for leaders' importance to organizational performance.

53:620:523. GLOBAL OPERATIONS MANAGEMENT (3)

Prerequisite: 53:620:506.

Utilizes recent innovations of cutting-edge technology to address issues of managing global operations. Text and cases draw on the experience of pioneers in global operations. Restructuring and reengineering to increase speed, reduce costs, and enhance innovativeness. Operations' major impact on global business performance.

53:620:524. ORGANIZATIONAL CHANGE AND DEVELOPMENT (3)

Prerequisite: 53:620:505.

Focus on the process by which managers sense and respond to change. Emphasis on proactive, planned, and managed change that may involve adaptation of structure and policy, as well as influencing the underlying system of beliefs, values, and attitudes. Examination of leadership climate, organizational culture, and individual resistance as limiting factors. Interventions compared.

53:620:525. CAREER DYNAMICS (3)

Explores theory, research, and practice related to careers in organizations. Topics span the individual's organizational life, beginning with entry into the organization and socialization process, through to the individual's early and middle career stages, and concluding with concerns surrounding late career/retirement. Additionally, current career planning and development programs and practices, as well as special issues, such as "plateauing," examined.

53:620:526. MOTIVATION AND COMPENSATION (3)

Prerequisite: 53:620:505.

Topics include wages and salary determination; fringe benefit administration; incentive-wage structures; the impact of collective bargaining on wage levels and structure; organizational behavior; and wage and salary systems.

53:620:528. TRAINING AND DEVELOPMENT IN THE ORGANIZATION (3)

Prerequisites: 53:620:505, 557.

Methods designed to assist individuals and organizational groups in preparing themselves for present and future opportunities; review and practice of techniques to improve knowledge, skills, attitudes, group behavior, and organizational structure.

53:620:530. MERGERS AND ACQUISITIONS (3)

Incentives and processes for using various modes of corporate development to achieve corporate strategic objectives; use of mergers, acquisitions, and alliances for corporate growth and capability building; analytical techniques used in corporate development decisions as well as process issues such as negotiation strategies, competitive bidding, and postmerger integration. Analyzes problems faced in managing acquisitions and explores alternative modes of market entry, such as joint ventures and internal development.

53:620:531. SUPPLY CHAIN STRATEGY (3)

Prerequisite: 53:620:504.

Improvement of supply chain interactions in various functional areas (such as engineering, purchasing operations, logistics, information systems, and sales) across a range of industries; implementation of integrated supply chain strategy.

53:620:557. PERSONNEL/HUMAN RESOURCES MANAGEMENT (3)

Prerequisite: 53:620:505.

Concentrates on management of personnel in organizations; focus on business problems and decision-making techniques faced by personnel managers, including an understanding of human behavioral factors that shape business decisions; training and management development, recruitment, selection of personnel, and specific techniques of personnel administration.

53:620:566. SEMINAR: BUSINESS, GOVERNMENT, AND SOCIETY (3)

Relationships between organizations, the laws, and governmental regulatory agencies that affect the operation of businesses, and the society in general. Conceptual, historical, legal, and ethical frameworks necessary to understand those relationships. Roles played by each party in relation to a number of employee, consumer, environmental, and international issues such as discrimination in employment, consumer safety, global warming, and the regulation of multinational concerns.

53:620:570. SEMINAR: ALTERNATIVE DISPUTE RESOLUTION (3)

Prerequisite: 53:620:505.

Underlying political, psychological, sociological, and economic reasons for the existence of disputes in contemporary society. Dispute resolution processes. Focus on underlying constructs, negotiation, mediation, and arbitration.

53:620:670. SPECIAL TOPICS IN MANAGEMENT (3)

Topics vary from term to term. Consult the director of the M.B.A. program for specific content each term. Students may enroll in more than one special topics course.

53:620:672. MANAGEMENT POLICY AND STRATEGY (3)

Capstone course. To be taken in the final term or last term available.

Integrates different functional skills in solving unstructured problems; emphasizes strategy formulation and implementation as developed through cases, lectures, readings, and practice exercises.

53:620:800. MATRICULATION CONTINUED (0)

Continuous registration may be accomplished by enrolling for at least 3 credits in standard course offerings, including research courses, or by enrolling in this course for 0 credits. Students actively engaged in study toward their degree who are using university facilities and faculty time are expected to enroll for the appropriate credits.

Graduate Courses (Ecommerce and Information Technology 623)**53:623:510. MANAGEMENT INFORMATION SYSTEMS (3)**

Information user's role in effective and efficient implementation and design of an MIS. Planning and control; ecommerce, ERP, DSS, telecommunications, group support systems, and wireless computing. Organizational implications of information technology and relevant hardware and software computer applications.

53:623:511. ANALYSIS AND DESIGN OF INFORMATION AND E-SYSTEMS (3)

Prerequisite: 53:623:510.

Analysis and design of information systems and e-systems in organizations, including the traditional life cycle approach for designing information systems and rapid application development used for designing ecommerce sites. Students learn how to critique and analyze ecommerce sites to enable web-based and traditional businesses to transact business over the Internet.

53:623:512. DECISION SUPPORT SYSTEMS AND DATA MINING (3)

Prerequisite: 53:623:510.

Semistructured decision making using DSS and expert systems; knowledge data discovery; and the application of algorithms for extracting patterns from data.

53:623:513. EMERGING INFORMATION TECHNOLOGIES (3)

Prerequisite: 53:623:510.

Novel technological advances; topics change from year to year and include web and ecommerce technologies.

53:623:514. ECOMMERCE PROJECT MANAGEMENT (3)

Prerequisite: 53:623:511.

Establishing and managing an ecommerce site; critical components for successful ecommerce with emphasis on business-to-consumer ecommerce.

53:623:515. SEMINAR IN GLOBAL ECOMMERCE POLICY (3)

Prerequisite: 53:623:513.

Furthering an organization's international mission through strategic alignment with their ecommerce presence; strategies for success for web-based enterprises and for the ecommerce segments of traditional businesses.

53:623:517. DATABASE SYSTEMS (3)

Prerequisite: 53:623:510.

Relational database theory and practice; concepts include data integrity, queries, and data warehousing. Students apply these concepts in a database project.

53:623:518. MANAGING TELECOMMUNICATION AND INTERNET TECHNOLOGIES (3)

Prerequisite: 53:623:510.

Network hardware, software, and applications in business and commerce; communications protocols, EDI, design, installation, testing, maintenance, and security and network.

53:623:521. DIRECTED STUDY IN MANAGEMENT INFORMATION SYSTEMS (3)

Prerequisite: 53:623:510.

Supervised by an individual ecommerce and information technology faculty member and approved by the graduate program director.

53:623:522. DIRECTED STUDY IN ECOMMERCE (3)

Prerequisite: 53:623:510.

Supervised by an individual ecommerce and information technology faculty member and approved by the graduate program director.

53:623:525. INFORMATION TECHNOLOGY (IT) POLICY (3)

Prerequisite: 53:623:510.

Management of information technology from the strategic manager's perspective. Analysis of competitive and cooperative IT systems; the relationship between IT and industry structure and the organization's products, services, and customers; IT as organization infrastructure; designing information architecture; management of information; and the evaluation of IT investments.

53:623:544. GLOBAL OPERATIONS INFORMATION TECHNOLOGY (3)

Prerequisite: 53:623:510.

Global perspectives in multinational corporations, EDI, CAD/CAM, time-based competition, FMS, and robotics; quality initiatives, improvements involving the creation and planning of goods and services. Emphasizes productivity in a global context. Application to health care, law enforcement, higher education, manufacturing, law, and the creative arts.

53:623:611. DESIGN OF INFORMATION SYSTEMS FOR BUSINESS (3)

Prerequisite: 53:623:511.

Essentials of systems design including structured design of input and output screens and forms; database design; interface design; designing accurate data-entry procedures; multimedia design; introduction to object-oriented design. Includes data-modeling techniques; hierarchical, network, and relational models for databases; CASE tools; and practical approaches to system implementation and evaluation.

53:623:670. SPECIAL TOPICS IN ECOMMERCE (3)

Prerequisite: 53:623:510.

Taught by an ecommerce and information technology faculty member. Topics vary from term to term. Consult the director of the program for specific content.

Graduate Course (Managerial Economics 626)**53:626:507. MANAGERIAL ECONOMICS (3)**

Application of economics to business decisions; economic price and cost theories applied to business problems and case studies.

Graduate Courses (Marketing 630)**53:630:508. MARKETING MANAGEMENT (3)**

The class explicitly models the relationship between demand and the role of price, promotion, distribution, and changes in technology. A new product plan is developed.

53:630:510. CONSUMER BEHAVIOR (3)

Prerequisite: 53:630:508.

Stages in the consumer decision-making process and the impact of relevant psychological, sociological, and cultural variables. Attention to recent research regarding contextual determinants of buying behavior. Implications for positioning and communication strategy, as well as public policy issues.

53:630:512. PRICING STRATEGIES (3)

Prerequisite: 53:630:508.

Techniques and concepts necessary for developing profit-maximizing pricing strategies. Methods for analyzing costs, competition, and the marketing environment. Price sensitivity and product value emphasized.

53:630:514. RETAIL MANAGEMENT AND E-MARKETING STRATEGY (3)

Prerequisite: 53:630:508.

Techniques for the management of both traditional retailing and e-marketing. Topics include development of retail format, site selection, personnel management, merchandise planning, and customer relationships. Applications of geodemographic mapping and retail information systems to ongoing operations. Includes web-based exercises and cases analyzing the contributions of "bricks" and "clicks" to a firm's strategic plan. Special topics include the Americans with Disabilities Act and its implications for retail layout and design.

53:630:515. GLOBAL MARKETING STRATEGY (3)

Prerequisite: 53:630:508.

Systematic treatment of marketing strategies in the global environment, including cultural practices, political risk assessment, variations in legal systems and trade law, the intricacies of tariff and nontariff barriers, and market entry decisions. Sources of global information and import/export regulations utilized. Product and brand decisions, promotional adaptations, and pricing strategies explored through cases analysis.

53:630:516. MARKETING PROBLEMS AND RESEARCH (3)

Prerequisite: 53:630:508.

How organizations collect and use information about consumers, competitors, and the environment, from a managerial perspective; use of marketing research for reducing environmental uncertainty and improving marketing decision making. Topics include (1) how to define research objectives and set research parameters, (2) sources of information about consumers and competitors, with an emphasis on new technologies for obtaining information, and (3) analytic methods used to describe and compare research results, as well as methods used for specific decision-oriented research applications.

53:630:517. NEW PRODUCT DEVELOPMENT (3)

Prerequisite: 53:630:508.

New product development in relation to market opportunity and competitive advantage; changes in competition, customer demands, and technology evaluated in terms of the product development process. Idea generation, prototype building, and commercial production. Case studies analyzed.

53:630:518. INTEGRATED MARKETING COMMUNICATIONS (3)

Prerequisite: 53:630:508.

Examination of marketing communications from a strategic, managerial perspective. Emphasis on issues associated with analyzing marketing communications needs, and planning and executing effective integrated advertising, sales promotion, publicity, and personal selling campaigns. Addresses marketing communications tools including the Internet, advertising, ecommerce web sites, and traditional marketing communications media.

53:630:519. STRATEGIC MARKETING CONCEPTS (3)

Prerequisite: 53:630:508.

Application of analytic and conceptual models to strategic issues in marketing. Topics include developing a sustainable advantage; allocation of resources across strategic business units, brands, and elements of the marketing mix; understanding competitive dynamics; and offensive and defensive marketing strategies. Issues explored via a competitive marketing simulation game and cases analyses.

53:630:521,522. DIRECTED STUDY IN MARKETING (BA,BA)

Prerequisite: 53:630:508.

Supervised by an individual faculty member and approved by the director of the M.B.A. program.

53:630:670. SPECIAL TOPICS IN MARKETING (3)

Prerequisite: 53:630:508.

Topics vary from term to term. Consult the director of the M.B.A. program for specific content each term. Students may enroll in more than one special topics course.

Other International Business Concentration Electives (School of Law-Camden)**24:601:630. INTERNATIONAL BUSINESS TRANSACTIONS (3)**

Legal aspects of doing business across national boundaries. Emphasis on private sales and investment transactions and the U.S. or foreign legal systems that may affect them. Topics include the role of counsel, forms of business organizations, technology transfers and licensing arrangements, import-export controls, incentives and limitations on direct investment, international antitrust and competition laws, and the resolution of disputes. Problems of labor, financing and taxation, improper payments, nationalization, and expropriation also examined.

24:601:663. INTERNATIONAL ASPECTS OF U.S. INCOME TAXATION (2)

Deals primarily with the taxation of income from business investments and activities located outside the United States, including the foreign tax credit, controlled foreign corporations, and earned income of U.S. citizens living abroad.

24:601:688. INTERNATIONAL BUSINESS PLANNING (3)

Taubeneck. Strongly recommended: Completion of Business Organizations and Introduction to Federal Income Taxation. Limited enrollment.

An integrated study of the corporate, business, securities, and tax aspects of U.S. businesses investing outside the United States. Initial consideration is given to business expansions that do not involve direct investments of capital, such as the transfer of technology under licensing agreements, creating distributorships, and operating through franchises. Students expected to analyze and draft agreements to implement proposed transfers. Export trade companies and their roles also studied.

The issues created by direct investment outside the United States studied on a transactional basis, comparing sole ownerships with joint ventures. Consideration given to the form of ownerships, exchange controls, the securities laws, labor relations, and tax aspects of the proposals. Focus on U.S. law, but includes the impact of the host jurisdiction's laws. Both developed and emerging host countries considered. The securities and tax ramifications of the funding of the U.S. multinational through the Euromarket also considered.

Students expected to analyze goals of clients and propose structures to meet the goals given the competing legal concerns. Grading based on drafting assignments and papers. Tax Honors credit given to students completing designated assignments focusing on taxation issues.

**Other Health Care Concentration Electives
(See Public Policy and Administration)**

School of Social Work

SOCIAL WORK 910

Degree Program Offered: Master of Social Work

Dean of the School: Mary Davidson, M.S.W., Ph.D.

Associate Dean and Director of the Graduate Program in Camden:

Raymond Sanchez Mayers, M.S.W., Ph.D.; 327 Cooper Street

Members of the Graduate Faculty

Fontaine H. Fulghum, Assistant Instructor; M.S.W., Tulane; A.B.D., Bryn Mawr

Sharon C. Lyter, Director of Field Education–Southern Region; M.S.W., Temple; Ph.D., Rutgers

Raymond Sanchez Mayers, Associate Professor; M.S.W., Barry; Ph.D., Brandeis

Sharon Hines Smith, Assistant Professor; M.S.W., Chicago; Ph.D., Pennsylvania

Program

The School of Social Work offers the master of social work degree with a concentration in direct practice with families, individuals, and groups on the Camden campus. The full range of the school's offerings are available in New Brunswick. Courses offered in Camden, Newark, and New Brunswick are open to all M.S.W. students. Camden students are distinguished from New Brunswick and Newark students by the fact that their advisers are members of the Camden faculty and their field placements are arranged by the Director of Field Education–Southern Region.

The M.S.W. degree is conferred by the School of Social Work. Requirements and policies governing the M.S.W. degree in Camden are the same as those in Newark and New Brunswick.

The Camden master's program currently offers 10 to 12 classroom courses per term in addition to fieldwork.

Students who choose a concentration in direct practice and a cluster in children and families can meet all the requirements of their respective programs at the Camden campus. Most graduate courses at Camden are offered in the evening.

The program is accredited by the Council on Social Work Education.

Advanced Standing

The school offers an advanced standing M.S.W. program for students who have earned a baccalaureate degree in social work from an undergraduate social work program accredited by the Council on Social Work Education. The baccalaureate degree must have been earned within the six academic years prior to matriculation in the M.S.W. program. Advanced standing students complete the program in one year, following successful completion of any additional courses required to fulfill the professional foundation. Also, prior to beginning the second-year advanced program, advanced standing students must have completed an introductory statistics course covering descriptive and basic inferential statistical procedures within the last six academic years, with a grade of C or better.

Students who are admitted as advanced standing students enter in the summer term with a provisional admission, where they will be required to complete successfully two courses with a B or better in each course in preparation for beginning work as second-year students in the fall term. Upon successful completion, formal admission will be extended. In the fall term, they are considered second-year students in the advanced program and are required to take the course of study associated with their concentration and cluster choices.

Structured Part-Time M.S.W. Option

There is a structured M.S.W. part-time option available. Students are required to take a minimum of 6 credits each term and to complete the program within four years of matriculation.

Advanced standing M.S.W. students are required to complete the structured part-time M.S.W. option within two years of matriculation.

Dual M.Div./M.S.W. Program

The School of Social Work and Princeton Theological Seminary offer an accelerated program in social work and ministry leading to a master of social work (M.S.W.) and master of divinity (M.Div.). The program is designed for students who expect to enter forms of ministry requiring competence in the disciplines of theology and social work.

The joint M.Div./M.S.W. program allows a student to complete both degrees in four years of full-time study. The first two years of study are spent exclusively at Princeton Theological Seminary. In the third year, a joint-degree student completes the requirements for the M.Div. while concurrently completing 18 credits of course work and field placement at the School of Social Work. In the summer between the third and fourth years, students are required to complete one course at the School of Social Work: 19:910:507 Psychopathology. In the fall of the fourth year, students must complete the law module of 19:910:506 Diversity, Oppression, and the Legal Environment of Social Work. In the fourth and final year of the program, students take all their course work and field placements at the School of Social Work.

Dual J.D./M.S.W. Program

The School of Social Work, in partnership with the School of Law–Camden, has established an accelerated dual-degree program in law and social work, through which students may obtain dual J.D. and M.S.W. degrees.

Through the accelerated program, full-time students complete the requirements for the J.D. and M.S.W. degrees in four years rather than the five normally needed to complete both degrees separately. Students interested in the program apply for admission individually to the School of Social Work and to the School of Law–Camden, and must satisfy admission requirements for the respective schools. To receive the dual degrees, participating students must meet the academic standards of both programs throughout their courses of study.

The dual-degree program is appropriate for students in both the social work Administration, Policy, and Planning (APP) and Direct Practice (DP) concentrations.

The program offers two paths of study. In the first path, the student begins the program at one of the law schools and completes the program at the School of Social Work. In the second path, the student begins the program in the School of Social Work and completes the program at one of the law schools. Additional program modifications may be made for advanced standing M.S.W. students.

For more information about the dual-degree program, contact the dean of students for the School of Social Work.

The application deadline for the School of Social Work and the School of Law–Camden is March 1. For advanced standing students, the application deadline is February 1 for the School of Social Work and March 1 for the School of Law. Current first-year students also may apply for admission to the dual-degree program.

To apply to the School of Social Work, call the graduate admissions office at 732/932-7711. For an application to the School of Law–Camden, call the admissions office at 856/225-6102. The law school admissions office also can provide information about the Law School Aptitude Test (LSAT), which students are required to complete prior to applying for admission.

Admission Requirements

Procedures

Application materials for the M.S.W. program are available on the Rutgers web site, <http://www.rutgers.edu>, or from the Office of Graduate and Professional Admissions, Rutgers, The State University of New Jersey, 18 Bishop Place, New Brunswick, NJ 08901-8530 (732/932-7711).

Applications should be completed and returned with supporting documents according to the instructions provided with the forms.

A complete application consists of

1. a completed admissions application form
2. two sets of official transcript(s) of previous undergraduate and graduate work
3. three letters of recommendation
4. a personal statement written according to the instructions for the M.S.W. program provided on the application
5. a nonrefundable application fee, payable by check or money order to Rutgers, The State University of New Jersey

Deadlines may be found in current admissions material and on the Rutgers web site.

To reapply within one year, a new application fee, updated personal statement, and current references must be submitted. After a lapse of one year or more, the entire application process must be repeated. Admitted students are required to reserve a place in the entering class by submitting a nonrefundable deposit of \$200 within five days of the date of notification of admission. The deposit is credited to the first term's tuition bill for admitted students.

Qualifications

Academic

The minimum requirements for admission to the School of Social Work M.S.W. program are

1. a bachelor's degree (or its equivalent for foreign students) from an approved institution of higher education (A background in the social and behavioral sciences is preferred.)
2. a B average in the bachelor's program, with higher scholastic achievement strongly preferred
3. an introductory undergraduate course in statistics that covers descriptive and basic inferential statistical procedures, taken within the last six academic years with a grade of C or better. (Applicants who do not meet this requirement will be considered for conditional admission and may not move to the advanced program until this prerequisite is satisfied. Students may sit for an examination to place out of this prerequisite.)

Professional

In addition to meeting minimum academic requirements, applicants are evaluated for personal qualifications and suitability for professional social work education.

Consideration is given to such areas as

1. motivation toward, knowledge of, interest in, and preparation for social work education
2. openness to new approaches and ideas
3. capacity for introspection
4. ability to analyze social problems
5. ability to deal with individual and cultural differences
6. identification with social work values
7. commitment to practice that includes services to the poor and oppressed and to the alleviation of poverty, oppression, and discrimination

Professional readiness is assessed by careful review of the entire application with special attention given to the personal statement and letters of recommendation.

Degree Requirements

The M.S.W. curriculum is divided into two levels: the professional foundation and the advanced curriculum. The first level requires 29 credits and the second level requires 31 credits to complete a total of 60 credits for graduation. Included in these 60 credits are both course work and fieldwork.

Professional Foundation

All students, except those with baccalaureate degrees from programs accredited by the Council on Social Work Education, are required to take all of the foundation courses. These courses contain a body of knowledge, values, and skills essential for social work practice. This common base is transferable among settings, population groups, and problem areas. The foundation curriculum

consists of courses in generalist social work practice with corresponding field instruction; human behavior and the social environment; psychopathology; introductory social research methods; social welfare policy and services; and a course focused on diversity, oppression, and the legal environment of social work practice. Successful completion of the foundation program is required before beginning the advanced curriculum.

The required foundation courses are:

- 19:910:500, 501 Social Work Practice I,II (3,3)
- 19:910:502, 503 Human Behavior and Social Environment I,II (3,3)
- 19:910:504 Social Welfare Policy and Services I (3)
- 19:910:505 Methods of Social Work Research I (3)
- 19:910:506 Diversity, Oppression, and the Legal Environment of Social Work (3)
- 19:910:507 Psychopathology (3)
- 19:910:508, 509 Field Practicum I,II (2,3)

Students admitted on conditional status without an introductory statistics course that covers descriptive and basic inferential statistical procedures may not enter the advanced program until they complete such course with a grade of C or better.

Advanced Curriculum

The advanced curriculum consists of a concentration in a method of advanced practice, a cluster in a substantive area, an advanced research course, advanced field instruction, and electives. Only after successful completion of the professional foundation courses can students begin the advanced curriculum. Students must select a concentration and a cluster.

Students admitted on conditional status without an introductory statistics course may not enter the advanced program until they complete such a course with a grade of C or better.

Concentrations. Concentrations build on, are related to, and extend the professional foundation. A concentration focuses on advanced methods of social work practice by size and type of client system. Concentrations are designed to develop greater depth in knowledge and skills building upon the generalist foundation. Students may concentrate in Direct Practice with Individuals, Families, and Groups (with all course work offered in Camden), or Administration, Policy, and Planning (with two advanced practice courses offered only in New Brunswick). Students must select a concentration prior to entering the advanced curriculum. Both concentrations require two advanced practice methods courses (6 credits) and a minimum of 7 credits of advanced field instruction.

Direct Practice with Individuals, Families, and Groups. The concentration in Direct Practice with Individuals, Families, and Groups prepares students to conceptualize, provide, and supervise the delivery of social work services to individuals, couples, families, and small groups. Emphasis is on developing competence in those helping processes used to prevent problems and to enhance, develop, and restore social functioning. Courses required for the concentration and which must be taken concurrently with a direct practice field practicum are:

- 19:910:511 Advanced Direct Practice I (3)
- 19:910:512 Advanced Direct Practice II (3)

Administration, Policy, and Planning. The concentration in Administration, Policy, and Planning is designed to prepare social workers to perform administrative functions or planning, organizing, and policy functions within organizations, communities, and in the larger society. Courses required for the concentration and which must be taken concurrently with an administration, policy, and planning field practicum are:

- 19:910:535 Advanced Administration, Policy, and Planning Practice I (3)
- 19:910:536 Advanced Administration, Policy, and Planning Practice II (3)

Clusters. A cluster is an organized program of study that focuses on a specific problem area and/or population at risk. It consists of a cluster-related policy course, an integrative seminar, and a cluster-related field placement that is coupled with the student's concentration. Clusters combine substantive knowledge of social problems and issues and populations at risk with social work practice methods. Currently, two clusters are offered: Children and Families (C&F)* and Health, Mental Health, and Aging (HMHA).

Children and Families. The children and families cluster addresses the special needs of families and children. Students learn the skills and knowledge necessary to attempt to prevent and remedy the social problems of this population. Opportunities to focus on child welfare and school social work are provided. Advanced field placement opportunities are available to direct practice and administration, policy, and planning students. The following courses are required for the children and families cluster:

- 19:910:557 Integrative Seminar: Children and Families (3)
- 19:910:585 Issues in Social Policy: Children and Families (3)

Health, Mental Health, and Aging. Health, mental health, and aging provides students with the opportunity to obtain knowledge of health, mental health, and aging concerns. Students will be able to tailor their learning to working with, and on behalf of, the aging or the developmentally disabled or the chronically mentally ill or those with health problems. Advanced field placement opportunities in HMHA are available to direct practice and administration, policy, and planning students. The following courses are required for the health, mental health, and aging cluster:

- 19:910:559 Integrative Seminar: HMHA(3)
- 19:910:587 Issues in Social Policy: HMHA(3)

Gerontology Certificate. Students enrolled in the health, mental health, and aging cluster receive a Certificate in Gerontology if (1) they focus on aging in all course requirements, such as policy analysis, papers, class presentation, case presentation and analysis, etc., and in 19:910:587 Issues in Social Policy and 19:910:559 Integrative Seminar; (2) they have a second-year field placement in a setting offering experience relevant to aging—such as in a nursing home or a county office on aging; and (3) they complete 19:910:572 Gerontology as an elective during the fall term of the second year.

Advanced Research. All students take an advanced research course that builds upon the basic knowledge acquired in the foundation research course. Major emphasis is on the evaluation of practice models, evaluation of individual practice, and the evaluation of agency programs.

Advanced Field Practicum. The advanced field practicum is concentration and cluster specific. During two terms, students take 7 credits of advanced fieldwork in the concentration and cluster of their choice. The advanced field practicum must be taken concurrently with the appropriate advanced practice and cluster courses.

Elective Courses. All students must complete a minimum of 9 credits of electives.

Graduate Courses

Professional Foundation

19:910:500. SOCIAL WORK PRACTICE I (3)

Corequisite: 19:910:508.

First of two required foundation practice courses based on a generalist social work practice perspective. A problem-solving model of practice applicable to work with systems of all sizes including individuals, families, small groups, organizations, and communities.

19:910:501. SOCIAL WORK PRACTICE II (3)

Prerequisite: 19:910:500. Corequisite: 19:910:509.

Second of two foundation practice courses based on generalist social work perspective. Continues use of a problem-solving model for work with systems of all sizes, and implications for at-risk groups.

19:910:502. HUMAN BEHAVIOR AND THE SOCIAL ENVIRONMENT I (3)

Theories, themes, and issues concerning the ongoing interaction between people as they grow, change, and develop over the life course and the social context in which this occurs. Particular attention to assumptions about human behavior that may interfere with recognition of diversity in the ongoing interaction between individual, family, and group identity; social context; and social life. Highlights values and ethical issues related to biopsychosocial development.

19:910:503. HUMAN BEHAVIOR AND THE SOCIAL ENVIRONMENT II (3)

Prerequisite: 19:910:502.

Theories and knowledge of action groups, organizations, and communities as the context for micro- and macrosocial practice. Ways in which systems promote or deter people in the maintenance or attainment of optimal health and well-being. Evaluation and application of theory to client situations to understand how macrosystems affect client benefit.

19:910:504. SOCIAL WELFARE POLICY AND SERVICES I (3)

History, philosophy, and development of social welfare as an essential institution in the United States. Study of the emergence and role of social work, understanding of patterns of current provision, and introduction to analysis of social welfare policies.

19:910:505. METHODS OF SOCIAL WORK RESEARCH I (3)

Introduction to scientific, analytic approach to building knowledge and skills, including role of concepts and theory, hypothesis formulation, operationalization, research design, data collection, data processing, statistical analysis, introductory computer skills, and report writing.

19:910:506. DIVERSITY, OPPRESSION, AND THE LEGAL ENVIRONMENT OF SOCIAL WORK (3)

Three five-week modules on diversity, oppression, and law. Diversity module introduces the range of diverse populations by gender, ethnicity, race, sexual orientation, and physical differences. Oppression module focuses on the role, function, and effects of oppression in society and the impact of oppression as it relates to issues of social and economic justice. Law module examines role of law in health and human services and addresses specific legal concepts such as confidentiality, privacy, and informed consent in the context of practice.

19:910:507. PSYCHOPATHOLOGY (3)

Major forms of emotional distress in adults and children. Classification trends, issues, and models. Introduction to clinical syndromes in terms of diagnostic methodology, research, and social concerns and their implications for at-risk groups.

19:910:508. FIELD PRACTICUM I (2)

Corequisite: 19:910:500.

Practice social work in agency settings under qualified educational supervision. Includes service to vulnerable and oppressed populations while learning generalist skills.

19:910:509. FIELD PRACTICUM II (3)

Corequisite: 19:910:501.

Further learning of problem-solving skills and strategies begun in Field Practicum I and prepares students to enter the advanced field curriculum.

Advanced Curriculum and Electives

19:910:511. ADVANCED DIRECT PRACTICE I (3)

Prerequisite: Successful completion of professional foundation courses.

Corequisite: Advanced direct practice and cluster-appropriate field placement.

Focus on advanced social work clinical and client advocacy skills and techniques at each stage of the helping process and with difficult practice situations as these apply to work with individuals, client groups, couples, and family systems. Case examples drawn particularly from the client populations addressed in the clusters.

* All course work in C&F is offered in Camden.

19:910:512. ADVANCED DIRECT PRACTICE II (3)

Prerequisite: 19:910:511. Corequisite: Advanced direct practice and cluster-appropriate field placement.

Validity, relevance, and differential use in practice of various selected psychotherapeutic theories that have influenced social work direct practice with individuals, families, couples, and groups. Ethnic-sensitive and feminist perspectives important critical filters. Continuing concern for the relevance of these theories for people of color, women, and gay and lesbian persons.

19:910:513. ADVANCED DIRECT PRACTICE WITH ADOLESCENTS (3)

Pre- or corequisite: 19:910:511.

Physical, psychological, social, and cultural dimensions of adolescence in today's culture, with focus on advanced direct practice with typical problems of adolescents. Particular attention paid to high risk groups.

19:910:514. ADVANCED THEORY AND PRACTICE GROUP WORK (3)

Pre- or corequisite: 19:910:511.

Skills developed regarding direct interventions with individuals in groups, with groups as a whole, and with groups to influence their environments. Addresses program building, consultation, and teamwork in developing group work services for individual and social change, especially for ethnic/cultural minorities, the oppressed, and the victimized.

19:910:517. ADVANCED DIRECT PRACTICE: INDIVIDUALS WITH MENTAL ILLNESS (3)

Pre- or corequisite: 19:910:511.

Contemporary interventions with clients with severe psychiatric disorders and their families in institutional and community settings. Topics include intervention techniques with the more severe and chronic forms of psychiatric disorder as defined in DSM IV, psychotropic medications, case management, the treatment orientations to care, and special issues in work with children and adolescents.

19:910:518. ADVANCED DIRECT PRACTICE WITH FAMILIES AND CHILDREN AT RISK (3)

Pre- or corequisite: 19:910:511.

Focus on families of social and ethnic minorities and other oppressed groups of special concern to the child welfare system that are at risk of neglecting or abusing their children. Emphasis on assessment of risk, crisis intervention and case management skills, work with community service systems, and utilization of the legal system.

19:910:519. ADVANCED DIRECT PRACTICE WITH FAMILIES (3)

Pre- or corequisite: 19:910:511.

Advanced practice with family systems, with emphasis on systems-analytical perspective that includes envioning systems, as well as internal dynamics of the family system. Differential use of the major theoretical approaches in family therapy. Emphasis on a social work framework and on such traditional family social work techniques as advocacy, brokerage, and provision of concrete services.

19:910:520. ADVANCED DIRECT PRACTICE IN SCHOOL SETTINGS (3)

Pre- or corequisite: 19:910:511.

Advanced direct practice with children and adolescents, in the context of the public school setting, individually, in groups, and with their families. Emphasis on the role of the school social worker in a host setting that is bound by governmental statutes and regulations, and on relationships with teachers and school administrators, with other members of the professional team, and with community agencies and groups.

19:910:521. ADVANCED DIRECT PRACTICE: INTERVENTION WITH ALCOHOL, TOBACCO, AND OTHER DRUG MISUSERS (3)

Pre- or corequisite: 19:910:511.

Various models and intervention approaches to working with alcohol, tobacco, and other drug misusers. Families and other client systems addressed. Emphasis on assessment to identify ATOD problems in a variety of practice settings with various populations, and on matching interventions according to the client system, the substance(s) misused, the extent of misuse, personal resources, social networks, and availability of services. Research findings and theoretical perspectives are central.

19:910:537. FISCAL PROCEDURES (3)

Prerequisite: Successful completion of the professional foundation.

Overview of fiscal responsibilities of social agency executives, including the accounting process, financial statements, budgeting internal controls, audits, tax compliance, and fund accounting.

19:910:538. LAW AND SOCIAL WORK (3)

Law in health and human services. Reading, using, and finding law. Law in practice in relation to law on the books. Topics include due process, equal protection, discrimination, confidentiality and duty to warn, child abuse, domestic violence, AIDS, sexual harassment, mental health, developmental disabilities, courtroom testimony, malpractice, and administrative liability.

19:910:539. COMMUNITY ORGANIZATION (3)

Prerequisite: Successful completion of the professional foundation.

Focus on identifying, developing, and testing community organizing skills, with special attention to leadership development and community analyses.

19:910:540. SUPERVISION AND CONSULTATION (3)

Prerequisite: Successful completion of the professional foundation.

Analysis of supervisory roles in human service organizations. Covers the three functions of supervision—supportive, educational, and administrative. Emphasis on frontline supervision.

19:910:541. MARKETING AND GRANTSMANSHIP (3)

Prerequisite: Successful completion of the professional foundation.

Introduction to current strategies and procedures for identifying, obtaining, and maintaining a diverse portfolio of social service funding sources; review of methodologies for packaging, marketing, and selling program proposals to social service funders and consumers.

19:910:557. INTEGRATIVE SEMINAR: CHILDREN AND FAMILIES (3)

Prerequisites: 19:910:585, 595. To be taken during final term of the M.S.W. program.

Integrates learning from the professional foundation, field instruction, practice methods, and the area of children and families. Emphasis on problem solving, integrating issues across social work methods, linking theory to practice, and furthering the skills of intervention.

19:910:561. GROUP DYNAMICS (3)

Emphasizes the study of small groups, both cognitively and experientially, by focusing on theory and research about the processes, structures, and functions of small groups as they relate to social work practice in human services.

19:910:562. UNDERSTANDING THE IMPACT OF DEATH AND TERMINAL ILLNESS (3)

Life consequences of various ways of understanding death; attempts to cope. Social work intervention with dying individuals, their families, and the bereaved; ethical issues.

19:910:564. WOMEN'S ISSUES (3)

Examines women in different parts of the world, the institutional factors and values of society that impact on personal roles, status, and discrimination of women, and the social and individual problems that affect women because of their gender. Feminist theories and feminist practice that facilitate institutional and individual change discussed.

19:910:566. FAMILY VIOLENCE (3)

Examination of the definitions and scope of family violence in today's society. Focus on the prevalence, etiology, myths, and dynamics of child physical abuse, incest, date rape, marital rape, sibling violence, women battering, and elder abuse and neglect. Includes a review of the issues, policies, programs, and services aimed at remedying and eliminating violence in the home.

19:910:567. CHILD SEXUAL ABUSE: ASSESSMENT AND INTERVENTION (3)

Prerequisite: Successful completion of the professional foundation.

Focuses on the initial assessment, intervention, and management of child sexual abuse from a multidisciplinary perspective. Specific topics include personal values and reactions to child sexual abuse, conceptual frameworks, psychosocial dynamics, offenders, investigative interviewing, crisis intervention, child growth and development, medical management, and preparing for court testimony.

19:910:569. SOCIAL WORK PERSPECTIVES ON AIDS (3)

Impact of HIV infection and AIDS on the individual, family, society, and institutions that provide care. Political, social, legal, ethical, spiritual, and public health issues; perspectives of people living with HIV infection and AIDS needed to inform practice and policy.

19:910:571. ALCOHOL, TOBACCO, AND OTHER DRUGS (3)

Action of drugs, epidemiology; consequences of ATOD use, abuse, and addiction; and issues of prevention, intervention, and evaluation addressed. Attention given to various populations. Research findings and theoretical perspectives are central.

19:910:572. GERONTOLOGY (3)

Survey of research literature on the aged as a population group and aging as a process. Social, economic, physiological, and psychological aspects of aging; prevalent theories of aging; social issues in both national and international perspectives; assessment and intervention with the elderly.

19:910:585. ISSUES IN SOCIAL POLICY: CHILDREN AND FAMILIES (3)

Prerequisite: Successful completion of the professional foundation. Required for students in the children and family cluster.

Models of policy analysis applied to children and families issues and problems. Content addresses understanding of values and sociopolitical forces that define problems; populations affected; current policies and programs and their impact; service delivery and resource allocation; unmet needs; trends; and analysis of political processes and change strategies.

19:910:595. METHODS OF SOCIAL WORK RESEARCH II (3)

Prerequisite: Successful completion of the professional foundation.

Quantitative and qualitative evaluation of agency programs and individual practice. Participation in hands-on small group research projects to cover all phases of the research process and use of computer technology.

19:910:600. FIELD PRACTICUM III (3)

Prerequisite: Successful completion of the professional foundation and 19:910:509; cluster and concentration specific. To be taken concurrently with 19:910:511 Advanced Direct Practice I or 19:910:535 Advanced Administration, Policy, and Planning Practice I. Placement is determined by choice of concentration and cluster.

Opportunities provided to become competent in providing advanced social work services and the applying theory and concepts to practice in preparation for advanced professional practice.

19:910:601. FIELD PRACTICUM IV (4)

Prerequisite: 19:910:600. To be taken concurrently with 19:910:512 Advanced Direct Practice II or 19:910:536 Advanced Administration, Policy, and Planning Practice II.

Continued learning experiences in specialized settings in preparation for advanced professional practice.

19:910:610. INDIVIDUAL STUDY (BA)

Students may earn no more than 3 credits. Completion of a student/faculty contract and approval of the dean required.

A tutorial elective may be arranged with a faculty member in an area of mutual interest. Students may earn no more than 3 credits in any term. Completion of a student/faculty contract and approval of the dean required.

Field Placement

Director of Field Education—Southern Region:

Sharon C. Lyter, Ph.D.

Field placements are developed to suit students' interests and specific learning needs. Following is a list of some of the placement settings.

Action AIDS, Philadelphia, PA
 Archway Programs, Atco, NJ
 AtlantiCare Behavioral Health, Egg Harbor Township, NJ
 Atlantic County Women's Center, Northfield, NJ
 Bankbridge School, Sewell, NJ
 Bordentown Schools, Bordentown, NJ
 Bridgeton Public Schools, Bridgeton, NJ
 Burlington County Special Services School District, Mt. Holly, NJ
 Buttonwood Hospital, New Lisbon, NJ
 Camden Board of Education, Camden, NJ
 Camden County Board of Social Services, Camden, NJ
 Camden County Technical School, Sicklerville, NJ
 Cape Counseling, Cape May Court House, NJ
 CASTLE Children's Program, Camden, NJ
 Catholic Charities, Camden, NJ
 Center for Family Services, Camden, NJ
 Children's Hospital of Philadelphia, Philadelphia, PA
 Community Mental Health Center, Gloucester County, Woodbury, NJ
 Cooper Hospital, Camden, NJ
 Deborah Heart and Lung Center, Browns Mills, NJ
 Division of Developmental Disabilities, Camden, NJ
 Division of Youth and Family Services, Camden, NJ
 Drenk Center, Mt. Holly, NJ
 FamCare, Glassboro, NJ
 Family and Community Services, Burlington, NJ
 Family Court, Camden County, Camden, NJ
 Family Court, Gloucester County, Woodbury, NJ
 Family Service of Burlington, Mt. Holly, NJ
 Garfield Park Academy, Willingboro, NJ
 Gloucester Vocational-Technical School, Sewell, NJ
 Hall-Mercer Community Mental Health, Philadelphia, PA
 Head Start Philadelphia, Philadelphia, PA
 Healthcare Commons, Inc., Carneys Point, NJ
 Hispanic Family Center, Camden, NJ
 Jewish Family and Children's Services, Cherry Hill, NJ
 Margate Schools, Margate, NJ
 Millville School District, Millville, NJ
 New Lisbon Developmental Center, New Lisbon, NJ
 Our Lady of Lourdes Medical Center, Camden, NJ
 Pitman Public Schools, Pitman, NJ
 Planned Parenthood, Camden, NJ
 Princeton House Behavioral Health, Cherry Hill, NJ
 Riverfront Prison, Camden, NJ
 Robins' Nest, Inc., Glassboro, NJ
 Samaritan Hospice, Marlton, NJ
 South Jersey Behavioral Health, Camden, NJ
 St. Christopher's Hospital for Children's Support, Stratford, NJ
 Underwood Behavioral Health, Woodbury, NJ
 United Way of Camden, Camden, NJ
 Virtua Memorial Hospital, Mt. Holly, NJ
 Volunteers of America, Camden, NJ
 Willingboro School District, Willingboro, NJ
 Youth Consultation Services, Camden, NJ

Graduate School–Newark (On the Camden Campus)

NURSING 705

Degree Programs Offered: Master of Science, Doctor of Philosophy
Dean of the College of Nursing: Felissa R. Lashley, Ph.D.

*Director of the Graduate Program–Newark: Wendy Nehring, R.N.,
Ph.D.; 973/353-5293, ext. 606*

Coordinator of the Graduate Program in Nursing in Camden and

Associate Dean for Administration:

Marie T. O'Toole, Ed.D.; 856/225-6526

Members of the Graduate Faculty

Claudia Beckmann, R.N.; Ph.D., Texas
Anne Brandes, R.N.; Ed.D., Rutgers
Dorothy J. DeMaio, R.N.; Ed.D., Rutgers
Gerri L. Dickson, R.N.; Ph.D., Wisconsin (Madison)
Lucille S. Eller, R.N.; Ph.D., Case Western Reserve
Mary Greipp, R.N.; Ed.D., Rutgers
Hurdis M. Griffith, R.N.; Ph.D., Maryland (Baltimore)
Elsie E. Gulick, R.N.; Ph.D., New York
Patricia M. Hurley, R.N.; Ph.D., New York
Lucille A. Joel, R.N.; Ed.D., Columbia
Rachel Jones, R.N.; Ph.D., New York
Felissa R. Lashley, R.N.; Ph.D., Illinois
Elise L. Lev, R.N.; Ed.D., Columbia
Ganga Mahat, R.N.; Ed.D., Columbia
Noreen Mahon, R.N.; Ph.D., New York
Wendy Nehring, R.N.; Ph.D., Illinois
Marie T. O'Toole, R.N.; Ed.D., Rutgers
Judith Barberio Pollachek, R.N.; Ph.D., Rutgers
Joanne Patterson Robinson, R.N.; Ph.D., Pennsylvania
Mary Ann Scoloveno, R.N.; Ed.D., Rutgers
Joanne S. Stevenson, R.N.; Ph.D., Ohio State
Beverly Whipple, R.N.; Ph.D., Columbia
Adela Yarcheski, R.N.; Ph.D., New York
Carolyn Yocom, R.N.; Ph.D., Illinois (Chicago)

Faculty Research Interests

Faculty research interests include care and promotion of health in infants, children, and adolescents; symptom management in HIV/AIDS and CHF; pain control alternatives; exercise in patients with hypertension; quality-of-life issues for menopausal women or women with breast cancer, for persons with multiple sclerosis, and for those who have undergone surgeries that alter appearance; sleep patterns of hospitalized cardiac patients; patient-care outcomes in vulnerable populations; and high-technology home care.

Master of Science

Purpose

The objective for the graduate program in nursing is to provide the Rutgers master's graduate with an opportunity to

1. synthesize theories and knowledge from nursing, the humanities, and related sciences that support advanced nursing practice in a specialized area of practice
2. integrate advanced nursing knowledge as the basis for advanced nursing practice
3. integrate, within a specialty, the roles of practitioner, educator, researcher, and administrator with clients, health care providers, and health care policy makers
4. design and manage nursing interventions, programs, resources, and systems for the delivery of nursing care to client systems, using advanced knowledge and skills

5. design educational strategies for client systems and health care providers, using educational concepts, principles, and skills
6. provide leadership in developing and maintaining standards of nursing practice, using ethical principles and legal concepts
7. evaluate nursing interventions, programs, personnel, policies, and technology, using theoretical models and methods
8. design educational strategies for client systems and health care providers, using educational concepts, principles, and skills
9. conceptualize a nursing research problem and design research, using scientific principles and methods
10. appraise the relevance of research findings
11. design and utilize nursing technology to plan, manage, evaluate, and research clinical nursing problems
12. acquire a foundation for doctoral study

Organizing Framework

The master's curriculum is designed to prepare clinical nurse specialists and nurse practitioners who are able to function in continuously changing environments or systems in which health care is delivered. The curriculum reflects the philosophy espoused by the faculty regarding the metaparadigm concepts of nursing. The organization of the curriculum consists of two components: core nursing cognate courses and the clinical specialty in nursing.

The first component of the curriculum consists of core courses in nursing, the content of which systematically builds upon knowledge and skills gained at the baccalaureate level. Ethics and advanced theories and research relative to the health of individuals, families, groups, and communities, and theories and research pertaining to management, education, role, and health care policy are discussed. The essential processes involved in concept analysis and theory development, especially using nursing conceptual models, are addressed. The emphasis in research is on the identification of a research problem, advanced methods and designs used for hypothesis testing, and the organization and management of qualitative and quantitative data.

The second component of the curriculum concentrates on the preparation of clinical nurse specialists and nurse practitioners in the areas of adult and aged in primary care, adult and aged in acute care, advanced practice in pediatrics, advanced practice in women's health, community health nursing, family nurse practitioner, and psychiatric/mental health nursing. The theory and practicum courses across all specialties focus on levels of health, specifically health promotion, acute health problems, and chronic health problems. Patterns identified in human environment interaction at all levels of health provide the substantive basis relative to theories, research, and practice addressed in the specialty courses.

Broadly conceived, patterns are attributes, characteristics, properties, and behaviors of individuals, families, groups, or communities having recurring manifestations that are directly or indirectly observable. As entities, patterns are relatively stable, fairly predictable, and can be related to one another in meaningful ways. Patterns can be identified in the literature as concepts that meet the aforementioned criteria and that represent the metaparadigm concepts of nursing. Of particular interest to nursing are indices of health and illness that are associated with or result from patterns.

Advanced specialized knowledge in each clinical nursing area is derived from the scientific literature, and emphasis is placed on examining and critiquing theories and research from the literature in nursing, focusing on patterns. Advanced specialized practice characterizes the role of the nurse practitioner who uses knowledge gained from the two components of the curriculum in the care of select populations in a variety of settings. The roles of the clinical nurse specialist and nurse practitioner are multifaceted and include that of expert practitioner, educator, researcher, and administrator. The master's curriculum in nursing prepares clinical nurse specialists and nurse practitioners who are leaders in their field and who possess knowledge foundational to doctoral education in nursing.

Curriculum

The curriculum pattern for the graduate nursing program is based on the fact that professional nursing is mandated by, and accountable to, society for the effect of nursing practice. As the needs of society change in response to new knowledge and technology, nursing evolves through a process of resocialization. Professional nursing

roles develop that are collaborative and complementary to roles of other health professionals; these reflect increasing authority and responsibility for decision making in areas of research and practice. Leadership in the planning and development of health resources as a part of the multidisciplinary team is a necessary response.

The master's program offers specialized study. Students advance from the baccalaureate-prepared generalist to the advanced practitioner capable of assuming roles that encompass consultation, management, and educational functions. The graduate program is designed to prepare nurses to deal with larger and more complex situations in the process of providing health care services in the areas of adult and aged primary care, adult and aged acute care, advanced practice in pediatrics, advanced practice in women's health, community health nursing, family nurse practitioner, and psychiatric/mental health nursing.

Admission Requirements

The requirements for admission to the master's program are as follows:

1. baccalaureate degree in nursing from a nationally accredited program
2. undergraduate cumulative grade-point average of 3.0 (where A = 4.0)
3. one of the following: five years of relevant practice experience or a grade of B or better in three Rutgers' College of Nursing graduate courses taken on a nonmatriculated basis; or a B.S. in nursing from Rutgers in the past 12 months with a GPA of 3.2 or better; or a satisfactory combined score on the verbal, quantitative, and analytical portions of the Graduate Record Examination taken within the last five years
4. current New Jersey Professional Nurse licensure
5. three satisfactory academic and professional letters of reference
6. prerequisite to full matriculation, the following courses must be completed successfully: a descriptive/inferential statistics course, a physical assessment course, * or its equivalent

Admission for Foreign Applicants

Foreign applicants must meet the following additional criteria to qualify for full graduate status:

1. completion of a college or university program equal to the unit requirements for a baccalaureate degree in nursing
2. registered professional nurse licensure in the country of origin and New Jersey Registered Professional Nurse licensure
3. completion of Test of English as a Foreign Language (TOEFL) with a satisfactory score for students whose first language is not English (Test of Written English, part of TOEFL, is required.)
4. satisfactory completion of Rutgers' English as a Second Language Placement Examination (This test is administered by the Program in American Language Studies [PALS] and is given prior to the term for which the student has been accepted. Details about taking the test are sent to the student with the letter of acceptance to the program by the admissions office. Based upon the student's performance on this placement test, the PALS program makes recommendations that are to be followed by the graduate program in nursing.)
5. applicants in F-1 or J-1 student status must document sufficient funds to cover both educational and living expenses

Applicants are encouraged to write to the College of Nursing Office for Student Affairs to request an informal evaluation before filing a formal application. Please note that specific clinical specialties may impose additional requirements.

Degree Requirements

Degree requirements for the master's program include the completion of 42 credits in all tracks except for the family nurse practitioner track, which requires completion of 45 credits. Additional requirements are determined by the catalog under which the student is admitted or readmitted.

Elective courses are available in other major academic units of the university; students are encouraged to enroll in these courses. Courses may be taken at the Rutgers Business School: Graduate Programs-Newark and New Brunswick, the School of Law-Newark, the School of Criminal Justice, the School of Social Work, and in the public policy and administration program or in other graduate programs at the Graduate School-Newark.

The master's program in nursing may be completed in either full- or part-time study. Some courses are offered in sequence and are not offered every term.

Time Limit. Requirements for the master of science degree with a major in nursing must be completed within five consecutive years from the date of matriculation. Matriculation Continued status is included in matriculation time.

Academic Advising

When a student is fully or conditionally accepted into the graduate program, the associate dean for student affairs, after consultation with the graduate program director, assigns a member of the graduate faculty to serve as the student's academic adviser. Students are notified of their advisers' names during new student orientation. An adviser will be changed if a faculty member leaves the College of Nursing or if the adviser and/or student indicates that a change would be beneficial, or if the faculty member's workload needs to be readjusted. The change may be initiated by the adviser or student in a written request to the associate dean, Office for Student Affairs, and/or the graduate program director. The associate dean for student affairs, in consultation with the graduate program director, assesses and coordinates reassignment of the student to another adviser.

Academic Policies

1. A full-time course load is defined as 9 or more credits and a typical load is 15 credits. A course load of 18 credits or more requires the approval of the graduate program director.
2. A student registered for 8 or fewer credits has part-time status.
3. Students must be registered every term to continue matriculation. Those students who interrupt their studies may, with the approval of the graduate program director, register for Matriculation Continued.
4. When a student applies for admission, the requirements for the degree at that time become the student's program of study. Any courses taken as a nonmatriculated student are applied only toward the degree if the courses are required at the time of admission and were taken within the five-year time frame for earning the degree.
5. Graduate course work totaling 12 credits taken at other fully accredited institutions prior to enrollment in this program may be considered for replacing required courses within the student's program. The courses must have been taken within the five-year time limit for the degree and must meet the stipulations outlined in this catalog. To petition for approval of substitute courses, complete Form T-1, obtained from the Office for Student Affairs. Transfer of credits does not occur until a minimum of 12 credits has been completed in the graduate program.
6. No more than 9 credits with a grade of C or C+ may be used in meeting the requirements for a master's degree.
7. Students are expected to earn grades of B or better in their course work. An overall B average is required for graduation.
8. The grade of *Incomplete*, *IN*, can be granted when a student has not completed the assigned work in a course because of illness or other reasons satisfactory to the instructor. The grade of *IN* is at the discretion of the instructor. Since the nursing curriculum builds upon and expands the content of previous course offerings, the grade of *IN* must be converted to a letter grade by the end of the drop/add period in the next term if the student is registered in a course for which the incomplete course is prerequisite. A student failing to complete the assigned work to remove the *IN* grade is required to drop the subsequent course. University regulations require the removal of incompletes within a calendar year. If not removed, the *IN* remains on the transcript. In unusual and compelling situations, an extension may be recommended by the

* Accepted physical assessment courses are offered through Rutgers' College of Nursing Continuing Education Program.

graduate program director and approved by the dean of the Graduate School–Newark. A specific plan for completion is required for an extension to be approved. The Request for Incomplete Status form may be obtained from the College of Nursing Office for Student Affairs.

9. All requirements for the master's degree must be completed within a period of five consecutive years from the date of matriculation. Should extenuating circumstances necessitate prolonging the time limits, the student's record is reviewed and extensions are granted only to those students who have a history of satisfactory performance and can document a timetable and plan to complete the requirements within a reasonable time period. For such an extension, a written request is made to the academic adviser, who recommends and presents his or her recommendation to the graduate program director. The director reviews the student's record and forwards the appropriate document to the dean of the Graduate School–Newark, indicating approval or disapproval. The final decision rests with the dean of the Graduate School–Newark.

Clinical Placements

Clinical placements for graduate students are arranged collaboratively with the student, the professor responsible for the course, and a preceptor. The terms of the placement are finalized in a letter of agreement filed with the agency and in the Office for Student Affairs. Preceptors serve as role models and guide the clinical experience. The professor maintains contact with the preceptor, provides overall supervision, and assigns the final grade.

Professional Liability Protection

All graduate students are required to have professional liability insurance prior to beginning clinical work.

Grade Complaints

Any complaints by students about their grades should be handled within the structure of the graduate program. The purpose of the following protocol is to ensure due process for all parties. It allows the student to determine if an error has been made in assigning the grade, and, alternatively, it provides the instructor with an opportunity to explain why the grade was given.

Complaints concerning the grading practices of individual instructors are handled in the following manner:

1. The student should confer with the instructor who recorded the grade in question. Such a conference must take place within 10 school days of grade notification.
2. If resolution does not occur, a written complaint must be filed by the student with the graduate program director or a designee within 10 days for review and mediation.
3. The graduate program director or designee, within 10 school days after notification of the dispute, shall consult with all parties and propose a resolution.
4. If a resolution does not occur at the level of the graduate program director, the matter shall be referred by the student to the Student Life Committee.
5. The student must forward the previously written complaint and previously submitted scholastic materials to the chairperson of the Student Life Committee.
6. A subcommittee of members of the Student Life Committee who hold graduate faculty status will be formed to review the submitted materials.
7. This committee shall render a decision within 15 school days. In arriving at a decision, the committee may consult with whomever it chooses and may, in extraordinary cases, ask third parties from among the faculty to review the grade in question.
8. The program faculty's decision may be appealed to the dean of the Graduate School–Newark. Such an appeal must be in writing, must state the grounds for the appeal, and must be filed within 10 school days of receipt of the program faculty's decision.
9. The dean of the Graduate School–Newark shall render a decision within 10 school days of the receipt of the appeal. This decision is final.

Health Requirements

All students enrolled in degree-granting programs must provide documentation of immunizations that are required by state law. Required immunization forms are included with the student's letter of admission. Students who do not submit documentation of immunizations prior to enrollment or during the first term of enrollment are not permitted to register for the following term. Requests for medical or religious exemptions must be made in writing.

Documentation of additional health requirements set by the College of Nursing policy includes

1. complete physical examination and laboratory tests
2. a health history
3. tuberculin screening yearly (a negative chest X-ray is required for a positive test)
4. evidence of immunization against Hepatitis B
5. tetanus/diphtheria booster received within the last 10 years
6. documentation of immunity to varicella, measles, mumps, and rubella

Forms for these requirements are sent by the College of Nursing but must be returned within one month of admission to the program to the Immunization Program at Hurtado Health Center, Rutgers, The State University of New Jersey, 11 Bishop Place, New Brunswick, NJ 08901-1180.

Graduate Nurse Alliance

The Graduate Nurse Alliance (GNA) was formalized in 1984 and is open to all enrolled master's students. Students are expected to participate. The stated purposes of the GNA are to provide a medium of exchange between faculty and graduate students; to ensure graduate student representation on designated faculty committees; to advocate student participation in curriculum planning, implementation, and evaluation; and to act as a liaison with the Graduate School–Newark student government.

Nondegree Students

Nondegree status is designed for students who wish to pursue courses without enrolling in the degree program. The following procedures and policies apply to nondegree students.

1. Applications and catalogs for nondegree graduate nursing courses may be obtained from the Graduate School–Newark office, the admissions office, or the Office for Student Affairs at the College of Nursing.
2. All nondegree students must be advised by the College of Nursing associate dean for student affairs before registering for courses.
3. No more than 12 credits may be earned as nondegree credits, including prerequisite courses for the graduate program in nursing.
4. Credit for nondegree courses may be applied to the graduate degree if the student applies and is admitted to the graduate program within five years. Satisfactory completion of these courses does not guarantee admission to the graduate degree program.

Core Courses

26:705:504. HUMAN DIVERSITY AND SOCIAL ISSUES IN THE COMMUNITY (3)

Advanced nursing practice examined from epidemiological perspective in the context of cultural and social pluralism. Emphasis on multiple dimensions of human diversity with identification and assessment of vulnerable and underserved populations and ethical issues.

26:705:506. CONTEMPORARY ROLE OF THE ADVANCED PRACTICE NURSE (3)

Establishes a theoretical context for role execution. Includes knowledge and strategies basic to practice as a teacher, manager, or provider of care. Analysis of the role of the nurse within the health care delivery system. Emphasis on practical issues and the influence of public policy, regulation, reimbursement, work-settings, and professional interrelationships. Focus on the nurse as change agent and evaluation of the effectiveness of nursing.

26:705:510. THEORETICAL FOUNDATIONS OF NURSING (3)

Prerequisite: Descriptive and inferential statistics.

Discusses the historical and philosophical bases for the development of a science, the components and processes of theory development, and their relationship to knowledge generation in the discipline of nursing. Analysis of existing conceptual models in nursing and their potential for and relevance to theory development, research, and practice. Identification and analysis of concepts relevant to theory development.

26:705:512. RESEARCH METHODS IN NURSING (3)

Prerequisite: 26:705:510.

Development of skills in the application of principles and methods of scientific research. Identification and conceptualization of a research problem relevant to nursing and the formulation of testable hypotheses. Emphasis on research designs and methodologies, the psychometric properties of instruments, sampling techniques, methods of data analysis, and interpretation of research findings. Focus on the scientific merit of empirical studies and ethical and legal considerations.

26:705:513. PSYCHOPATHOLOGICAL AND PSYCHOSOCIAL FOUNDATIONS IN ADVANCED NURSING (3)

Biologic and behavioral theories and research from a variety of disciplines, including nursing, for application of psychiatric assessment in primary care settings. Analyzes research and makes case studies for the assessment, diagnosis, and treatment of psychiatric disorders across the life span within a developmental framework that examines the manifestations of psychiatric illnesses in children, adolescents, adults, and the aged.

26:705:520. ADVANCED HEALTH ASSESSMENT (3)

Pre- or corequisite: 26:120:547.

Assessment competencies necessary for advanced practice nurses with emphasis on assessment skills and the client as an individual in context of the family. Focus on development of comprehensive understanding of clients for effective health care delivery.

26:705:538. PHARMACODYNAMICS FOR PRIMARY CARE (3)

Designed to meet the needs of nurses in advanced practice who are eligible for prescriptive privileges. Focuses on pharmacological management of self-limited episodic complaints and stable chronic disease states across the life span, commonly managed by advanced practice nurses.

Science Course**26:120:547. ADVANCED PATHOPHYSIOLOGY (3)**

Examination of pathogenesis of major conditions affecting humans across the life span and their clinical management. Integration of laboratory and diagnostic data, as well as client assessment.

Clinical Concentration Courses**Primary Care of Adults and the Aged Nursing****26:705:522. PRIMARY CARE OF ADULTS AND THE AGED THEORY I (3)**

Prerequisites: 26:705:504, 510, 520; 26:120:547. Pre- or corequisites: 26:705:506, 512, 538.

Advanced specialized knowledge relevant to young, middle-aged, and older adult clients examined for design and management of clients. Theories and research related to adult response patterns across states of health critiqued.

26:705:523. PRIMARY CARE OF ADULTS AND THE AGED PRACTICUM I (3)

Corequisite: 26:705:522.

Synthesis of theory and research relevant to nursing practice with development of proficiency as advanced practice nurses. Diagnostic reasoning, teaching, and collaborative practice for an adult client population across states of health examined.

26:705:532. PRIMARY CARE OF ADULTS AND THE AGED THEORY III (3)

Prerequisites: 26:705:522, 523, and 540.

Critique of advanced specialized knowledge relevant to nursing of young, middle-aged, and older adults with focus on management of adult health and illness in primary-care settings. High frequency health problems emphasized.

26:705:533. PRACTICUM PRIMARY CARE OF ADULTS AND THE AGED III (3)

Corequisite: 26:705:532.

Competency in advanced primary-care nursing to adults across the life span with emphasis on management of health and illness, health promotion, disease prevention, chronic illness episodes of acute illness in primary-care settings.

26:705:540. PRIMARY HEALTH CARE THEORY II (3)

Prerequisites: Completion of specialty theory and practicum I courses.

Builds on graduate core and specialty knowledge to promote cost-effective, quality primary health care where advanced practice nurses are the initial contact for the client within the health care system, promoting client wellness, diagnosing and treating common health deviations, stabilizing chronic health problems, and referring patients to other providers. Focus on women's and men's specific health issues.

26:705:541. PRIMARY HEALTH CARE PRACTICUM II (3)

Corequisite: 26:705:540.

Continued development of competency in assessment, differential diagnosis, and management of gender-specific health alterations and health-promoting lifestyle changes in women and men.

Advanced Practice in Acute Care**26:705:627. ADVANCED PRACTICE: ACUTE-CARE THEORY I (3)**

Pre- or corequisites: 26:705:504, 510, and 512; 26:120:547.

Conceptual model for the practice of advanced nursing care of critically ill adults. Focus on selected physiological and psychological ramifications of trauma and acute illnesses.

26:705:628. ADVANCED PRACTICE: ACUTE-CARE PRACTICUM I (3)

Corequisite: 26:705:627.

Delivery of advanced acute-care nursing to adults across the life span. Emphasis on advanced practice of ill and injured young, middle-aged, and older adult clients in acute-care settings.

26:705:629. ADVANCED PRACTICE: ACUTE-CARE THEORY II (3)

Prerequisites: 26:705:522, 540, and 628.

Critique of advanced specialized knowledge relevant to nursing acutely ill and injured young, middle-aged, and older adult clients with focus on management of adult health and illness in acute-care settings.

26:705:630. ADVANCED PRACTICE: ACUTE-CARE PRACTICUM II (3)

Corequisite: 26:705:629.

Continued development of competency in delivery of advanced acute-care nursing to adults across the life span. Emphasis on management of illness and injury within a focus of acute-care and advanced nursing practice roles.

26:705:631. ADVANCED PRACTICE: ACUTE-CARE THEORY III (3)

Prerequisites: 26:705:629 and 630.

Continued development of expertise in managing life-threatening conditions of acute-care clients.

26:705:632. ADVANCED PRACTICE: ACUTE-CARE PRACTICUM III (3)

Corequisite: 26:705:631.

Continued development of competency in delivery of acute-care nursing across the life span.

Community Health Nursing**26:705:524. COMMUNITY HEALTH NURSING THEORY I (3)**

Prerequisites: 26:705:504, 510, and 520; 26:120:547. Pre- or corequisites: 26:705:506, 512, and 538.

Advanced specialized knowledge relevant to nursing care of health promotion and prevention in populations, groups, and individual/family in the community examined. Focus on assessment and analysis of patterns of health, interdisciplinary collaboration, program planning, and policy development.

26:705:525. COMMUNITY HEALTH NURSING PRACTICUM I (3)

Corequisite: 26:705:524.

Exploration and analysis of community health nursing in a designated community. Emphasis on the health needs of a community; focus on community assessment—the identification of health problems and/or potential problems, planning and implementation of a community program to alleviate the problem(s), and evaluation of the plans.

26:705:534. COMMUNITY HEALTH NURSING THEORY II (3)

Prerequisites: 26:705:524, 525.

Advanced specialized knowledge relevant to the design, implementation, and evaluation of programs that address health promotion and prevention in populations, groups, and the individual/family in the community examined. Focus on planning, implementation, evaluation of programs, and services.

26:705:535. COMMUNITY HEALTH NURSING PRACTICUM II (3)

Corequisite: 26:705:534.

Application of theory to advanced nursing practice, administration, or education in a community setting. Practicum focused on student-identified role in community health nursing.

Advanced Practice in Women's Health

(Course sequencing: 26:705:522, 523, 540, 541, 528, and 529)

26:705:522. PRIMARY CARE OF ADULTS AND THE AGED THEORY I (3)

See description under Primary Care of Adults and the Aged.

26:705:523. PRIMARY CARE OF ADULTS AND THE AGED PRACTICUM I (3)

See description under Primary Care of Adults and the Aged.

26:705:528. ADVANCED PRACTICE IN WOMEN'S HEALTH (3)

Prerequisites: 26:705:526, 527, and 540.

Critically examines theories and research findings related to patterns of high-risk childbearing families, including concepts, models, theories, and patterns that focus on high-risk prenatal and neonatal clients and the role of the advanced practice nurse.

26:705:529. ADVANCED PRACTICE IN WOMEN'S HEALTH PRACTICUM (3)

Corequisite: 26:705:528.

Practicum in advanced practice with childbearing families with application of concepts, models, and theories essential to care of high-risk childbearing families. Focus on comprehensive assessment and intervention, as well as care of mothers, neonates, and their families.

26:705:540. PRIMARY HEALTH CARE THEORY II (3)

See description under Primary Care of Adults and the Aged.

26:705:541. PRIMARY HEALTH CARE PRACTICUM II (3)

See description under Primary Care of Adults and the Aged.

Advanced Practice in Pediatric Nursing

(Course sequencing: 26:705:526, 527, 540, 541, 536, and 537)

26:705:526. ADVANCED PRACTICE IN PEDIATRIC NURSING THEORY I (3)

Prerequisites: 26:705:504, 510, and 520; 26:120:547. Pre- or corequisites: 26:705:506, 512, and 538.

Synthesis of concepts, models, theories, and patterns essential to advanced family nursing practice examined. Construct for advanced family nursing is individual's and family's expressing of primary health during childrearing.

26:705:527. ADVANCED PRACTICE IN PEDIATRIC NURSING PRACTICUM I (3)

Corequisite: 26:705:526.

Application of concepts, models, and theories essential to practice of advanced family nursing with childbearing and childrearing families. Focus on comprehensive assessment, intervention, and preventive care for childrearing families.

26:705:536. ADVANCED PRACTICE IN PEDIATRIC NURSING THEORY III (3)

Prerequisites: 26:705:526, 527, and 540.

Critical examination of theories and research findings related to children and their families utilizing a conceptual framework in delivering care to infants, children, adolescents, and families experiencing acute and/or chronic health care problems.

26:705:537. ADVANCED PRACTICE IN PEDIATRIC NURSING PRACTICUM III (3)

Corequisite: 26:705:536.

Application of theories and concepts related to acute and/or chronic health problems in care of infants, children, and adolescents. Design and manage nursing interventions, programs, and resources for the delivery of advanced nursing practice in pediatric settings.

26:705:540. PRIMARY HEALTH CARE THEORY II (3)

See description under Primary Care of Adults and the Aged.

26:705:541. PRIMARY HEALTH CARE PRACTICUM II (3)

See description under Primary Care of Adults and the Aged.

Family Nurse Practitioner

(Course sequencing: 26:705:526, 527, 540, 541, 532, 530, 531, and 544)

26:705:526. ADVANCED PRACTICE IN PEDIATRIC NURSING THEORY I (3)

See description under Advanced Practice in Pediatric Nursing.

26:705:527. ADVANCED PRACTICE IN PEDIATRIC NURSING PRACTICUM I (3)

See description under Advanced Practice in Pediatric Nursing.

26:705:540. PRIMARY HEALTH CARE THEORY II (3)

See description under Primary Care of Adults and the Aged.

26:705:541. PRIMARY HEALTH CARE PRACTICUM II (3)

See description under Primary Care of Adults and the Aged.

26:705:532. PRIMARY CARE OF ADULTS AND THE AGED THEORY III (3)

Prerequisites: 26:705:540, 541.

Advanced specialized knowledge relevant to nursing of young, middle-aged, and older adults critiqued. Focus on management of adult health and illness in primary care settings. High frequency health problems emphasized.

26:705:533. PRACTICUM IN PRIMARY CARE OF ADULTS AND THE AGED III (3)

Corequisite: 26:705:532.

Competency in advanced primary care nursing to adults across the life span with an emphasis on management of health and illness, health promotion, disease prevention, and chronic illness episodes of acute illness in primary care settings.

26:705:530. PRIMARY CARE MANAGEMENT OF FAMILIES WITH EPISODIC HEALTH NEEDS (3)

Prerequisites: 26:705:532, 533.

Principles of ongoing assessment and primary family nursing care of children, adults, and families with acute episodic common health problems introduced. Concepts relating to individual and family interactions, growth and development, and health patterns of the middle-aged family examined.

26:705:531. FAMILY EPISODIC HEALTH NEEDS PRACTICUM (3)

Corequisite: 26:705:530.

Clinical practice focuses on the delivery of primary health care by the family nurse practitioner to children, adults, and families with episodic health problems. Application of concepts and theories to care of the midlife family and to patterns related to health needs.

26:705:544. FAMILIES WITH CHRONIC HEALTH PROBLEMS PRACTICUM (3)

Corequisite: 26:705:543.

Clinical course focusing on the delivery of primary health care by the family nurse practitioner to children, adults, and their families with chronic health problems. Emphasis on ongoing assessment, management, and patterns of response to chronic illness. The integral relationship between family, community, health-care system, and care of a chronically ill person examined.

Psychiatric/Mental Health Nursing

26:705:514. HUMAN BEHAVIOR: THEORY I (3)

Prerequisites: 26:705:504, 510, 520; 26:120:547. Pre- or corequisites: 26:750:506, 512, 538.

Advanced practice role with individuals, families, and therapeutic groups as clients. Behavior patterns in chronic mental health problems; patterns of interventions from biological, psychosocial, and developmental perspectives, as well as relevant research examined.

26:705:515. HUMAN BEHAVIOR: PRACTICUM I (3)

Corequisite: 26:705:514.

Advanced nursing knowledge of individuals, families, and groups applied to advanced nursing practice. Individual and group patterns assessed in order to plan, manage, and evaluate selected clients. Students develop individual learning contracts congruent with College of Nursing and agency policies.

26:705:516. HUMAN BEHAVIOR: THEORY II (3)

Prerequisites: 26:705:514, 515. Pre- or corequisite: 26:705:540.

Advanced practice role with individuals, families, and therapeutic groups as clients. Behavior patterns in crises and acute mental health problems, patterns of interventions from a short-term perspective, and relevant research examined.

26:705:517. HUMAN BEHAVIOR: PRACTICUM II (3)

Corequisite: 26:705:516.

Advanced nursing knowledge of individuals, families, and groups applied to advanced nursing practice. Individual and group patterns of behavior analyzed in order to plan, manage, and evaluate the care of selected clients.

Electives

Electives may be taken within the College of Nursing. Courses also available by arrangement in the Rutgers Business School: Graduate Programs–Newark and New Brunswick, the School of Law–Newark, the School of Criminal Justice, the School of Social Work, and the public policy and administration program and other graduate programs in the Graduate School–Newark.

26:705:566. CURRICULUM AND TEACHING IN NURSING (3)

Prerequisite: 26:705:506.

Provides a basic structure to enable teachers to abstract theoretical constructs. Critique of various philosophies of nursing and education and articulation of individual philosophy. Survey of curriculum designs through the evaluation process.

26:705:568. NURSING ADMINISTRATION (3)

Prerequisite: 26:705:506.

Exploration of a conceptual model of an organization in which professional nurses function. The model fosters analytical thinking applicable to any organization, and facilitates integration of knowledge from many disciplines.

26:705:570. INFORMATION SYSTEMS MANAGEMENT (3)

Pre- or corequisite: 26:705:512.

Management of quantitative data with emphasis on application theory, assumptions underlying research designs, skill in statistical operations, and integration of results. Introduction to SPSSX computer package; basic concepts for creating and editing computer files (VAX).

26:705:620. THEORIES OF AGING (3)

Explores biological/psychological/social theories postulated to enhance understanding of the aged.

26:705:638. ANALYSIS AND DEVELOPMENT OF COMPUTER PROGRAMS IN NURSING (3)

Topics include computer systems, information systems, computer-based education, decision making with computers, and artificial intelligence. Development of computer literacy skills and computer applications in nursing practice.

26:705:650. INDEPENDENT STUDY (1-3 BA)

Student must have written permission and agreement from faculty adviser and participating faculty member. Final approval for study required from graduate program director.

In-depth study of selected interest area.

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ACADEMIC DIVISIONS

Rutgers, The State University of New Jersey, provides educational and research services throughout the state on campuses located in Camden, Newark, and New Brunswick. The principal university center is located in New Brunswick, where Rutgers originated two centuries ago.

Camden

Camden offers programs at three undergraduate colleges and at three graduate schools. With an enrollment of 5,200 students, it offers exceptional educational opportunities in addition to providing the advantages and resources associated with a major state university.

Faculty of Arts and Sciences–Camden

Margaret Marsh, *Ph.D.*, Dean

Established in 1983 as a result of academic reorganization of the Camden campus, the Faculty of Arts and Sciences–Camden offers academic programs for undergraduate and graduate work in 23 arts and sciences disciplines and in a variety of interdisciplinary areas.

School of Business–Camden

Milton Leontiades, *Ph.D.*, Dean

Established in 1988, the School of Business–Camden sets major requirements and teaches all courses leading to the bachelor of science degree in the professional areas of accounting and management. The School of Business also sets the major requirements and teaches all courses leading to a master of business administration degree.

Camden College of Arts and Sciences

Margaret Marsh, *Ph.D.*, Dean

A coeducational, liberal arts college, CCAS is the successor institution to the College of South Jersey, which was established in 1927 and became part of the state university in 1950.

University College–Camden

Margaret Marsh, *Ph.D.*, Dean

University College–Camden is an evening college of liberal arts and professional studies serving part-time students since 1950.

Graduate School–Camden

Margaret Marsh, *Ph.D.*, Dean

Graduate programs in the liberal arts were started in Camden in 1971 under the jurisdiction of the Graduate School–New Brunswick. The Graduate School–Camden was established as an autonomous unit in 1981.

School of Law–Camden

Rayman L. Solomon, *J.D.*, *Ph.D.*, Dean

Founded in 1926, the School of Law–Camden joined the university in 1950 as the South Jersey division of the School of Law–Newark. It became an independent unit of the university in 1967. The law school offers a curriculum leading to the degree of juris doctor, including advanced study in special areas.

Summer Session–Camden

Thomas Venables, *Ed.D.*

The Summer Session, begun in 1913 and established as a division of the university in 1960, offers a wide variety of graduate and undergraduate courses during three sessions in the summer months.

Newark

Newark offers programs at three undergraduate colleges and at four graduate schools. With an enrollment of approximately 10,300 students, it offers strong academic programs, excellent facilities, and an outstanding faculty.

Faculty of Arts and Sciences–Newark

Edward G. Kirby, *Ph.D.*, Dean

The Faculty of Arts and Sciences–Newark was established in 1985 to expand and strengthen the instructional program for undergraduate students at the Newark campus. The combined faculties of Newark College of Arts and Sciences and University College–Newark offer courses and academic programs in more than 60 subject areas.

Newark College of Arts and Sciences

Edward G. Kirby, *Ph.D.*, Dean

Founded in 1930 as Dana College, this undergraduate, coeducational, liberal arts college became part of Rutgers when the University of Newark was integrated into the state university in 1946.

College of Nursing

Felissa R. Lashley, *Ph.D.*, Dean

The College of Nursing was established in 1956 as an expansion of the university's offerings in the former School of Nursing of the Newark College of Arts and Sciences. Its graduate program is conducted through the Graduate School–Newark.

University College–Newark

Edward G. Kirby, *Ph.D.*, Dean

University College–Newark is an evening and weekend college of liberal arts and professional studies serving part-time students since 1934. Within the context of the liberal arts tradition, University College students are offered a full range of courses and curricula, including programs in business and preparation for the professions leading to the degrees of bachelor of arts and bachelor of science.

Rutgers Business School–Newark and New Brunswick

Howard Tuckman, *Ph.D., Dean*

Established in 1993 as the Faculty of Management, Rutgers Business School offers undergraduate and graduate programs on or through the university's Newark and New Brunswick campuses. Rutgers Business School: Undergraduate–Newark is a four-year undergraduate school. It offers the bachelor of science degree jointly with either the Newark College of Arts and Sciences or University College–Newark. Degree programs are available in accounting, finance, management, and marketing. Rutgers Business School: Undergraduate–New Brunswick is a two-year, upper-division school offering programs in accounting, finance, management, management science and information systems, and marketing. The school admits students from Douglass, Livingston, Rutgers, and University Colleges in their junior year. The bachelor of science degree is awarded jointly by the business school and the undergraduate college the student attended. Rutgers Business School: Graduate Programs–Newark and New Brunswick dates from the Seth Boyden School of Business, which was founded in 1929 and incorporated into Rutgers in 1946. The school offers the master of business administration, an M.B.A. degree in professional accounting, a master of accountancy in taxation, a master of accountancy in governmental accounting, a master of accountancy in financial accounting, a master of quantitative finance, and a variety of dual degrees. The Ph.D. degree in management is offered jointly by the Graduate School–Newark and the New Jersey Institute of Technology.

Graduate School–Newark

Steven J. Diner, *Ph.D., Dean*

The Graduate School–Newark was established as a separate instructional division of the university with degree-granting authority in 1976.

School of Criminal Justice

Leslie W. Kennedy, *Ph.D., Dean*

The School of Criminal Justice, which opened in 1974, offers a graduate program that provides students with a sound foundation for work in teaching, research, or criminal justice management. The master of arts degree is offered through the school, and the Ph.D. degree is offered in conjunction with the Graduate School–Newark.

School of Law–Newark

Stuart L. Deutsch, *J.D., Dean*

The university's graduate programs in law originated in other institutions. The New Jersey School of Law, founded in 1908, and the Mercer Beasley School of Law, founded in 1926, merged in 1936 to become the University of Newark School of Law, which became part of Rutgers in 1946.

Summer Session–Newark

The Summer Session, begun in 1913 and established as a division of the university in 1960, offers a wide variety of graduate and undergraduate courses during three sessions in the summer months.

New Brunswick

The New Brunswick campus is the largest and most diversified of the university's three campuses, with 16 academic units, 1,800 faculty, and 36,000 students enrolled in undergraduate and graduate programs.

Faculty of Arts and Sciences–New Brunswick

Holly M. Smith, *Ph.D., Executive Dean*

Established in 1981 as a result of academic reorganization of the New Brunswick campus, the Faculty of Arts and Sciences–New Brunswick teaches all arts and science courses for undergraduate and graduate students in degree-granting units and sets the major requirements for all arts and science majors. Organized into disciplines and departments, it offers 44 undergraduate major programs and 29 graduate programs, which are administered by the Graduate School–New Brunswick.

Douglass College

Carmen Twillie Ambar, *J.D., Dean*

Founded in 1918 as the New Jersey College for Women, Douglass is the largest women's college in the nation. While maintaining rigorous standards of instruction in the fundamental disciplines of the liberal arts, Douglass supports and develops programs that link major courses of study to future careers. The college also implements special programs as well as independent activities designed to help women students develop the qualities required for achievement in any field of endeavor.

Livingston College

Arnold Hyndman, *Ph.D., Dean*

Livingston College opened in 1969 as a coeducational institution dedicated to serving a diverse student body reflecting the racial, ethnic, and socioeconomic composition of today's society. As a college of the liberal arts and professions, Livingston is committed to a multidisciplinary program that brings together a diverse group of students, faculty, and staff in a cosmopolitan community dedicated to learning.

Rutgers College

Carl Kirschner, *Ph.D., Dean*

Rutgers College was chartered in 1766 and is the original nucleus around which the university developed. Formerly an undergraduate college for men, it is now coeducational. Dedicated to the promotion of excellence in undergraduate education, Rutgers College provides its students with clear guidelines in the pursuit of a liberal arts education.

University College–New Brunswick

Emmet A. Dennis, *Ph.D., Dean*

University College–New Brunswick is an evening college of liberal arts and professional studies serving part-time students since 1934. Within the context of the liberal arts tradition, University College–New Brunswick students are offered a full range of courses and curricula, including programs in business and preparation for the professions leading to the degrees of bachelor of arts and bachelor of science.

Cook College

Keith R. Cooper, *Ph.D., Acting Dean*

A coeducational and residential college, Cook offers undergraduate programs in various applied disciplines with an emphasis on environmental, agricultural, food, and marine sciences. Formerly the College of Agriculture and later the College of Agriculture and Environmental Science, Cook College adopted its present name in 1973. Graduate programs are offered through the Graduate School–New Brunswick.

Ernest Mario School of Pharmacy

John L. Colaizzi, *Ph.D., Dean*

First organized in 1892 and incorporated into the state university in 1927, the Ernest Mario School of Pharmacy offers a six-year professional program leading to the doctor of pharmacy (Pharm.D.) degree and a graduate program offering a post-B.S. Pharm.D. degree (both traditional two-year and nontraditional). Other graduate programs leading to advanced degrees through the Graduate School–New Brunswick are available. In addition, the school sponsors a continuing education program for the benefit of practicing pharmacists throughout the state.

Mason Gross School of the Arts

George B. Stauffer, *Ph.D., Dean*

This branch of Rutgers opened in July 1976. The school grants both undergraduate and graduate degrees. Formed to provide an education in the arts of the highest professional caliber, the school offers an M.F.A. degree in visual arts and theater arts; D.M.A., A.Dpl., M.M., and B.Mus. degrees in music; and a B.F.A. degree in visual arts, dance, and theater arts.

Rutgers Business School–Newark and New Brunswick

Howard Tuckman, *Ph.D., Dean*

Established in 1993 as the Faculty of Management, Rutgers Business School offers undergraduate and graduate programs on or through the university's Newark and New Brunswick campuses. Rutgers Business School: Undergraduate–Newark is a four-year undergraduate school. It offers the bachelor of science degree jointly with either the Newark College of Arts and Sciences or University College–Newark. Degree programs are available in accounting, finance, management, and marketing. Rutgers Business School: Undergraduate–New Brunswick is a two-year, upper-division school offering programs in accounting, finance, management, management science and information systems, and marketing. The school admits students from Douglass, Livingston, Rutgers, and University Colleges in their junior year. The bachelor of science degree is awarded jointly by the business school and the undergraduate college the student attended. Rutgers Business School: Graduate Programs–Newark and New Brunswick dates from the Seth Boyden School of Business, which was founded in 1929 and incorporated into Rutgers in 1946. The school offers the master of business administration, an M.B.A. degree in professional accounting, a master of accountancy in taxation, a master of accountancy in governmental accounting, a master of accountancy in financial accounting, a master of quantitative finance, and a variety of dual degrees. The Ph.D. degree in management is offered jointly by the Graduate School–Newark and the New Jersey Institute of Technology.

School of Communication, Information and Library Studies

Gustav Friedrich, *Ph.D., Dean*

This school was formed in 1982 by a merger of two schools to provide academic programs that focus on various facets of communication and information science. The school offers undergraduate programs of study in communication, and journalism and mass media. Students are admitted to the school in their junior year from the five residential undergraduate colleges in New Brunswick: Cook, Douglass, Livingston, Rutgers, and University Colleges. Bachelor of arts degrees are awarded jointly by the School of Communication, Information and Library Studies and the undergraduate college. At the graduate level, programs are offered that lead to the degree of master of library and information science, the master of communication and information studies, and, jointly with the Graduate School–New Brunswick, the doctor of philosophy degree. Courses for in-service librarians also are provided.

School of Engineering

Michael T. Klein, *Sc.D., Dean*

Instruction in engineering began at Rutgers in 1864 when New Jersey designated Rutgers College to be the State College for the Benefit of Agriculture and Mechanic Arts. The College of Engineering became a separate unit in 1914 and was renamed the School of Engineering in 1999. The school is dedicated to the sound technical and general education of the student. It offers a bachelor of science degree in seven disciplines as well as a curriculum in applied sciences. Its graduate programs are conducted through the Graduate School–New Brunswick.

Edward J. Bloustein School of Planning and Public Policy

James W. Hughes, *Ph.D., Dean*

Founded in 1992, the Edward J. Bloustein School of Planning and Public Policy provides focus for all of Rutgers' programs of instruction, research, and service in planning and public policy. The school offers undergraduate programs in urban studies and public health, each leading to the baccalaureate degree. On the graduate level, the school confers master of city and regional planning, master of city and regional studies, master of public affairs and politics, master of public policy, master of public health, and doctor of public health degrees; the latter two degrees are offered jointly with the University of Medicine and Dentistry of New Jersey–School of Public Health. A dual-degree program in public health and applied psychology leading to the master of public health and doctor of psychology degrees is offered with the Graduate School of Applied and Professional Psychology. A program also is offered that leads to the doctor of philosophy degree in urban planning and policy development; this degree is conferred by the Graduate School–New Brunswick. In addition, the school offers joint-degree programs with Rutgers' two law schools, with the Rutgers Business School: Graduate Programs–Newark and New Brunswick, and with the Graduate School–New Brunswick.

School of Management and Labor Relations

Barbara A. Lee, *Ph.D., J.D., Dean*

The School of Management and Labor Relations, formed in 1994, provides undergraduate instruction in labor studies and employment relations. At the graduate level,

programs are offered that lead to the degrees of master in human resource management, master in labor and employment relations, and doctor of philosophy in industrial relations and human resources.

Graduate School–New Brunswick

Holly M. Smith, *Ph.D., Dean*

Graduate programs in the arts and sciences have been offered since 1876. The Graduate School–New Brunswick awards advanced degrees in more than 60 disciplines and is responsible for all doctor of philosophy degrees at Rutgers–New Brunswick. The faculty is drawn from virtually all academic divisions of the university.

Graduate School of Applied and Professional Psychology

Stanley B. Messer, *Ph.D., Dean*

GSAPP was established in 1974 to train direct-service psychologists who have a special commitment to community involvement. It offers the doctor of psychology (Psy.D.) degree in professional psychology with specializations in the areas of clinical psychology, school psychology, and organizational psychology. GSAPP also awards the master of psychology (Psy.M.) degree *en passant* to the doctorate; the Psy.M. is not offered as a terminal degree.

Graduate School of Education

Richard DeLisi, *Ph.D., Acting Dean*

Courses in education were first offered by Rutgers College in the late 19th century. A separate school offering its own curricula was organized in 1924. GSE offers programs leading to the degrees of master of education, specialist in education, and doctor of education.

School of Social Work

Mary E. Davidson, *Ph.D., Dean*

Established in 1954 to prepare students for professional social work practice, SSW offers a two-year graduate curriculum leading to the master of social work degree. Jointly with the Graduate School–New Brunswick, it offers a program leading to the doctor of philosophy degree, and its faculty also teaches an undergraduate social work program.

Summer Session–New Brunswick

Thomas A. Kujawski, *Ed.M.*

The Summer Session, begun in 1913 and established as a division of the university in 1960, offers a wide variety of graduate and undergraduate courses during three sessions in the summer months.

ACADEMIC CENTERS, BUREAUS, AND INSTITUTES

Academic Foundations Center. Conklin Hall, Newark Campus

Advanced Food Technology, Center for. Nabisco Institute for Advanced Food Technology, Cook Campus

Advanced Information Processing, Center for. CoRE Building, Busch Campus

Agricultural Experiment Station, New Jersey. Martin Hall, Cook Campus

Alcohol Studies, Center of. Smithers Hall, Busch Campus

American Women and Politics, Center for. Wood Lawn, Douglass Campus

Art Museum, Jane Voorhees Zimmerli. College Avenue Campus

Biological Research, Bureau of. Nelson Biology Laboratories, Busch Campus

Biostatistics, Institute of. Hill Center, Busch Campus

Biotechnology Center for Agriculture and the Environment. Cook Campus

Ceramic Research, Malcolm G. McLaren Center for. 607 Taylor Road, Busch Campus

Coastal and Environmental Studies, Center for. Doolittle Hall, Busch Campus

Computer Science Research, Laboratory for. Hill Center, Busch Campus

Controlled Drug-Delivery Research Center. Pharmacy Building, Busch Campus

Crime Prevention Studies, Center for. Center for Law and Justice, Newark Campus

Criminological Research, Institute for. Lucy Stone Hall, Livingston Campus

Critical Analysis of Contemporary Culture, Center for the. 8 Bishop Place, College Avenue Campus

Discrete Mathematics and Theoretical Computer Science, Center for. CoRE Building, Busch Campus

Eagleton Institute of Politics. Wood Lawn, Douglass Campus

Economic Research, Bureau of. New Jersey Hall, College Avenue Campus

Edison Papers, Thomas A. 16 Seminary Place, College Avenue Campus

Education Law and Policy, Institute for. Center for Law and Justice, Newark Campus

Engineered Materials, Institute for. Engineering Building, Busch Campus

Engineering Research, Bureau of. Engineering Building, Busch Campus

Fiber Optic Materials Research Program. 607 Taylor Road, Busch Campus

Fisheries and Aquaculture Technology Extension Center. Martin Hall, Cook Campus

Global Strategic Human Resource Management, Center for. School of Management and Labor Relations, 94 Rockefeller Road, Livingston Campus

Government Services, Center for. Edward J. Bloustein School of Planning and Public Policy, 33 Livingston Avenue, College Avenue Campus

Health, Health Care Policy, and Aging Research, Institute for. 30 College Avenue, College Avenue Campus

Historical Analysis, Rutgers Center for. 88 College Avenue, College Avenue Campus

Human Evolutionary Studies, Center for. 131 George Street, College Avenue Campus

International Business Education, Center for. Janice H. Levin Building, Livingston Campus

International Conflict Resolution and Peace Studies, Center for. Hickman Hall, Douglass Campus

International Faculty and Student Services, Center for. 180 College Avenue, College Avenue Campus

Jazz Studies, Institute of. Dana Library, Newark Campus

Jewish Life, Center for the Study of. 12 College Avenue, College Avenue Campus

Journalism Resources Institute. 185 College Avenue, College Avenue Campus

Marine and Coastal Sciences, Institute of. 71 Dudley Road, Cook Campus

Materials Synthesis, Center for. Engineering Building, Busch Campus

Mathematical Sciences Research, Center for. Hill Center, Busch Campus

Mathematics, Science, and Computer Education, Center for. Science and Engineering Resource Center, Busch Campus

Metropolitan Studies, Joseph C. Cornwall Center for. Smith Hall, Newark Campus

Molecular and Behavioral Neuroscience, Center for. Aidekman Center, Newark Campus

Negotiation and Conflict Resolution, Center for. Edward J. Bloustein School of Planning and Public Policy, 33 Livingston Avenue, College Avenue Campus

Neighborhood and Brownfields Redevelopment, National Center for. Edward J. Bloustein School of Planning and Public Policy, 33 Livingston Avenue, College Avenue Campus

Operations Research, Center for. Hill Center, Busch Campus

Packaging Science and Engineering, Center for. Engineering Building, Busch Campus

Physics Research, Bureau of. Serin Physics Laboratories, Busch Campus

Rutgers Cooperative Extension. Martin Hall, Cook Campus

Surface Modification, Laboratory for. Serin Physics Laboratories, Busch Campus

Transportation Center, Alan M. Voorhees. Edward J. Bloustein School of Planning and Public Policy, 33 Livingston Avenue, College Avenue Campus

Urban Policy Research, Center for. 33 Livingston Avenue, College Avenue Campus

Waksman Institute of Microbiology. 190 Frelinghuysen Road, Busch Campus

Walt Whitman Center for the Culture and Politics of Democracy. Hickman Hall, Douglass Campus

Wireless Information Network Laboratory. Electrical Engineering Building, Busch Campus

Women, Institute for Research on. 160 Ryders Lane, Douglass Campus

Women and Work, Center for. School of Management and Labor Relations, 162 Ryders Lane, Douglass Campus

Women's Leadership, Institute for. 162 Ryders Lane, Douglass Campus

Workforce Development, John J. Heldrich Center for. Edward J. Bloustein School of Planning and Public Policy, 33 Livingston Avenue, College Avenue Campus

Workplace Transformation, Center for. School of Management and Labor Relations, Labor Education Center, 50 Labor Center Way, Cook Campus

Centers Operated Jointly

Biotechnology and Medicine, Center for Advanced. Environmental and Occupational Health Sciences Institute. Hazardous Substance Management Research Center.

UNIVERSITY LIBRARY SYSTEM

Alcohol Studies Library. Smithers Hall, Busch Campus

Annex. Annex Building, Busch Campus

Archibald Stevens Alexander Library. 169 College Avenue, College Avenue Campus

Art Library. Hamilton Street, College Avenue Campus

Blanche and Irving Laurie Music Library. Douglass Library, Chapel Drive and George Street, Douglass Campus

Chemistry Library. Wright Chemistry Laboratory Building, Busch Campus

Chrysler Herbarium Library. Nelson Biology Laboratories, Busch Campus

Criminal Justice Library. Center for Law and Justice, 123 Washington Street, Newark Campus

East Asian Library. Alexander Library, College Avenue Campus

Institute of Jazz Studies Library. John Cotton Dana Library, Newark Campus

John Cotton Dana Library. 185 University Avenue, Newark Campus

Kilmer Area Library. Avenue E, Livingston Campus

Library of Science and Medicine. Bevier Road, Busch Campus

Mabel Smith Douglass Library. Chapel Drive and George Street, Douglass Campus

Mathematical Sciences Library. Hill Center, Busch Campus

Media Services. Kilmer Area Library, Livingston Campus

Paul Robeson Library. 300 North Fourth Street, Camden Campus

Physics Library. Serin Physics Laboratories, Busch Campus

School of Law–Camden Library. Fifth and Penn Streets, Camden Campus

School of Law–Newark Library. Center for Law and Justice, 123 Washington Street, Newark Campus

School of Management and Labor Relations Library. Ryders Lane, Cook Campus

SERC Reading Room. Science and Engineering Resource Center, Frelinghuysen Road, Busch Campus

Special Collections and University Archives. Alexander Library, College Avenue Campus

Stephen and Lucy Chang Science Library. Foran Hall, Cook Campus

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