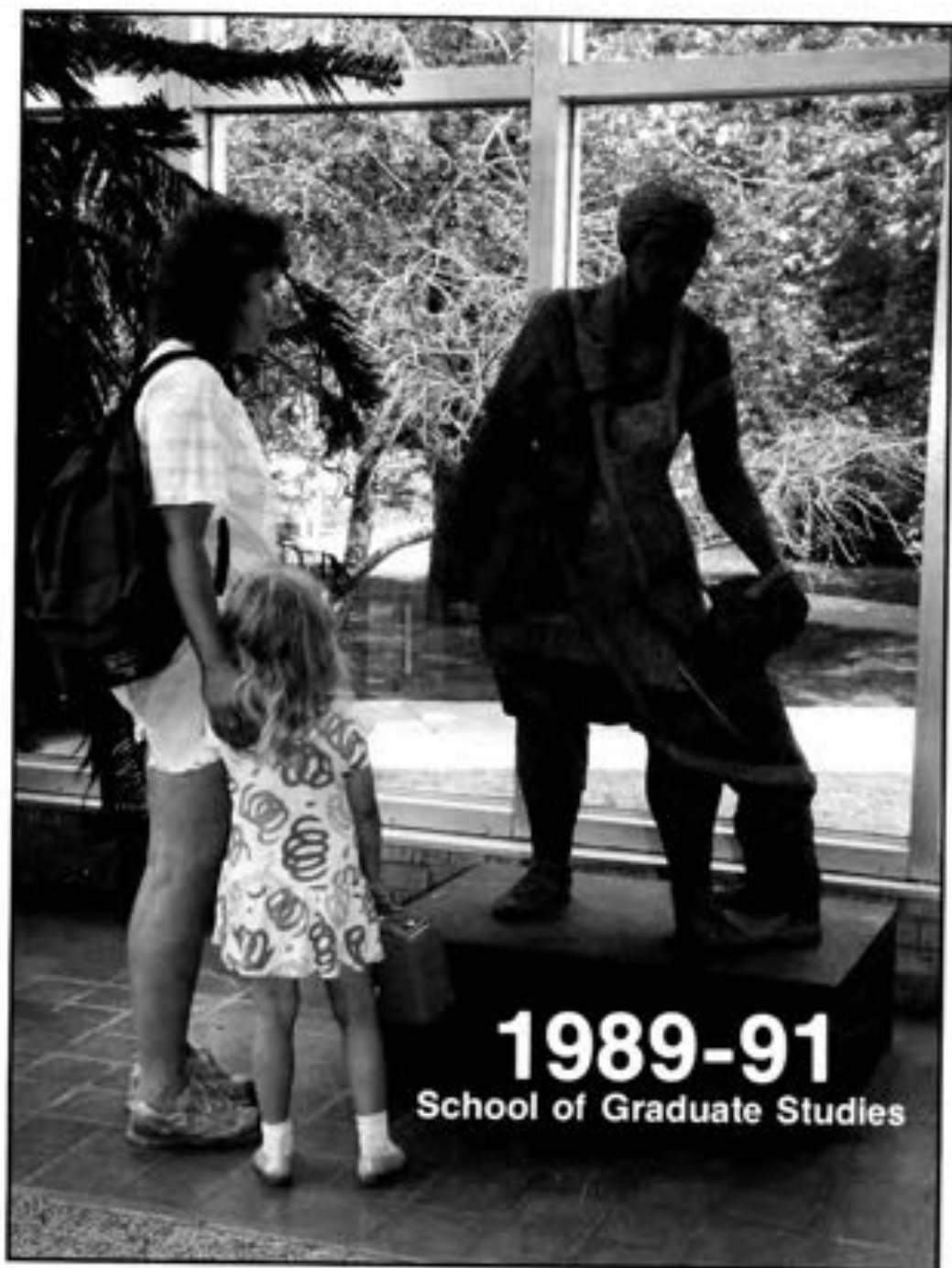


University of Wisconsin **Whitewater**



**BULLETIN OF THE UNIVERSITY OF WISCONSIN-WHITEWATER
SCHOOL OF GRADUATE STUDIES
1989-91**

The provisions of this bulletin do not constitute a contract between a student at the University of Wisconsin-Whitewater and the University. The purpose of the bulletin is to provide regulations, course listings, degree programs, and fee schedules which are in effect at the time of publication. The University of Wisconsin-Whitewater reserves the right to change the regulations in this bulletin at any time during the period for which it is in effect and to add, modify, or withdraw courses at any time. The University of Wisconsin-Whitewater, with the concurrence of the UW-System Administration and/or the Board of Regents of the University of Wisconsin System, also reserves the right to change tuition and fees and to add, modify, or withdraw degree programs at any time. Effective dates of changes will be determined by the proper University authorities and published through the Timetable of Classes or other official publications of the University.

In accordance with the Family Educational Rights and Privacy Act of 1974, the University of Wisconsin-Whitewater has established a written institutional policy and adopted procedures covering the privacy rights of students. The institution maintains the confidentiality of student education records and does not release any of these records except as provided by the law. Inquiries regarding specific items in the policy may be obtained from the Office of the Registrar.

The University of Wisconsin-Whitewater is committed to equal opportunity for all persons regardless of age, sex, race, color, national origin, creed, affiliation or disability in its educational programs and activities. This is in compliance with the requirements of Title IX of the 1972 Education Amendments (as amended), of Section 504 of the Rehabilitation Act of 1973 (as amended), and the Sexual Harassment Policy of the Wisconsin System Board of Regents (Resolution #2384, 5/8/81). Refer inquiries to the Title IX Officer, University of Wisconsin-Whitewater, Whitewater, WI 53190-1790.

Published quarterly by the Board of Regents of the University of Wisconsin System.
Second-class postage paid at Whitewater, Wisconsin 53190-1790.

TABLE OF CONTENTS

1989-91 CALENDAR	(Inside front cover)
------------------------	----------------------

SECTION I POLICIES AND PROCEDURES

UNIVERSITY OF WISCONSIN-WHITEWATER	2
Background	2
The Campus	2
Graduate Education	2
ADMISSION REQUIREMENTS	3
Admission in Good Standing	3
Admission on Probation	3
Non-candidate for Degree Status	4
Guest Transfer of Credit	4
Deficiencies in Background for Graduate Study	4
Seniors Taking Graduate Courses	4
APPLICATION PROCESS	5
Application to Degree Programs	5
Advising	5
Registration	6
Reactivation	6
ACADEMIC REQUIREMENTS AND POLICIES	7
Minimum Credit Requirements	7
Credit Restrictions	7
Transfer of Credit	7
Degree Program Options	8
Comprehensive Examination	9
Thesis	9
Course Numbers	10
Grading System	10
Permanent Academic Record	11
Academic Probation	11
Course Repeats	11
Changes in Registration	11
Degree Candidacy	12
Time Limit	12
Graduation	12
Appeals	12
FEES	13
Academic Fees	13
State Residency	13
Minnesota-Wisconsin Reciprocity	13
Room and Board	13
Textbooks	14
Fee Payments	14

FINANCIAL ASSISTANCE	15
Graduate Assistantships	15
Advanced Opportunity Program Assistantships	15
Financial Aid	16
Nonresident Grants	16
Foreign Student Grants	16
Carl D. Perkins Loans	16
Guaranteed Student Loans	16
Supplemental Loans for Students	16
College Work-Study	17
Regular Student Payroll	17
Off-Campus Employment	17
Applications for Financial Aid	17
Academic Progression	17
Financial Aid Refund/Repayments	17
FACILITIES AND SERVICES	18
Library and Learning Resources	18
Computer Center	19
Observatory	19
Media Based Education	19
Certification and Licensure	20
Placement Services	20
Residence Life	20
Parking and University Police	20
Health Service	20
Health Warning	21
Counseling and Development Center	21
Disabled Student Services	21
International Student Programs	22
Children's Center	22
General Recreation	22
Intramural Sports	22
Religious Groups	22
Cultural Affairs	23
University Theatre	23
Music Activities	23
Art Exhibitions	23

SECTION II

DEGREE PROGRAMS

Accounting (M.S.)	26
Biology (M.A.T./M.S.T.)	27
Business Administration (M.B.A.)	29
Business Education (M.A.T./M.S.T.)	32
Communication (M.S.)	34
Educational Administration (M.S. at UW-Madison)	37
Elementary Education (M.S.E.)	38
English (M.A.T./M.S.T.)	38
Geography (M.A.T./M.S.T.)	40
Guidance and Counseling (M.S.)	41

History (M.A.T./M.S.T.)	43
Mathematics (M.A.T./M.S.T.)	45
Music (M.A.T./M.S.T.)	46
Professional Development (M.E.P.D.)	47
Public Administration (M.P.A. at UW-Oshkosh)	50
Reading (M.S.E.)	50
Safety (M.S.)	52
School Business Management (M.S.E.)	54
School Psychology (M.S.E.)	55
Special Education (M.S.E.)	57

SECTION III

COURSE DESCRIPTIONS

GENERAL INFORMATION	62
Course Numbers	62
Course Currency Policy	62
COLLEGE OF THE ARTS	63
Art	63
Music	66
Theatre and Dance	70
COLLEGE OF BUSINESS AND ECONOMICS	72
Accounting	72
Business Education and Office Administration	73
Economics	77
Finance and Business Law	80
Management	82
Marketing	85
School Business Management	87
COLLEGE OF EDUCATION	89
Coaching	89
Educational Foundations and Counselor Education	90
Curriculum and Instruction	100
Health, Physical Education, and Recreation	107
Safety Studies	113
Special Education	117
COLLEGE OF LETTERS AND SCIENCES	125
Afro-American Studies	125
Anthropology	125
Biology	126
Chemistry	130
Chicano Studies	131
Communication	131
English	138
Foreign Languages	142
Geography	143
Geology	145
History	145

Mathematics and Computer Science	148
Philosophy and Religious Studies	152
Physics and Astronomy	153
Political Science	155
Psychology	159
Social Welfare	163
Sociology	165
Women's Studies	167

SECTION IV

ORGANIZATION

ADMINISTRATION	170
GRADUATE FACULTY	172
CONSTITUTION OF THE GRADUATE FACULTY	185
INDEX	189



Policies & Procedures

SECTION I

POLICIES AND PROCEDURES

UNIVERSITY OF WISCONSIN-WHITEWATER

Background. The University of Wisconsin-Whitewater was founded in 1888 as a Normal School to train teachers. Since that time, it has progressed to State Teachers College, State College, and State University. Then in 1972, with the merger of the nine state universities and the former University of Wisconsin, UW-Whitewater became a member of the University of Wisconsin System. The UW-System now includes 13 universities and 13 two-year centers. The combined enrollment makes it the fourth largest system of higher education in the United States.

UW-Whitewater itself has grown to approximately 11,000 students with more than 600 faculty and academic staff members. It is now a comprehensive university offering both undergraduate and graduate degrees. More than 80 majors are offered in four undergraduate colleges: The Arts, Business and Economics, Education, and Letters and Sciences. In addition, the Office of Continuing Education and Outreach enrolls hundreds of students on and off campus in both credit and noncredit programs.

The Campus. The University is located in southeastern Wisconsin approximately 45 miles southeast of Madison, 50 miles southwest of Milwaukee, and 100 miles northwest of Chicago. The 400-acre campus is situated in the northwest corner of the City of Whitewater within walking distance of the city's business district.

The campus has more than 40 major buildings including 14 residence halls which serve some 4,000 students. The focal point of the campus is a scenic pedestrian mall around which are located the academic buildings. North of the mall are the residence halls, the Health Center, Williams Physical Education and Recreation Center, a 15,000 seat stadium, and 43 acres of recreational fields.

Graduate Education. Until the last quarter century, UW-Whitewater had only offered undergraduate degrees. In response to the societal needs for greater specialization and increased education in the professional work force, graduate programs were initiated at the University of Wisconsin-Whitewater in the early 1960's. Since then, UW-Whitewater has granted 6,555 master's degrees. It has presently the fourth largest graduate school in the UW-System with 1,617 students enrolled during the fall of 1988.

Master's degree programs are available in accounting, business administration, communication, counseling and guidance, education, safety studies, school business management, school psychology, and special education. An extensive program of evening classes is offered for those who are employed during the day. It is possible to complete master's degree programs through summer and evening work without being a full-time student during the academic year.

Graduate degree programs at UW-Whitewater are fully accredited by the North Central Association, the American Assembly of Collegiate Schools of Business, the American Speech-Language-Hearing Association, the National Association of Schools of Music, the National Council for Accreditation of Teacher Education, and by the Wisconsin State Department of Public Instruction.

Information on the specific degree programs is found in the section on Degree Programs. For further information on graduate studies and current class schedules, contact: School of Graduate Studies, Roseman 2047, University of Wisconsin-Whitewater, Whitewater, WI 53190-1790.

General information on graduate studies is available on a touch-tone telephone information system which can be accessed by phoning (414) 472-2000.

ADMISSION REQUIREMENTS

In general, all persons who hold a bachelor's or advanced degree from a regionally accredited school may register in graduate-level courses for graduate credit. Proof of a bachelor's or higher degree is required.

Students may be admitted to a graduate degree program either in good standing or on probation. Certain other special categories are established for persons not attempting to complete a degree at this institution. These special categories are "non-candidate for degree" and "guest transfer of credit."

Admission in Good Standing. Requirements for admission to a degree program in good standing are as follows:

1. A baccalaureate or higher degree from a regionally accredited institution.
2. At least a 3.00* overall grade point average in all the graduate work previously completed at UW-Whitewater, with no grades of I or P pending.
3. One of the following:
 - a. At least a 2.75 overall grade point average in the undergraduate degree program.
 - b. At least a 2.90 grade point average in the last half of the undergraduate degree program.
 - c. At least 12 credits of graduate work completed on a regular grade basis at UW-Whitewater.
 - d. At least a 2.50 overall grade point average in the undergraduate degree program, a Graduate Management Admission Test (GMAT) score of at least 570, and at least five years of appropriate work experience. (This option is available only to M.B.A. and M.S. - Accounting applicants.)
4. Any additional requirements set by individual departments or colleges for admission to specific degree programs.

Admission on Probation. A student who does not meet the requirements for admission in good standing may be admitted to a degree program on probation after furnishing credible evidence of ability to do satisfactory graduate work. Such credibility is determined by the admitting academic department or individual program director, and could be a creditable postgraduate employment record; a satisfactory score on the Graduate Record Examination, GMAT or Miller Analogies Test; or the successful completion of graduate work at a regionally accredited institution.

Students admitted on probation will have 12 credits, including repeated courses, within which to meet the criteria above for good standing status. Those failing to do so will be ineligible to take further graduate work in that degree program.

*All grade point averages are on a 4.00 basis.

Non-candidate for Degree (NCFD) Status. Persons who hold the bachelor's degree or a graduate degree from a regionally accredited college or university but do not wish to be admitted to a graduate degree program are classified as NCFD students. Evidence of a bachelor's degree or an advanced degree is required for a NCFD student. This category allows the student to enroll in graduate level courses and to receive graduate credit for this work. Departments and colleges reserve the right to restrict NCFD students from their courses.

Before completing more than nine credits as a NCFD, a student must either file an application for a degree program or file for continued NCFD status. Acceptance of any course work toward a graduate degree including course work completed as an NCFD student is at the discretion of the department. Because all but nine credits of course work for a degree must be done at UW-Whitewater after admission to the degree program, a maximum of nine credits taken as a NCFD may be applied toward the completion of a degree.

Guest Transfer of Credit. Persons attending another graduate school who wish to take graduate courses at UW-Whitewater and transfer them to that institution may do so. The Graduate Office at UW-Whitewater provides a form to be completed by an official of the graduate school to which the credits are to be transferred. The form certifies that the student is attending the other institution and states the provisions for approval of the work taken at UW-Whitewater toward the degree at the other institution.

Deficiencies in Background for Graduate Study. If a department finds that a student lacks the proper academic background for graduate studies, it may specify that deficiencies be made up before the student completes a degree. In some cases, deficiencies may have to be made up by registering in undergraduate courses which do not count toward completion of a master's degree.

Seniors Taking Graduate Courses. UW-Whitewater undergraduate students with senior status may be allowed to take at most six graduate credits at UW-Whitewater provided they have completed at least 90 semester credits with at least a 2.75 overall grade point average (or 2.90 over the last half of their course work) and have the written recommendation of the department chairperson of their undergraduate major. Eligibility for this privilege must be established with the Graduate Office. Seniors may not use graduate-level credits to satisfy requirements for the bachelor's degree, and undergraduate fees will be charged for their graduate-level work.

APPLICATION PROCESS

Application to Degree Programs. To apply for admission to a graduate degree program, individuals should:

1. Send a completed application for admission form together with a \$20 nonrefundable application fee payable to UW-Whitewater, to the Graduate Office. Application forms may be obtained from the Graduate Office.
2. Request that the registrar at each institution of higher education previously attended, other than UW-Whitewater, send an official transcript of all college or university work completed at the institution directly to the School of Graduate Studies at UW-Whitewater. Transcripts submitted personally by applicants will not be accepted. In the case of an institution in a foreign country that does not issue transcripts other than the single official copy presented to the student, a photocopy may be submitted provided that the applicant presents the official document for verification of authenticity at the Graduate Office upon arrival at UW-Whitewater.
3. Submit all other credentials (e.g., test scores and letters of recommendation) required for admission to the particular program for which admission is being sought.

In addition, international students should:

4. Arrange for an official Test of English as a Foreign Language (TOEFL) score to be sent directly to the Graduate Office if English is not the native language. A TOEFL score of 550 is required for admission into some of the degree programs and is strongly recommended for the others.
5. Send a completed certification of finances form to the Graduate Office to demonstrate that there is adequate financial support available during the planned period of study. Forms will be issued upon request by the Graduate Office.
6. Have a former professor send a letter of recommendation directly to the Graduate Office attesting to the student's ability to pursue graduate study in the United States.

All application credentials should be sent to the School of Graduate Studies, UW-Whitewater, Whitewater, Wisconsin 53190-1790. These materials become the property of the University and are not returned to applicants nor forwarded to other institutions. Applications will not be processed until all of the credentials above have been received.

Application material should be submitted at least two months before the beginning of the term the applicant plans to attend. Students may be admitted into a degree program for the fall, spring or summer term. Application for admission will be considered during the applicant's last term of undergraduate study with admission pending the applicant attaining the baccalaureate degree and meeting all the requirements for admission. Students may apply for admission to a degree program for the term in which they are already enrolled in graduate courses at UW-Whitewater, but they must be formally accepted into the degree program before they will be allowed to register for classes in a subsequent term.

After application credentials have been evaluated, students will be notified of their admission status. If accepted into a degree program, they will be assigned an adviser and sent class registration material.

Advising. Students are assigned faculty advisers by and generally within their major or emphasis department. Advisers are available to help plan each student's program of study and to assist in the selection of courses before students register for classes. Graduate students who seek state professional education licensure should also contact the Director of Certification for current licensure requirements.

Registration. Graduate students who have been admitted to a degree program for a given term or have enrolled in a graduate course during the year preceding a given term, except for those who will have graduated from the University, will be sent a registration form and a timetable of graduate classes for that term. These materials are mailed well in advance of the beginning of a term and include instructions on registering for classes.

Since UW-Whitewater reserves the right to cancel classes that have insufficient enrollment and to restrict classes filled to capacity, students are strongly advised to register in advance by the published dates in order to attain the classes they need. Advance registration also enables departments to make timetable adjustments when possible to accommodate student requests. Students who register in advance will be sent class schedules and will be contacted if there are problems with their course requests.

Reactivation. Applicants who do not enroll at UW-Whitewater as a graduate student within a calendar year of the beginning of the term for which they were admitted and students who have not enrolled as a graduate student within a calendar year are considered inactive. Inactive students must update and reactivate their files by completing a reactivation form before they will be eligible to register for graduate courses. Forms are available at, and must be submitted to, the Graduate Office.

ACADEMIC REQUIREMENTS AND POLICIES

In addition to the graduate school academic requirements and policies, it is the prerogative of each graduate degree program to impose more stringent requirements. A graduate student is responsible for meeting all degree requirements in effect at UW-Whitewater during the term for which the student is admitted into the current degree program unless the student's attendance at UW-Whitewater is interrupted by an absence of four or more consecutive academic sessions (including summer), in which case upon re-entry the student will be subject to the requirements in effect at that time.

Minimum Credit Requirements. All graduate degree programs at UW-Whitewater require at least 30 graduate credits distributed according to the requirements of the individual programs. The minimum credit requirements and credits distribution for specific degree programs are stated in this bulletin under program descriptions.

At least half of the graduate work in a degree program and at least half of the work in a major or emphasis field must be completed in courses numbered 700 or higher. In addition, a grade point average of at least 3.00 (B) over all the graduate work taken at UW-Whitewater, as well as in all the graduate work taken in the student's major or emphasis, is required for graduation.

Credit Restrictions. Undergraduate courses, including those taken to make up deficiencies in background or in supervised teaching, will not be counted toward the number of graduate credits required for a degree. Undergraduate courses may not be used to satisfy master's degree requirements, and graduate courses may not be used to satisfy undergraduate requirements at UW-Whitewater. Also, a course taken for undergraduate credit may not later be changed to graduate credit. Courses taken for undergraduate credit may not be taken for graduate credit, although exceptions may be granted by the student's adviser when the field of knowledge has changed to the degree that the course content has changed substantially from the first time the student took the course to the present.

No course in the major or emphasis or any other required course in which a grade of below C has been earned may be applied toward the completion of any degree. Not more than three graduate level courses in which a grade of C has been earned may be counted toward the completion of a degree program.

During a semester, students may register for at most 15 credits, while those on probation should not take more than 12 credits. Graduate assistants must be registered for at least nine graduate credits, but no more than 12 credits each semester. During the 8-week summer session, students are limited to a total of 9 credits with at most 6 credits being earned during either 4-week session. Three credits is the maximum that may be taken in intersession.

A student may not carry more than 3 credits of individual studies in a single term. Not more than 4 credits in individual studies, not more than 6 credits of special studies, and not more than a combined total of 9 credits of individual studies, workshops, and special studies may be applied toward the completion of a degree. Departments retain the prerogative of allowing fewer than 9 of these types of credits to apply toward their respective graduate degrees.

Transfer of Credit. All course work, with the exception of up to nine credits, must be completed at UW-Whitewater after the beginning of the term for which students have been admitted into a degree program. The nine credit limit includes both appropriate course work from other graduate institutions and appropriate courses previously completed at UW-Whitewater. While no more than nine such credits may be applied towards the credit requirements of a degree program, additional course work may be used to meet specific program requirements. Some specific consortium arrangements between UW-Whitewater and other institutions referred to elsewhere in this bulletin allow more than nine credits to be completed at the participating institutions.

Credit for a course completed at another institution may be transferred to UW-Whitewater and applied toward a graduate degree provided (1) the institution offering the course is regionally accredited at the graduate level, (2) the course appears as a graduate course on the student's graduate transcript from the institution offering the course, (3) the course is applicable toward a graduate degree at the institution offering the course, (4) the course is appropriate for the student's proposed graduate degree program at UW-Whitewater, (5) the course is not a correspondence course, nor is it taught in a format less rigorous than that for UW-Whitewater courses, and (6) the student earned a grade of at least B (3.00) for the course. All requests to apply course work taken by a student prior to being accepted into a degree program at UW-Whitewater toward the degree requirements, must be included in the application for admission to the degree program. Students who have already been admitted to a degree program here and who wish to take a course at another institution and have it transferred to UW-Whitewater, must obtain permission prior to enrolling in the course. Forms for this prior approval are available in the Graduate Office. The institution at which the student wishes to earn graduate credit may also require documentation of the student's graduate status at UW-Whitewater.

Academic departments may include questions for the major or emphasis area comprehensive examination for the master's degree from courses accepted in transfer to UW-Whitewater. Students should contact their major or emphasis department about this matter.

For the purpose of interpreting the transfer of credit policy and the other policies of this bulletin, the degrees listed below are considered to be separate degrees to which the policies apply. The nine-credit transfer limit does not apply to changes in emphases within one of the degree programs.

M.B.A.	M.S.E. - School Psychology
M.S. - Accounting	M.S.E. - Special Education
M.S. - Communication	M.A.T./M.S.T. - Business Education
M.S. - Counseling & Guidance	M.A.T./M.S.T. - Biology
M.S. - Safety	M.A.T./M.S.T. - English
M.E.P.D.	M.A.T./M.S.T. - Geography
M.S.E. - Elementary	M.A.T./M.S.T. - History
M.S.E. - Reading	M.A.T./M.S.T. - Mathematics
M.S.E. - School Business Management	M.A.T./M.S.T. - Music

Students may not receive a master's degree from a degree program in which they already hold a master's degree, although they may complete a second emphasis within a degree program.

Degree Program Options. At the discretion of the major or emphasis department, the following options are available to graduate students:

Comprehensive examination option. A minimum of 30 credit hours of course work, including a comprehensive examination.

Thesis option. A minimum of 30 credit hours of course work, including a thesis taken for one to six credits.

Course work option. A minimum of 36 credit hours of course work.

Major or emphasis departments may set additional requirements for any of these plans. Students should check with their department for the options available and for the requirements within each option.

When options exist, students should consult their adviser early in their studies to determine which plan best meets their needs. A thesis may be advised for those who wish to seek depth in

an academic area, while those who prefer a breadth of knowledge may select comprehensive examinations. Students formally declare the thesis option by registering for the course, Thesis Research. They declare the comprehensive examination option by submitting their application to take the comprehensive examination. After declaring an option, students are permitted to change options only once. Changing options penalizes students who have either prepared a thesis or invested time preparing for the comprehensive examination. Changes in options must occur before students have failed twice in their first option. Failure occurs when a student's comprehensive examination is adjudged a failure or at any time a student's thesis committee formally indicates failure.

Comprehensive Examination. Students must complete a minimum of 30 credit hours of graduate course work and pass a comprehensive examination in the major or emphasis field under the comprehensive examination option. Examinations may be written and/or oral at the discretion of the major or emphasis department. Written examinations are intended to take approximately six hours to complete. Questions may cover any graduate work done in the major or emphasis, including credits transferred from another institution.

Comprehensive examinations are administered once each term near the end of the term. In general, students may not take the examination until during or after the final term of their course work. Exceptions may be made for students who have thesis credits pending and/or still have a practicum or a semester of student teaching remaining. To be eligible to take the examination, students must have cleared all pending incomplete (I) and progress (P) grades and must be in good standing with at least a 3.00 grade point average both in the overall graduate level credits earned at UW-Whitewater and in the major or emphasis area.

Comprehensive examinations are graded either "passed" or "failed." Students who fail the examination may retake it after completing additional work, as designated by the academic department, in a subsequent term. Students may retake comprehensive examinations at most twice after an initial failure and after the required additional work has been completed following each failure. Specific programs may have more stringent rules.

Thesis. The thesis option requires a minimum of 30 credits of graduate course work including a thesis for which up to six credits may be earned and applied toward the completion of course and credit requirements in the major or emphasis. Graduate students electing to write a thesis in a degree program must formally enroll and pay fees for at least one credit of Thesis Research. The amount of thesis credit is determined in conference with the student's thesis adviser and should be agreed upon with the adviser before paid registration for the credit. Enrollment and fee payment for thesis credit is done only once even though the thesis may require more than one term to complete. With the adviser's permission, students may increase the number of thesis credits up to the maximum of six by adding and paying for credits in succeeding terms.

Each thesis is expected to contain evidence of research on the part of the student and must be submitted in a form and quality specified by the School of Graduate Studies. These standards and guidelines are available at the Graduate Office. Unless a department specifies that students follow some other guide, theses should be prepared according to the most current edition of *Form and Style in Thesis Writing* by William Giles Campbell. The original and one copy of the approved thesis and its abstract together with a signed completion of thesis form should be delivered to the Graduate School Office by the end of the term in which the student plans to graduate. Degrees are not conferred until these requirements have been met. Students also must pass an oral examination over their thesis administered by an appointed thesis committee. A student's committee will consist of a minimum of three persons at least two of whom, including the committee chairperson, have graduate faculty status. Committee members may be brought in from outside the department of the major or emphasis.

In general, students may not take the oral examination until the term in which they expect to graduate. To be eligible to take it, students must have cleared all pending incomplete (I) and progress (P) grades except for thesis research, and must be in good standing with at least a 3.00 grade point average both in the overall graduate level credits earned at UW-Whitewater and in the major or emphasis area.

Course Numbers. Courses numbered 500 or higher at UW-Whitewater are graduate courses, while those numbered under 500 are undergraduate courses. Courses numbered from 500 to 599 are junior-graduate courses and those numbered 600 to 699 are senior-graduate courses. Courses numbered 700 or higher are open only to graduate students.

Grading System. Students may earn regular grades of A, B, C, D, and F in graduate courses. Grading is based upon a four point system: each semester credit of A is assigned four grade points, each semester credit of B is assigned three grade points, etc. Students' overall grade point averages and their grade point averages in a major or emphasis area are calculated solely upon all the graduate course work attempted at UW-Whitewater. Graduate courses accepted in transfer from other institutions are excluded in the computation.

In addition to the regular grades mentioned above, instructors may assign special grades in certain situations. A grade of S denotes the student has passed a course taken on a pass-fail basis. Students registered for a course on this basis receive either an S or an F. While grades of F count in computing grade point averages, S grades do not. Instructors decide what constitutes pass for their courses. Students should request the criteria prior to the deadline for changing registration. After the tenth day of classes (less for summer and short-term courses), a student's registration may not be changed from a pass-fail basis to a regular grade basis or vice versa. Workshops may be taken on a pass-fail basis. Other courses made available by departments on a pass-fail only basis are so indicated in advance in the graduate timetable of classes. Since the decision on whether or not a course taken on a pass-fail basis will count in a degree program rests with the major or emphasis department or college, students should attain appropriate permission prior to taking a course pass-fail.

A grade of NC indicates an unsuccessful attempt of a practicum graded on a satisfactory-no credit basis. This grade differs from an F in that it is not computed in the grade point average.

In courses designed to extend beyond the term of registration, e.g., thesis research, instructors may assign a grade of P to indicate progress toward completion. In courses not designed to extend beyond the term of registration, instructors may assign a grade of I to indicate a student's course work was incomplete due to documented extenuating circumstances. Neither P nor I grades are calculated into the term or cumulative grade point averages. An I grade is accompanied by a signed contract in which the instructor specifies the work to be completed by the student. A P or I grade is replaced by a regular grade when the course work is completed: the grade point average for the term in which the course was registered, as well as for subsequent terms, and cumulative grade point averages will then be retroactively computed using the regular grade replacement. A regular grade cannot be changed to a P or I on a temporary basis. The course work must be completed within one calendar year from the time the P or I grade is assigned. Students may petition instructors for extensions of this deadline. Instructors granting extensions will then inform the Registrar's Office. The Registrar's Office automatically changes a P or I grade to an F when the work has not been completed by the deadline.

A grade of N is recorded by the Registrar's Office when an instructor does not report a grade for a student officially registered for the course. The N grade is the same as an F in every way except for the possibility of it being removed or changed with appropriate documentation provided by the student. The student must take the initiative to remove or change any P, I, or N grades.

The grading symbol for audit is **X**. This grade is not calculated in the grade point average. No credit is earned in courses registered under this option.

Permanent Academic Record. A permanent academic record will be maintained in the Records department of the Registrar's Office. Students share in the responsibility for the accuracy of their records. Each semester's final grade report should be reviewed carefully and the Registrar's Office should be contacted immediately if there are any errors. No changes will be made to course entries that are not appealed within two years of the posting date, and changes will not be made to a record after the degree is officially entered.

Academic Probation. Students in degree programs who fail to maintain at least a 3.00 overall grade point average for all graduate work completed at UW-Whitewater are placed on academic probation. A student on academic probation must attain at least a 3.00 overall grade point average within the next 12 graduate credits attempted at UW-Whitewater (including courses that are repeated) in order to be returned to good standing status. Failure to accomplish this will result in the student being dropped from the degree program with ineligibility to take further graduate work in that degree program.

Course Repeats. Graduate students are allowed to repeat at most two courses in their degree programs. Courses may be repeated only once. When a course is repeated, the original course and grade remain on the transcript; however, the last grade and credits earned replace the originals and are the only ones used in computing the overall grade point average and the grade point average in the major or emphasis. Students who have been dropped from a degree program may not use the course repeat process to gain readmission into that degree program.

Changes in Registration. Students who intend to make a change in their course requests or class schedule, including withdrawal from the University, are subject to the procedures, deadlines and fee refund policies which are printed in the graduate timetable of classes for the given term. Failure to follow the procedures and meet the deadlines may result in students receiving failing grades for not completing the course work.

In general, students may not add a course after the first week of classes in a term. Students may not drop a course without academic penalty after the first nine weeks of a semester or after 50 percent of the class days have passed during a summer session or in those classes which do not last a complete semester. Forms for adding or dropping a course are available in the Registrar's Office.

Students who want to completely terminate their study during a term, even if they are registered for only one course, should file a withdrawal form. Withdrawal from the University means complete separation from all courses, residence halls, food service and related student activities for the term; however, the students' files remain active per the guidelines detailed in the section entitled Application Process. Withdrawal forms are available at the Graduate Office.

Students may, at any time, voluntarily withdraw from a degree program by notifying the Graduate School in writing. Students may then apply for admission to any degree program, including the one from which they have just withdrawn. In such cases, a student's cumulative grade point average will be carried forward. The student will be subject to the admission requirements in effect at the time the new application is made. All graduate course work previously completed will be reevaluated. Academic departments may consider the student's prior performance in the degree program in determining eligibility for admission to the program and the status of admission (i.e., in good standing or on academic probation). A student may not be admitted into the same degree program more than twice.

Degree Candidacy. Students in degree programs other than M.B.A., M.E.P.D., and M.S.-Accounting who have completed at least 12 credits of graduate work and are in good standing are required to file an application for candidacy with the Graduate Office. All course deficiencies must have been removed and all subject matter prerequisites in the major or emphasis must have been met by the student. The application for candidacy is a means of determining the student's plan for course work to complete a degree and to evaluate progress toward that goal.

Time Limit. Students have seven years in which to complete their degree program, measured from the beginning of the term in which the first course to be included in the degree was completed, but not later than the beginning of the term for which they were admitted. Based upon good cause, students may request an extension of this time limit. Such requests should be made in writing, should include the reasons for which the request is being made, and should be directed to the student's major or emphasis department. Requests for extensions not exceeding two additional years will be considered and acted upon only by the academic department. Requests for extensions beyond two additional years will be considered only in cases of extreme and unavoidable hardship; such requests must also be acted upon by the Committee on Exceptions to Graduate Policy, and must carry the endorsement of the academic department. All student requests for extensions are reported by departments to the Graduate School Office on the appropriate form.

Graduation. Before the beginning of the term in which a degree is expected, students should meet with their adviser to make sure that all course requirements are being met. A student's major or emphasis department is responsible for certifying that the student has met all of the academic requirements for graduation. No student may receive a degree until all I and P grades are cleared from the record and changed to a regular grade. Also, all financial obligations to the University must be cleared by the Accounting Office before a student may be issued a diploma and a final transcript of the academic record.

Students must file applications for graduation and a diploma with the Graduate Office during the first two weeks of the semester or the first week of the summer session in which they plan to graduate. Forms are available at the Graduate Office. A graduation fee of \$22 must be paid not later than one month before the date of graduation regardless of whether or not students attend the voluntary commencement ceremony. The fee is payable to UW-Whitewater and should be sent together with a graduation fee card to the Cashier's Office, L-1008, P.O. Box 88, Whitewater, WI 53190-1790. If a student fails to graduate during the intended term, new application forms for graduation and a diploma must be filed in a subsequent term, although the graduation fee does not have to be paid again.

Appeals. Graduate students are responsible for meeting the terms and conditions of the School of Graduate Studies and the individual program requirements. In cases where exception to graduate school policies or other regulations seems justified, a student may petition. Requests for specific exceptions to graduate school policies should be presented by students in writing and should include clearly stated compelling reasons which may justify an exception. Such requests should be addressed to the Dean of Graduate Studies and submitted to the Graduate Office. The Dean will forward each request, accompanied by a recommendation from the program coordinator of the student's major or emphasis, to the Committee on Exceptions to Graduate Policy for its consideration. Students are notified of the action on their requests. Actions by the Committee on Exceptions to Graduate Policy may be appealed to the Graduate Council.

Appeals involving college or department policies, procedures or other academic matters, including those policies which supersede graduate school policy, will be resolved by the appropriate unit within the college. Such appeals are initiated by students through their adviser. Since NCSD students are not assigned an adviser, they may appeal directly to the college or department where the problem occurred. In either case, appropriate appeal procedures will then be followed as established by the individual college or department within the college.

FEES

Academic Fees. Academic fees are set by the Board of Regents of the UW-System and are subject to change by the Board without notice. Fees shown here are those in effect at the time this bulletin was prepared and are subject to change without notice.

Graduate Fee Schedule, Spring Semester 1988-89

Credits	Resident Fee	Nonresident Fee
9.0 & over	\$1,016.84	\$2,900.34
8.0	904.80	2,578.08
7.0	791.07	2,255.82
6.0	678.08	1,933.56
5.0	565.05	1,611.30
4.0	452.04	1,289.04
3.0	339.03	966.78
2.0	226.02	644.52
1.0	113.01	322.26
0.5	56.50	161.13

State Residency. Individuals who have been a *bona fide* resident of the State of Wisconsin for one full year prior to the beginning of the semester of enrollment are exempt from payment of nonresident tuition. Intent to become a *bona fide* resident may be demonstrated or disproved by factors including, but not limited to, filing of Wisconsin income tax returns, eligibility to vote in Wisconsin, motor vehicle registration in Wisconsin, possession of a Wisconsin operator's license, place of employment, and self support.

In addition, nonresident members of the armed forces (family included) stationed in the State, minor students whose parents have been *bona fide* residents of the State for 12 months prior to the beginning of the semester of enrollment, students who are graduates of Wisconsin high schools whose parents have been *bona fide* residents of the state 12 months prior to the beginning of the semester of enrollment or whose last surviving parent was a *bona fide* resident of the State 12 months preceding death, or minor students who are orphans and have resided substantially in the State during the years of minority and at least 12 months prior to the beginning of the semester of enrollment are entitled to exemption from nonresident tuition.

However, those who enter and remain in this State principally to obtain an education are presumed to continue to reside outside this State, and such presumption continues in effect until rebutted by clear and convincing evidence of *bona fide* residence.

Minnesota-Wisconsin Reciprocity. A reciprocity agreement provides that Minnesota residents are afforded the opportunity to attend UW-Whitewater at the same tuition rate as would be paid at a similar state institution in Minnesota. Arrangements to participate in this program may be made by filing an application with the Minnesota Higher Education Coordinating Board, Suite 400, Capitol Square, 550 Cedar Street, St. Paul, Minnesota, 55101. (Subject to yearly approval by Minnesota-Wisconsin State Governments.)

Room and Board. The cost of housing and meals vary greatly with different types of living accommodations and with individual life styles. However, the following information is provided as an indication of what students might expect to pay if they were to live on campus. For the spring semester of the 1988-89 academic year, the cost of a double occupancy room in a residence hall was \$567. The cost of a 19 meal plan for 17 weeks was \$435. Both prices are subject to change without notice.

Textbooks. Graduate students pay no textbook rental fees and are expected to purchase texts and other instructional materials that are assigned in courses. The University's textbook rental service is not authorized to rent books to graduate students. The University Bookstore (Moraine Hall) sells graduate texts and other course materials. Students should check with the instructor of the course for the needed materials and textbooks. Since text requirements differ widely, no attempt is made here to estimate textbook purchase costs.

Fee Payments. The UW-Whitewater offers two methods to pay fees:

1. **Payment in full.** Students may pay all fees (academic, room, food) in full by the advance billing due date for advance registrants. If they register after the advance registration process, students pay in full at the same time they register.
2. **University Installment Credit Plan.** (Not available for summer session.) If electing the installment plan, students must fulfill the following requirements:
 - a. Have a signed Installment Credit Agreement and Marital Property form on file with the University to pay fees in installments.
 - b. A down payment of \$100 is required and due by the advance registration billing due date as listed in the Timetable. If registering after the advance registration process, students must sign the Installment Credit Agreement, Marital Property Form, and make \$100 down payment at the same time of registration. If total charges are less than \$100, students do not qualify for the installment plan and must pay fees in full.
 - c. The balance of the financial obligation plus a finance charge at an annual rate of 18% (1 1/2% monthly periodic rate) on the balance less than \$500 and a finance charge at an annual rate of 12% (1% monthly periodic rate) on the balance that is \$500 or more is payable upon receipt (not to exceed 30 days from the billing date). Billing statements are mailed to the student's local address as filed with the Registrar; however, failure to receive a statement in no way relieves a student from the obligation to make timely payments.
 - d. Failure to have a signed Installment Credit Agreement and Marital Property Form on file will result in a \$20 administration fee if fees are not paid in full during registration fee payment process. An additional \$10 (total \$30) administration fee will be assessed if fees are not paid in full by the end of the second week of school.

FINANCIAL ASSISTANCE

Graduate Assistantships. UW-Whitewater has a limited number of graduate assistantships for selected full-time graduate students. To be eligible for consideration, individuals must be enrolled in a graduate degree program at UW-Whitewater in good standing status. Graduate assistants must register for at least nine graduate credits, but no more than 12 credits, each semester.

Students receiving full assistantship awards are expected to perform 20 hours of service per week. Workloads for partial awards are reduced proportionately. Duties will involve assignments such as laboratory assistant, research assistant, the preparation of materials for instruction, or other assignments of an academic nature.

The amount of a full assistantship award for the 1988-89 academic year was \$5,700. The final award is contingent upon funding being appropriated from the Wisconsin State Legislature, and is subject to change. When funds are available, out-of-state students who receive at least 2/3 of a full assistantship for an academic year or for one semester will be eligible for a remission of the nonresident portion of tuition costs for the corresponding time period. In addition, the out-of-state portion of the fees may be waived for the summer session if the student received at least 2/3 of a full assistantship award for the preceding spring semester.

New students and students taking courses as non-candidates for degree must complete and return both an application for admission and an application for a graduate assistantship. Students who have already been admitted to a graduate degree program should submit only an application for a graduate assistantship. Completed application forms should reach the Graduate Office by March 15 of the preceding year for first consideration. Recipients will be notified in writing and issued an employment contract as early as possible.

Advanced Opportunity Program Assistantships. Statutorily designated Minorities (Black, Hispanic, American Indian/Alaskan Native and Southeast Asians) who are U.S. citizens or permanent residents are encouraged to apply for financial assistance provided by the Advanced Opportunity Program (AOP). Awards under the Advanced Opportunity Program are designed to help meet the cost of attending the University for full-time graduate students. Recipients must demonstrate potential to complete a graduate degree program at the University. AOP award decisions are made by the AOP Selection Committee.

The amount of a full AOP assistantship for the 1988-89 academic year was \$5,700. The final award is contingent upon funding being appropriated from the Wisconsin State Legislature, and is subject to change. Out-of-state students who receive AOP awards are also eligible for a remission of the nonresident portion of tuition costs for the time period of the award.

AOP award recipients may be expected to perform 15 hours of service each week as assigned by the Program's administrator. Tuition and fees, books, housing, meals, and other expenses must be paid by the student. Efforts will be made to help the graduate student project a yearly budget and to secure housing. AOP award recipients receive their funds in four equal installments over the two semester academic year.

Minority students who are interested in attending UW-Whitewater on a full-time basis can learn more about the AOP award by contacting the Assistant Vice Chancellor's Office, Academic Support Services, 226 McCutchan Hall, University of Wisconsin-Whitewater, Whitewater, WI 53190-1790. Phone (414) 472-4985.

Financial Aid. Financial Assistance is available to UW-Whitewater students in the form of grants, loans, and employment. All these aids make up a "Financial Aid Package" and may be offered singly or in various combinations. Grants are financial assistance which do not have to be repaid, while loans must be repaid. Since funds are limited, priority for aid is based on financial need and how promptly applications are filed. The various forms of financial aid are listed below. The terms and conditions are those in effect at the time of publication of this bulletin and are subject to change without notice.

Nonresident Grants. These grants are available to out-of-state students enrolled on a full-time basis who exhibit scholastic excellence and can demonstrate need. The award covers the nonresident portion of tuition.

Foreign Student Grants. The University is authorized to grant awards to American students from outside the continental United States and to students from other countries. These grants are available to students who are enrolled on a full-time basis, exhibit scholastic excellence, and can demonstrate financial need. A continuing graduate student must have a cumulative grade point of 3.00 or better. The Foreign Student Grant covers part of the nonresident tuition.

Carl D. Perkins Loans. Formerly called the National Direct Student Loan (NDSL) program, this program makes loans available to graduate students who are citizens or permanent residents of the United States. Students must be enrolled at least half-time and demonstrate financial need to be eligible. Students may borrow a total of \$18,000 for graduate study. This total includes amounts previously borrowed under the NDSL program, including amounts borrowed under the NDSL for undergraduate study. The borrowers must sign a note for the loan which is interest free as long as they are enrolled at least half time at any eligible institution. Repayment begins nine months after the student leaves school or graduates. The loan has special deferment features for students who: serve in the Armed Forces, the Peace Corps or the Volunteers in Service to America (VISTA) program, or the National Oceanic and Atmospheric Administration (NOAA). There are also special features for parental leave and mothers with preschool children. Borrowers may have portions of their loan cancelled if they:

1. Become a teacher of the economically, mentally, emotionally, and physically handicapped. They may have up to 100 percent forgiven for five years of approved service. Preschool teachers in Head Start Programs can, under certain conditions, have their loans forgiven at the rate of 15 percent up to 100 percent.
2. Become a member of the Armed Forces. They may have 50 percent of their loan cancelled at the rate of 12 1/2 percent principal and interest for each year of consecutive service in an area of hostility as defined by the United States Code.

Guaranteed Student Loans. The Guaranteed Student Loan Program enables you to borrow directly from a bank, credit union, savings and loan association, or other participating lender who is willing to make the educational loan to you. The loan is guaranteed by a state or private nonprofit agency or insured by the Federal Government. Loans from this program are available to graduate students who are citizens or permanent residents of the United States. Students must be enrolled at least half-time and demonstrate financial need to be eligible. Information is available from private lenders, State Guarantee Agencies, and Regional Offices of the U.S. Office of Education. The current annual loan limit is \$7,500 for graduate students. The loan is interest free until 6 months after graduation or termination of university attendance. The student is assessed a 1-3 percent insurance fee and a 5 percent origination fee at the time the loan is made. The cumulative limit is \$54,750 for undergraduate and graduate work.

Supplemental Loans For Students. Graduate students also may borrow an annual amount of \$4,000 up to an aggregate loan limit of \$20,000. Repayment of the principal begins within 60 days. The interest rate is equal to the 91 day Treasury Bill plus 3.75 percentage points, with a maximum of 12 percent. Information about the interest rate and the application process are available from private lenders.

College Work-Study. To participate in this program, students must be capable of maintaining good standing status, be U.S. citizens or permanent residents of the U.S., and be enrolled at least half-time or be accepted for enrollment and awarded Work-Study on their financial aid proposal (award letter). Students must be in need of earnings from part-time employment to continue their education. Work may be for the institution or for an approved off-campus agency. On-campus jobs can include work in the library, laboratories, offices, and maintenance. Off-campus jobs are assigned in public or nonprofit organizations and include work in health, welfare, recreation programs, and in Community Action Programs. During the summer or other vacation periods when they do not have classes, students may work a maximum of 30 hours per week under this program. In general, the basic pay rate is the prevailing minimum wage. The University reserves the right to terminate any student employee for justifiable reasons.

Regular Student Payroll. In addition, the University makes available hundreds of other part-time jobs similar to those under the Work-Study Program. These on-campus positions include jobs in offices, laboratories, and other campus facilities. To be eligible a student must be enrolled at least half-time, but does not have to prove financial need. A student may work 30 hours per week. The University reserves the right to terminate any student employee for justifiable reasons.

Off-Campus Employment. Every year the Financial Aid Office places several hundred students in part-time jobs in private homes, businesses and industries in the Whitewater area. All inquiries for off-campus part-time employment should be made at the Financial Aid Office, Andersen Library 2002E, UW-Whitewater, 53190-1790. Phone (414) 472-1130.

Application for Financial Aid. All graduate students applying for financial aid must have been offered admission or must be enrolled at least half-time with four credits. To apply for aid, a student must:

1. Be accepted for admission by the Graduate Office.
2. Complete a Family Financial Statement (FFS) and submit it to the American College Testing Program (ACT) as soon as possible after January 1 of the preceding year.
3. Submit a Financial Aid Transcript form to each of the other institutions attended, whether or not aid was received. Transcript forms are available at the Financial Aid Office.

International students who hold an F-1 visa are not eligible for aid from the Financial Aid Office except for the Foreign Student Grant. For more detailed information and applications in regard to any of the programs or policies listed, contact the Financial Aids Office, 2002E Andersen Library, UW-Whitewater, Wisconsin 53190-1790, Phone (414) 472-1130.

Academic Progression. Full-time graduate students who are enrolled in a degree program may receive federal financial aid for a maximum of 6 semesters of full-time awards. Half-time students are eligible for a maximum of 10 semesters of half-time awards. Students who receive aid based upon full-time enrollment must complete (with a "C" or better) 9 credits each semester and must complete 18 credits each year. Part-time aid recipients should successfully complete 4 credits each semester and must complete 8 credits per year.

Financial Aid Refund/Repayments. Financial Aid is awarded to students to cover direct costs charged by UW-Whitewater and other related educational costs. Funds disbursed to students may exceed these costs when a student withdraws or drops classes during a semester or summer session. Fee refunds of financial aid programs will be processed by UW-Whitewater. Federal and state regulations require that a prorated portion of funds awarded to cover noninstitutional costs be repaid by the student. The actual repayment shall be determined by the Financial Aid Office. Be sure to read the timetable to determine the amount of repayment. A student will receive a statement from University Accounting and repayments will be made to the Cashier's Office. A student remains ineligible for future financial aid disbursements until repayment is made in full.

FACILITIES AND SERVICES

Library and Learning Resources. Library and Learning Resources provides a variety of print and non-print materials to meet the specialized and intensive information needs of graduate students and their faculty. Over a quarter of a million books, nearly half a million government documents, and several thousand maps are in the permanent collections, along with audiovisual, archival, and other materials. More than two thousand periodicals are received. In developing these collections, particular attention is paid to the needs of the graduate students. The professional staff of the Library and Learning Resources work closely with teaching faculty to select, acquire, and provide instructional resources and to assist students in finding the information they need.

Evening and weekend hours of the Library and Learning Resources are particularly helpful to part-time and commuting students. In addition, it offers a wide variety of services and houses many special collections. For instance the Documents and Research Service of the Library and Learning Resources is a select repository of the federal, state and international government documents. It provides publications of various government agencies, census reports, transcripts of hearings by congressional committees, scientific publications of the National Oceanic and Atmospheric Administration, the National Aeronautic and Space Agency, and the Smithsonian Institution, reports of numerous federal regulatory agencies, and periodicals published by the U. S. Printing Office. It is a repository of the Defense Mapping Agency. It receives Wisconsin government documents and publications of the United Nations and other international organizations. It also maintains an Area Research Center of the State Historical Society of Wisconsin, and provides on campus access to the massive holdings of manuscripts, census data, archival materials, and newspapers of the Society.

Audiovisual Resources, another unit of the Library and Learning Resources, supports teaching and learning by providing films and media equipment for classroom use. Limited classroom video production facilities are also available. It also provides the production of graphic and photographic materials for instructional use.

The Learning Materials Center functions as a laboratory for the teacher training programs by providing special collections of textbooks, curriculum guides, educational method books, standardized tests, children's literature, media materials and equipment, and microcomputer hardware and software. Students enrolled in the University's education programs may have the opportunity to familiarize themselves with all types of the up-to-date educational materials and equipment.

The Information and Instruction Service helps students with the location of information on a particular subject and the use of the large law collection, corporate annual reports, Educational Resources Information Center (ERIC) documents, numerous indexes to periodicals, and other reference tools. The reference librarians will provide faculty and students with computerized on-line bibliographic searching on any research topic. Upon the request by an instructor, the reference librarians will offer bibliographic instruction to any class on research methods and use of library collections. When students' information needs cannot be met locally, the Information and Instruction service can obtain the required materials through inter-library loan.

UW-Whitewater is committed to serving the disabled members of the University community, and the Library and Learning Resources tries to fulfill this mission by offering a number of special services. Wheelchair access is maintained throughout the library building. Kurzweil reader and other special facilities for the visually handicapped are also provided.

Library and Learning Resources supports study whether it is conducted on or off the campus. Collections of books and periodicals for use in business classes have been established in the libraries of the UW-Rock County and UW-Waukesha County Centers. Reference service is

available by mail or telephone and borrowed materials may be either renewed or returned by mail. For more information on these or other services to off-campus students, consult the Office of the Dean of Library and Learning Resources by calling (414) 472-1000 or, at night or on weekends, the Circulation Desk by calling (414) 472-5511.

Computer Center. The Computer Center provides several services of interest to graduate students. One is the library of application programs including statistical routines for analysis of research project data, both in the batch and time-sharing modes. In the batch mode, both the SAS and SPSS statistical packages are available. For small data sets similar programs are available in a time-sharing mode.

Both an IBM 4341 and a VAX 11/780 provide interactive and batch support of instructional and research activities. These computers, as well as the library computer, are accessible from a wide variety of terminals located throughout the campus, including every academic building and the residence halls.

The microcomputer laboratories located in McGraw Hall provide access to word processing, spreadsheets, integrated software and a variety of programming languages on a network of IBM compatible microcomputers.

A professional academic computing staff and student consultants are available for programming and technical assistance to users. Services are available for those who need help in developing instructional or research materials, instruction on the operation of computing equipment, or help in interpreting documentation and output.

There is no charge for the use of the computing resources if the activity is directly related to a course of study. Information about any of these services can be obtained by calling the Computer Center at (414)472-1325.

Observatory. Whitewater Observatory is a teaching and research facility. Contained in the observatory dome is a 16 inch Cassegrain reflecting telescope. The facility includes a general-purpose room in which evening observing sessions, public lectures and supervised student research take place, and a darkroom equipped for film development and print-making by students registered in astronomy classes. While the observatory dome is maintained at an outside temperature, both the general-purpose room and photo lab are actively heated in winter and cooled in summer. Immediately outside of the observatory is a viewing area for constellation studies and for instruction in the use of small, portable telescopes. The observatory is used by astronomy classes for both daytime and nighttime activities, for lectures to the general public on alternate Friday evenings during semesters and for tours for school groups.

Media Based Education. The Educational Teleconference Network (ETN) of UW-Extension provides a system of two-way communication for noncredit courses, available at approximately 185 listening stations located in the State of Wisconsin. An ETN listening station is located in Roseman Building on the UW-Whitewater campus. In addition, each county in the State has two or three listening stations within a convenient distance from a student's home. A wide variety of professions accept ETN programs for certification or recertification requirements.

A semester schedule of ETN offerings describing noncredit programs for Continuing Education Units (CEU's) is available by writing to the Office of Continuing Education and Outreach, Roseman 2005, or by calling (414) 472-3165.

Certification and Licensure. Issues related to teacher certification and state licensure are handled by the Director of Certification. Graduate students who seek state professional education licensure should make certain that their proposed programs meet all licensure standards before embarking on a program of study. This is true in both the case of initial licensure and additions to existing licenses. In order to ascertain what are the current licensure requirements, students should direct their questions to the Director of Certification, 2031 Winther Hall, (414) 472-4677.

Placement Services. The services of the Placement Office are available to graduate students as the need may arise. Many students take advantage of these services as they explore career fields, develop career plans, prepare themselves for the job search and actually search for employment. The services include a library of career information, assistance in establishing a credential file, employment counseling and consultation, employment interview opportunities, frequent job listings and an employer referral system for the benefit of registrants. For more information and registration procedures contact: Placement Services, Library Building - Room 2002. Phone (414) 472-1471.

Residence Life. The University provides residence hall accommodations for approximately 4,000 students. In addition, approximately 180 householders in the city provide housing facilities for students. UW-Whitewater adheres to federal and state laws and to University policy concerning nondiscrimination in rental policies because of race, religion, or national origin. A variety of residence hall living accommodations are available including coeducational, coeducational intensive study, single sex, and single sex intensive study residence halls. There is no University-operated housing for married students. However, most married students have been able to find apartments, mobile homes, or small homes in the Whitewater area. An up-to-date listing of area rentals is maintained in the Residence Life Office to assist married student in obtaining housing. For further information, contact the Residence Life Office, Salisbury Hall, Room 101. Phone (414) 472-1151.

Parking and University Police. The UW-Whitewater Campus Police Department is charged with the protection of students and their property, the enforcement of laws and University regulations, the investigation of offenses and crimes, and the keeping of the peace on campus. Campus Police also enforce traffic and parking regulations and control the sale of parking permits. All persons who use unmetered University parking facilities must display a valid parking permit or visitor parking permit, issued by the University Police. It is not necessary to have a permit on a vehicle which is parked at a meter; however, it is necessary to pay the meter even if the vehicle has a permit. Parking permits may be purchased at University Police Headquarters on Starin Road.

The University Police Department offers a number of crime prevention programs and services to the university community. Established programs include Sexual Assault Survival, Alcohol-Related Laws & Their Impact, and Theft Prevention, as well as programs and presentations available on request. Further information can be obtained by calling (414) 472-4660.

Health Service. Student Health Services aims to help students maintain optimum health while attending the University. Services are located in the Stephen Ambrose building at the corner of Starin Road and Prairie Street and are available to any currently enrolled student. Physicians, nurse practitioners, nurses, a medical technologist, and other staff are available. An appointment system is used. Staff will assist with referrals when further care is required.

Expanded services which include special assessment and planning for individual needs are available for students with physical disability or chronic illness. A Personalized Reproductive Care (PRC) clinic provides routine Pap tests, contraceptive management, and treatment for

many common gynecologic problems. Other services include: routine laboratory tests including tests for sexually transmitted diseases and pregnancy, tuberculin skin tests for student teachers, routine immunizations, and allergy injections for students under the care of an allergist. A "Cold Self-Care" service makes throat cultures and advice available without an appointment and without waiting.

Students requiring treatment outside the regular hours are encouraged to use the emergency room at Fort Atkinson Memorial Hospital or Mercy Hospital in Janesville. Any costs associated with referral or emergency care outside the Health Service are the responsibility of the student. The City of Whitewater maintains a skilled Rescue Squad available for emergencies by calling 911 (or 9-911 from campus phones).

Measles and other communicable diseases are common in college students. A completed immunization form should be sent to the Health Service prior to enrollment. A statement from the attending physician should be obtained by any student with a chronic illness if ongoing medication or care is required. This statement should also be sent to the Health Service.

Students without health insurance are encouraged to seek coverage. A university-endorsed plan which includes hospital, surgical and medical care is available for a limited time at the beginning of each term. Information concerning the plan is sent to students in August, or is available in the Health Service.

Health Warning. Any persons present near chemicals (including hazardous wastes) should realize that they are voluntarily exposing themselves to these substances. Precautions such as changing routes so as not to pass near the hazardous exposure areas or delaying enrolling or not enrolling in a class may be necessary. These precautions are especially important for people with sensitive medical conditions which could make exposure to the substances mentioned above especially dangerous. In particular, women who are in their first trimester of pregnancy should avoid exposure.

Counseling and Development Center. There are times when students are troubled by social conflicts, self-doubt, selection of a major, or other problems which affect academic work and personal life. It is the purpose of the Counseling Center to help work through these problems with students so that they experience personal and academic satisfaction. Through their training and experience, the members of the Counseling and Development Center's staff are prepared to provide assistance on a voluntary and confidential basis.

Disabled Student Services. UW-Whitewater has a select mission to develop and provide services for students with disabilities. One result of this mission has been the identification and elimination of environmental barriers. To date, nearly \$2 million has been expended to make programs and facilities accessible. Additionally, the University offers a wide variety of services and programs to accommodate the needs of students with disabilities. Services are based on individual need and interest. Information about admissions, housing, financial aids, registration, attendants, transportation, adaptive equipment, wheelchair repair, and specialized academic support services is available upon request.

In 1988, the Board of Regents of the University of Wisconsin System adopted a new policy on nondiscrimination and students with disabilities. The new policy requires a minimum of eight weeks of prior notification when requesting academic accommodations and/or auxiliary aids. In addition, it is expected that students will engage in appropriate and responsible levels of self-help in obtaining and arranging for their needs. Students may be required to submit medical or other diagnostic documentation of their disability and may be required to participate in additional evaluation prior to receiving an accommodation or auxiliary aid. (Copies of the Regents'

policy are available through Disabled Student Services.) Students who are not functionally independent and desire assistance with personal needs are strongly encouraged to complete an on-campus evaluation the semester prior to enrollment.

The University Health Center has specially trained and experienced staff members available (nurse-practitioner and physical therapist) to provide a range of services including pre-enrollment evaluation to determine level of independence and attendant needs, if any, assessment of lifestyle, assistance in recruiting and training attendants, and ongoing therapy to maintain or improve existing abilities and increase independent living skills.

Special needs are coordinated through the Office of Disabled Student Services on an as-needed basis. Services may include assistance in academic advisement, ordering taped books and materials, special testing, reader service, career and vocational concerns and so on. For more information write: Director, Disabled Student Services, Roseman Building, UW-Whitewater, Whitewater, WI 53190-1790; or phone (414) 472-4711.

International Student Programs. The Office of International Student Programs provides individual and group counseling services and orientation, and assists international students with personal, academic, and financial problems as well as problems with housing, food, or immigration. The office also serves as a liaison with the academic and administrative areas of the University and coordinates cultural and social programs that bring together foreign and domestic cultures such as the International Dinner, Heritage Fair, UN Day, Host Family Program and International week. For more information, contact the Associate Director of International Programs at (414) 472-5178 or (414) 472-4992.

Children's Center. Child care for children of students, faculty and staff is provided at UW-Whitewater. The Children's Center is located in the Roseman Building and is open from 7:30 a.m. to 5:00 p.m. daily to children ages two and one-half through kindergarten entrance. A preschool teaching program is presented both mornings and afternoons. The Center is staffed by a coordinator, three professional teachers, one assistant teacher and undergraduate teachers' aides. For information on fees and registration, contact the coordinator at (414) 472-1768.

General Recreation. Sports facilities are open evenings and weekends for unorganized recreational use. Indoor facilities include provisions for such activities as basketball, volleyball, badminton, racket sports, weight lifting, gymnastics and swimming. Outdoor areas and facilities are also available which include a variety of sports fields, tennis and volleyball courts, as well as an exercise par course. Equipment is available for these and many other indoor and outdoor activities.

Intramural Sports. An extensive program of intramural sports is available for men and women students. Tournament and leagues are conducted throughout the year in various activities such as flag football, volleyball, basketball, floor hockey, softball, tennis and other sports. Coed sport activities are conducted in flag football, volleyball, sandpit volleyball, inner tube water polo, softball, tennis, and others.

Religious Groups. The following religious organizations are represented on campus: Campus Crusade for Christ; Inter-Varsity Christian Fellowship; the Navigators (interdenominational); Catholic student Association (Roman Catholic); Christian Science Organization; Lutheran Collegians (Evangelical Lutheran); Lutheran Student Ministry; United Ministries in High Education, which includes American Baptist, Methodist, Presbyterian, United Church of Christ (Congregational) and the Community of Christ the Servant, a local ecumenical church; and Share-a-Prayer Holy Spirit Ministries. Local churches or off-campus houses maintained by religious organizations provide the facility for religious and social programs.

Cultural Affairs. UW-Whitewater students have the opportunity to see performances by nationally and internationally renowned theatre, dance and music groups brought to campus by Cultural Affairs. This student/faculty committee plans both the Performing Arts Series and Lively Arts Series to enrich campus life with live cultural entertainment. Both series bring professional performing groups to Whitewater's stages. Tickets to all Cultural Affairs events are offered to students at greatly discounted prices. Not only do students have the opportunity to attend these performances, but they may also work with the artists in classes or meet them informally on campus.

University Theatre. Annually the Department of Theatre and Dance produces seven major shows, a children's play for tour, experimental and one-act plays, and a dance production. These activities provide rich opportunities for students to see a wide range of productions.

Music Activities. The Department of Music sponsors a wide variety of performing groups including Concert Choir, University Chorus, UW-Whitewater Repertory Singers, Swing Choir, Symphonic Band, Marching Band, Concert Band, the Jazz Laboratory Bands, Percussion Ensemble, Flute Choir, Clarinet Choir, Saxophone Choir, Early Music Ensemble, Brass Choir and other smaller ensembles. These groups as well as all others sponsored by the department, are open by audition to all university students. If students enjoy singing or playing a musical instrument, they will appreciate the opportunity to share in the musicianship of these groups. Contact the Music Department office for additional information. If students enjoy music, they will not want to miss the many interesting and exciting concerts given by the campus groups and by the faculty artists. These concerts are free to students and provide a rich and memorable break in weekly routines.

Art Exhibitions. The University's art gallery is a showcase for the campus. The Crossman Gallery focuses on aesthetic research and teaching, fulfilling President John Bascom's Wisconsin Idea: serving all areas of the state; indeed the gallery is an intellectual center of excellence in the northern midwest. Shows of popular student appeal, as well as exhibits of statewide and midwest significance draw favorable media review. Some of our most experimental and pioneering work is for both our art majors and graduate students from the UW-System and other universities throughout the country. Art faculty from throughout the UW-System exhibit on a regular basis. There is at least one international exhibit each year, which is the combined effort of two colleges on campus.

Degree
Programs



Degree Programs

SECTION II DEGREE PROGRAMS

ACCOUNTING

The Master of Science (M.S.) in Accounting degree program is designed primarily as a first professional degree for candidates with a non-business undergraduate background. Individuals with baccalaureate degrees in the arts, humanities, sciences, engineering, education or business from accredited schools are encouraged to apply. Candidates with an accounting major or equivalent undergraduate background may consider either the M.B.A. program, or, if a greater degree of specialization is desired, the M.S. program. Programs for completion of the M.S. degree are designed to fit the individual needs of the student and satisfy the academic requirements to write the Certified Public Accountant examination. The M.S. - Accounting program is accredited by the American Assembly of Collegiate Schools of Business.

Program Coordinator:

Dr. Roy Weatherwax
Carlson 5019 Phone (414)472-1344

Additional Admission Requirements:

1. Completion of the Graduate Management Admission Test (GMAT).
2. A composite score of at least 1000 based upon the formula:
 $(\text{GMAT score}) + [200 \times (\text{overall undergraduate grade point average})]$,
or a composite score of at least 1050 based upon the formula:
 $(\text{GMAT score}) + [200 \times (\text{upper division undergraduate grade point average})]$.
3. A TOEFL score of at least 550 or the equivalent on another exam for students from countries where English is not the native language.

Due to increasing enrollments, admission may be limited despite fulfillment of the aforementioned entrance requirements.

Additional Program Policies: Same as Business Administration (M.B.A.) program.

Additional Degree Requirements:

1. Common Body of Knowledge (0-33 credits)

Individuals will be required to take the following courses if the respective functional courses were not included in their undergraduate preparation.

	Credits
210-701 Accounting Foundations	3
230-703 Statistics Foundations	3
230-704 Economics Foundations	3
250-705 Information System Foundations	3
260-702 Mathematics Foundations	3
240-718 Financial Management	3
240-341 Business and Commercial Law	3
240-342 Advanced Business and Commercial Law	3
250-719 Operations Management	3
250-720 Organization Theory and Policy	3
260-716 Marketing	3

2. Accounting Course Requirements (27 credits)

210-541	Intermediate Accounting I	3
210-543	Intermediate Accounting II	3
210-651	Income Tax Accounting	3
210-725	Management Cost Accounting	3
210-751	Financial Accounting	3
210-752	Advanced Financial Accounting	3
210-755	Managerial Accounting and Controllership	3
210-761	Accounting and Management Information Systems	3
210-765	Advanced Auditing	3

3. Three of the following five courses: (9 credits)

210-756	Corporate and Special Entities Taxation	3
210-781	Advanced Accounting Theory I	3
250-791	Business Policy and Environment	3
(250-791 must be taken in the last semester (or in the last 12 credits for Outreach students) of the student's program. It is required if the candidate has not had a business policy course at the undergraduate level.)		
260-731	Advanced Statistical Methods	3
260-732	Operations Research	3

4. Students who have completed any of the courses listed under 2 or 3 above before entering the M.S.-Accounting program may substitute electives to constitute a 30-credit program. 210-652 Advanced Income Tax Accounting and 210-725 Profit Planning and Control are recommended.

5. At least 16 credits of course work above the 730 level. 250-791 Business Policy and Environment is not counted in the 16 credits.

6. No more than two accounting courses with a grade of C.

Outreach Program: Courses leading to the M.S.-Accounting degree are offered off campus in the evening at the UW Centers in Waukesha and Janesville, as well as at the Whitewater campus. The Business Outreach program, as it is called, is designed to assist primarily the working adult or those unable to attend classes on a full-time basis during the day. Admission and degree requirements are the same as for those in the full-time program although special counseling and mail registration services are utilized. For further information, contact Dr. Harish Batra, Carlson 4033, phone (414)472-1945.

BIOLOGY

Both a Master of Arts in Teaching (M.A.T.) degree and a Master of Science in Teaching (M.S.T.) degree are offered in Biology. The M.A.T. program is designed for those who lack the course work required for teacher certification. It provides the background for certification as a secondary or post-secondary biology teacher while providing an opportunity to strengthen or develop teaching disciplines. The M.S.T. program is designed to extend and improve the professional preparation of secondary or post-secondary teachers who are already certified to teach biology.

Program Coordinator:

Dr. William L. Brundhorst
Upam 303 Phone (414)472-1072

Additional Admission Requirements:

M.A.T.: At least 15 credits of course work in biology and approval of the Director of Student Teaching (Winther 2039, phone (414)472-1123) based upon an interview. Applicants who are unable to come to campus for the interview prior to admission may be granted a provisional admission pending a successful interview.

M.S.T.: At least 15 credits of course work in biology and certification to teach biology at the secondary or post-secondary level.

Additional Degree Requirements: Both degrees require 30 credits of graduate course work and one of the following: (1) a comprehensive examination, (2) a thesis and oral defense, or (3) an additional 6 credits of courses numbered 630-XXX. Specific course requirements for each degree are given below. For the thesis option, 1-6 credits of Thesis Research may be included within the 30 credits. The 36 credit option is open only to students who have not started a thesis or failed a comprehensive examination. In addition to meeting the aforementioned requirements, M.A.T. candidates must complete 12 undergraduate credits in directed teaching and the related seminar and meet all the requirements for certification to teach biology at the secondary or post-secondary level.

M.A.T.:

	Credits
1. Professional Education (12 credits)	
424-740 Techniques of Research	3
Elective courses offered by the College of Education*	9
2. Courses in the Teaching Major or Minor (18 credits)	
Courses numbered 630-XXX	12
Elective courses*	6
3. Undergraduate Directed Teaching and Seminar (12 credits)	
439-411 Directed Teaching: Secondary	10
436-470 Post Student Teaching Seminar	2

*Course electives should be selected in consultation with the Program Coordinator and the Director of Certification (Winther 2031, phone (414)472-4577) to assure meeting certification requirements.

M.S.T.:

1. Liberal Arts (3-6 credits)	
Elective courses offered by the College of the Arts, the College of Letters and Sciences excluding courses numbered 630-XXX, or the Department of Economics	3-6
2. Professional Education (6-9 credits)	
424-740 Techniques of Research	3
Elective courses offered by the College of Education	3-6
3. Biology (15-21 credits)	
Elective courses numbered 630-XXX	15-21

Pigeon Lake Field Station: The University of Wisconsin System sponsors summer programs at the Pigeon Lake Field Station near Drummond in Bayfield County of northwestern Wisconsin. Station offerings include undergraduate and graduate courses in field biology and in mapping and outdoor education. Sessions vary from one to six weeks in length with a variety of biology courses offered on a rotating basis. Credit earned at the Station is accepted as residence credit at UW-Whitewater.

The Field Station is located in a natural outdoor laboratory among the lakes, streams, and forests of relatively unspoiled portions of northern Wisconsin. Students are housed in rustic cabins and have their meals in the Station dining hall. Station facilities also include two classroom buildings, a library and a recreation hall on land including 1,400 feet of shoreline on Pigeon Lake. With access to Lake Superior and the Apostle Islands, the national forest, and adjacent wildlife areas, the Station is ideally located for field studies as well as for recreation.

The several programs offered each summer are publicized by special announcements early in the year. For further details contact the Program Coordinator.

BUSINESS ADMINISTRATION

The Master of Business Administration (M.B.A.) degree program provides individuals with advanced academic work in the functional aspects of public and private organizations. This professional degree program provides the individual with general competencies for overall management and allows a degree of specialization in an area of particular interest to the candidate. Emphases include:

- Accounting
- Business Education
- Decision Support Systems
- Finance
- International Business
- Managerial Economics
- Management
- Marketing

Individuals with baccalaureate degrees in arts, humanities, sciences, engineering, education or business from accredited schools are encouraged to apply. The M.B.A. program is accredited by the American Assembly of Collegiate Schools of Business.

Program Coordinator:

Dr. Harish Batra
Carlson 4033 Phone (414)472-1945

Additional Admission Requirements:

1. Completion of the Graduate Management Admission Test (GMAT).
2. A composite score of at least 1000 based upon the formula:
 $(\text{GMAT score}) + [200 \times (\text{overall undergraduate grade point average})]$
or as composite score of at least 1050 based upon the formula:
 $(\text{GMAT score}) + [200 \times (\text{upper division undergraduate grade point average})]$.
3. A TOEFL score of at least 550 or the equivalent on another exam for students from countries where English is not the native language.

Due to increasing enrollments, admission may be limited despite fulfillment of the aforementioned entrance requirements.

Additional Program Policies:

1. In order to enroll in 700 level courses offered in the College of Business and Economics (except Business Education and School Business Management), a student must be admitted to the M.B.A. or M.S.-Accounting program. M.E.P.D. students must have prior permission from the Coordinator of the M.E.P.D. program.
2. Candidates must obtain approval from their adviser before enrolling in courses. Courses taken without the approval of the adviser may not apply toward completion of the program. Prior to entering the program or during the first four weeks of the semester, candidates shall prepare a program in consultation with their adviser. This program must then be submitted to the program coordinator for approval. Any changes (including add/drop) to the program must have the written approval of the Coordinator. All changes are initiated by students through their adviser.
3. Individual Studies (XXX-700) and/or Reading and Research (XXX-790) may not be used as electives but may be used to satisfy up to 3 credits in the Emphasis. A copy of the proposal must be on file in the Coordinator's Office prior to registration. The student should initiate these requests with the instructor.
4. Courses in the Common Body of Knowledge (see below) must be taken at the beginning of the program. Program and course prerequisites will be rigidly enforced. Failure to comply will result in the student being dropped from the course.
5. Students who are dropped from the program for academic reasons or who fail to meet the admission requirements are not eligible to pursue further graduate business courses in the M.B.A. or M.S.-Accounting programs in the College of Business and Economics.
6. The maximum course load is 12 graduate credits during fall and spring semesters and 6 credits during the summer term.
7. Business related course work taken in an applicant's undergraduate program, where the applicant has graduated more than five years prior to the date of admission to the Graduate School may not be considered as satisfactory in meeting Common Body of Knowledge requirements.
8. Candidates who have not enrolled in a graduate course at UW-Whitewater within two consecutive semesters must conform to any new requirements in the program at the time they are reactivated.
9. Within the confines of the Constitution of the Graduate Faculty and the policies and procedures adopted by the Graduate Council, the Graduate Studies Committee in the College of Business and Economics is the final governing authority on all policy and procedural matters in the graduate business program.

Additional Degree Requirements:

1. A minimum of 36 graduate credits which may include a thesis of up to 6 credits.
2. An adequate preparation in the Common Body of Knowledge as defined by the American Assembly of Collegiate Schools of Business. Additional graduate courses will be required of

those individuals not having a sufficient preparation. (Normally a program of study for those without prior business preparation would require two full years to complete.)

3. Common Body of Knowledge (5-34 credits)
(To be completed at the beginning of the program.)

	Credits
210-701 Accounting Foundations	3
One of:	
210-725 Profit Planning and Control	3
210-726 Management Cost Accounting	3
230-703 Statistics Foundations	3
230-704 Economics Foundations	3
250-705 Information System Foundations	3
260-702 Mathematics Foundations	3
240-718 Financial Management	3
240-721 The Legal Environment of Business	3
250-719 Operations Management	3
250-720 Organization Theory and Policy	3
260-716 Marketing	3

4. Breadth Elective Area (18-27 credits)
(May be taken during term in which Common Body of Knowledge courses are completed.)

One of:	
260-731 Advanced Statistical Methods	3
260-732 Operations Research	3
One of:	
230-736 Business Conditions Analysis	3
230-737 Managerial Economics	3
250-741 Managerial and Organizational Behavior	3
250-791 Business Policy and Environment	3
(250-791 must be taken in the last semester of the student's program, or in the last 12 credits for Outreach students.)	

Electives	6-15
(Electives to be selected in consultation with the student's adviser from courses numbered 730 or above, within the College of Business and Economics, and outside the student's emphasis area. Not more than 6 credits may be selected from any one emphasis area. Upon recommendation of a student's adviser and with approval of the M.B.A. Coordinator, up to six credits of courses clearly complementing the student's program may be selected from courses numbered 700 or above outside the College of Business and Economics or from courses numbered 600 or above from within the College.)	

5. Area of Emphasis (9 credits)
Nine graduate credits within one of the following areas:

Accounting
Business Education
Decision Support Systems
Finance
International Business
Managerial Economics
Management
Marketing

(Upon recommendation of the student's adviser and with approval of the M.B.A. Coordinator, a thesis of up to 6 credits may be included in the 9 credit emphasis.)

6. At least 24 credits from 4 and 5 above must be numbered above 730 and be beyond the Common Body of Knowledge. 250-791 Business Policy and Environment is not counted in the 24 credits.
7. A grade point average of at least 3.00 in emphasis courses, in courses prescribed for the program, and over all graduate work undertaken. Grades earned outside the program cannot be used to adjust the program grade point average.

Outreach Program: Courses leading to the M.B.A. are offered off campus in the evening at the UW Center in Waukesha and Janesville, as well as at the Whitewater campus. The program, known as Business Outreach, is designed to assist primarily the working adult or those unable to attend classes on a full-time basis during the day. Admission and degree requirements are the same as those in the full-time program although special counseling and mail registration services are utilized. For further information contact Dr. Harish Batra, Carlson 4033, phone (414)472-1945.

BUSINESS EDUCATION

Both a Master of Arts in Teaching (M.A.T.) degree and a Master of Science in Teaching (M.S.T.) degree are offered in Business Education. The M.A.T. program is designed for those who lack the course work required for teacher certification in business education. It provides the background for certification as a secondary or post-secondary business education teacher while providing an opportunity to strengthen or develop teaching disciplines. The M.S.T. program is designed to extend and improve the professional preparation of secondary or post-secondary teachers who are already certified to teach business education.

Program Coordinator:

Dr. Donald K. Zahn
Carlson 4018 Phone (414)472-1322

Additional Admission Requirements:

M.A.T.: Approval of the Director of Student Teaching based upon an interview. (Winter 2039, phone (414)472-1123.) Applicants who are unable to come to campus for the interview prior to admission, may be granted a provisional admission pending a successful interview.

M.S.T.: An undergraduate major in business education and certification to teach business education at the secondary or post-secondary level.

Additional Degree Requirements: Both degrees require 30 credits of graduate course work and one of the following: (1) a thesis and oral defense, (2) a comprehensive examination, or (3) an additional 6 credits of courses numbered 220-XXX. Specific course requirements for each degree are given below. For the thesis option, 1-3 credits of Thesis Research may be included within the 30 credits; however, the number of credits must be determined in advance of registration through consultation with a thesis committee. The 36 credit option is open only to students who have not started a thesis or failed the comprehensive examination. In addition to meeting the aforementioned requirements, M.A.T. candidates must complete 12 undergraduate credits in directed teaching and the related seminar and meet all the requirements for certification to teach business education at the secondary or post-secondary level.

M.A.T.:**Credits**

1. Professional Education (12 credits)	
424-740 Techniques of Research	3
Elective courses offered by the College of Education*	9
2. Courses in the Teaching Major or Minor (18 credits)	
220-762 Current Problems in Business Education	3
One of:	
220-751 Improvement of Instruction in Skill Subjects	3
220-752 Improvement of Instruction in Accounting and Basic Business Education	3
220-754 Improvement of Instruction in Business Communication	3
220-756 Improvement of Instruction in Marketing and Distributive Education	2
One of:	
220-660 Principles of Vocational Education	2
220-661 Organization and Administration of Vocational Programs	3
220-765 Occupational Information and Vocational Guidance	3
Elective courses numbered 220-XXX	3-5
Elective courses*	6
3. Undergraduate Directed Teaching and Seminar (12 credits)	
439-411 Directed Teaching: Secondary	10
436-470 Post Student Teaching Seminar	2

*Course electives should be selected in consultation with the Program Coordinator and the Director of Certification (Winther 2031, phone (414)472-4677) to assure meeting certification requirements.

M.S.T.:

1. Liberal Arts (3-6 credits)	
Elective courses offered by the College of the Arts, the College of Letters and Sciences, or the Department of Economics	3-6
2. Professional Education (6-9 credits)	
424-740 Techniques of Research	3
Elective courses offered by the College of Education	3-6
3. Business Education (15-21 credits)	
220-762 Current Problems in Business Education	3
One of:	
220-751 Improvement of Instruction in Skill Subjects	3
220-752 Improvement of Instruction in Accounting and Basic Business Education	3
220-754 Improvement of Instruction in Business Communication	3
220-756 Improvement of Instruction in Marketing and Distributive Education	2
One of:	
220-660 Principles of Vocational Education	2
220-661 Organization and Administration of Vocational Programs	3
220-765 Occupational Information and Vocational Guidance	3
Elective courses numbered 220-XXX	6-14

COMMUNICATION

The Master of Science (M.S.) degree is offered in Communication with emphases in:

Communicative Disorders
Mass Communication
Speech Communication

All three emphases provide graduate study for (1) persons not certified to teach, who have professional goals in business, private and/or clinical practice, mass media, or other noneducational areas; (2) persons certified to teach who want more background in their specialty; and (3) persons with a liberal arts degree who are seeking certification to teach. However, admission and degree requirements vary from one emphasis to another. The program in communicative disorders is accredited by the American Speech-Language-Hearing Association.

Communicative Disorders Emphasis

Program Coordinator:

Dr. William Chevrette
Roseman 1016 Phone (414)472-5202

Additional Admission Requirements: An undergraduate major in communicative disorders. Applicants not meeting this requirement must supplement their academic preparation until it is comparable to an undergraduate major prior to admission to the program.

Additional Degree Requirements: Thirty-six credits of course work including a thesis (1-6 credits) and oral defense or a comprehensive examination. Of the 36 credits, 27 must be in communicative disorders, 6 in the practicum experience, and 3 in an elective field-related course. Specific course requirements are listed below.

	Credits
1. Courses Required if not Taken as an Undergraduate (0-26 credits)	
662-582 Audiometry	3
662-584 Aural Rehabilitation	3
662-585 Fluency Disorders	3
662-670 Diagnostic Methods in Communicative Disorders-Children	2
662-680 Speech and Language Development in the Child	3
662-681 Language Assessment and Intervention in Communicative Disorders	3
662-686 Disorders of Voice	3
662-688 Aphasia and Apraxia in Adults	3
662-689 Cerebral Palsy, Apraxia, Congenital Aphasia in Children	3
2. Required Courses (27 credits)	
662-570 Practicum: Communicative Disorders	6
662-709 Seminar in Communicative Disorders	3
662-710 Speech and Language Therapy in the Clinical Environment	3
662-711 The Dysarthrias	3
662-712 Research Methods in Communicative Disorders or equivalent research course	3
662-713 Seminar in Normal and Disordered Language Behavior	3
662-764 Speech and Language Disorders in Special Populations	3
662-770 Diagnostic Methods in Communicative Disorders-Adult	3

Certification Requirements: In addition to meeting the aforementioned degree requirements, candidates seeking public school certification must complete the following unless the courses were taken as an undergraduate:

One of:

432-764	Developmental Reading in the Elementary School	3
432-768	Developmental Reading in the Secondary School	3
	An approved course in reading	3

One of:

423-681	Human Abilities and Learning	3
840-624	Human Learning	3
	An approved course in learning	3
437-450	Methods: Communicative Disorders	3
439-411G	Directed Teaching: Communicative Disorders	5
436-470	Post Student Teaching Seminar	2
	Wisconsin Human Relations Requirement	3

Mass Communication Emphasis

Program Coordinator:

Dr. John E. Nichols
Salisbury 323 Phone (414)472-5260

Additional Admission Requirements: Fifteen credits in journalism and/or radio-television-film. Applicants not meeting this requirement will have their transcripts and relevant experience evaluated to determine whether their backgrounds are acceptable or if additional prerequisite course work is required.

Additional Degree Requirements: Thirty credits of course work including one of the following: (1) an approved professional project (2-3 credits) and an oral defense, (2) a thesis (2-3 credits) and an oral defense, or (3) a comprehensive examination and an oral defense. Specific course requirements are listed below. Course options and electives should be selected in consultation with advisers to match individual career paths.

	Credits
1. 666-622 Communication Theories (666-622 may be waived if an equivalent course was taken as an undergraduate.)	3
664-694 Seminar	3
One of:	
666-620 Listening Behavior	3
666-624 Cross Cultural Communication	3
424-740 Techniques of Research	3
2. One of the following:	
a. Electives numbered 664-XXX and/or radio/television/film courses numbered 666-XXX selected with adviser's consent	12-24
Electives outside the emphasis selected with the adviser's consent	0-9
b. Electives numbered 664-XXX and/or radio/television/film courses numbered 666-XXX selected with adviser's consent	9-18
Electives in professional education	3-6
Electives in liberal arts, excluding courses in the emphasis, selected with adviser's consent	0-9

c. Electives numbered 664-XXX and/or radio/television/film courses numbered 666-XXX selected with adviser's consent	9-12
432-768 Developmental Reading in the Secondary School	3
Elective in educational psychology	3
439-411 Directed Teaching: Secondary	10
436-470 Post Student Teaching Seminar	2
Wisconsin Human Relations Requirement	3

Option c above is for those seeking public school certification and includes additional course work at the undergraduate level.

Speech Communication Emphasis

Program Coordinator:

Dr. Darrell Mullins

Heide 442 Phone (414)472-1034

Additional Admission Requirements: An undergraduate program in speech communication or speech communication and theatre which totals at least 20 credits and is appropriate to the applicant's plan for future academic study.

Additional Degree Requirements: Thirty credits of course work plus one of the following: (1) an approved thesis and an oral defense, (2) a written comprehensive examination and an oral defense in either speech communication or speech communication and theatre, or (3) six additional credits of course work. For the first option, 1 to 3 credits of Thesis Research may count toward the 30 credits. In order to use option 3, students must receive permission from the graduate faculty of the Department of Communication after successfully completing 15 credits in communication and/or theatre. Specific course requirements are given below. Course options and elective courses should be selected in consultation with advisers to match individual career paths.

	Credits
1. 666-622 Communication Theories	3
666-657 Classical Rhetoric	3
(666-622 and 666-657 may be waived if equivalent courses were taken as an undergraduate.)	
666-701 Introduction to Graduate Study in Speech	3
2. One of the following:	
a. One of:	
424-740 Techniques of Research	3
680-790 Research in English	3
Electives in speech communication	9-21
One of:	
Electives in theatre	9
Electives selected with the adviser's consent	3-9
b. 424-740 Techniques of Research	3
Electives in speech communication	9-21
Electives in professional education	3-6
One of:	
Electives in theatre	9
Electives in liberal arts courses, excluding speech communication, selected with adviser's consent	3-9

c. 424-740 Techniques of Research	3
Electives in speech communication (may include at most 9 theatre credits)	9-15
Electives in professional education	3
432-766 Developmental Reading in the Secondary School	3
One of:	
437-631 Methods of Teaching Speech	3
437-434 Methods of Teaching Theatre	3
439-411 Directed Teaching: Secondary	10
436-470 Post Student Teaching Seminar	2
Wisconsin Human Relations Requirement	3

Option c above is for those seeking public school certification and includes additional course work at the undergraduate level.

EDUCATIONAL ADMINISTRATION

A cooperative program between UW-Whitewater and UW-Madison provides an opportunity for students to earn a Master of Science (M.S.) degree in Educational Administration from UW-Madison by completing a substantial amount of their course work on the UW-Whitewater campus. Twenty-four of the 30 credit program may be taken at UW-Whitewater through a combination of UW-Whitewater courses and UW-Madison courses offered at UW-Whitewater. The program combines the unique resources of the two institutions to assist qualified persons to add dimension to their education through (1) intensive study in the theory and practice of educational administration, (2) refinement of skills and attitudes essential to educational leaders, and (3) further study in related educational fields such as curriculum and guidance. The program is designed to prepare persons for leadership positions at all levels of education, both public and private. Students in the program may simultaneously pursue certification as school administrators as well as establish a foundation for an academic and career ladder leading to specialist and doctoral degrees at UW-Madison in educational administration.

Cooperative Program Coordinator:

Dr. Paul Yarns
Winther 4036 Phone (414)472-4891

Admission Requirements: Students must be admitted to the UW-Madison Graduate School and the UW-Madison Department of Educational Administration as well as by the UW-Whitewater School of Graduate Studies and the Department of Curriculum and Instruction. Applicants should contact the Cooperative Program Coordinator for a list of current admission requirements and application forms.

Degree Requirements: Applicants should contact the Cooperative Program Coordinator for the current UW-Madison degree requirements. At present, the following UW-Whitewater courses are approved for inclusion in the program.

	Credits
423-681 Human Abilities and Learning	3
433-769 Supervision of Instruction	3
433-772 Legal Aspects of Education	3
433-776 The School Principalship	3
One of:	
435-762 Curriculum in the Elementary Schools	3
437-710 Curriculum in the Secondary Schools	3

ELEMENTARY EDUCATION

A Master of Science in Education (M.S.E.) degree is offered in Elementary Education. The program is intended primarily to assist those who are certified to teach to extend their certification.

Program Coordinator:

Dr. Paul Yvarra
Winther 4036 Phone (414)472-4891

Additional Admission Requirements: An undergraduate major in education with certification to teach at the early childhood, elementary, or secondary level. Applicants without any teacher certification may be admitted by special permission of the graduate faculty of the Department of Curriculum and Instruction. Secondary certification is required for those seeking to obtain elementary certification through this program.

Additional Degree Requirements: Thirty credits of course work and a comprehensive examination or a thesis; or, at the discretion of the graduate faculty of the Department of Curriculum and Instruction, 35 credits of course work. The latter option is unavailable to those who have started a thesis or failed a comprehensive examination. Course requirements are given below.

	Credits
1. Courses offered by the Department of Curriculum and Instruction excluding those numbered 437-XXX.	18-24
2. Courses offered outside the College of Education.	6
3. 424-740 Techniques of Research	3
4. One of:	
430-550 Introduction to Multicultural Education	3
430-635 Language Acquisition for the Bilingual Child	3
430-655 Teaching Content in the Bilingual Classroom	3
430-722 Issues in Elementary Education	3
434-714 Current Issues in Early Childhood Education	3

ENGLISH

Both a Master of Arts in Teaching (M.A.T.) degree and a Master of Science in Teaching (M.S.T.) degree are offered in English. The M.A.T. program is designed for those who lack the course work required for teacher certification. It provides the background for certification as a secondary or post-secondary English teacher while providing an opportunity to strengthen or develop teaching disciplines. The M.S.T. program is designed to extend and improve the professional preparation of secondary or post-secondary teachers who are already certified to teach English.

Program Coordinator:

Dr. Ruth A. Schauer
Heide 402 Phone (414)472-1035

Additional Admission Requirements:

M.A.T.: At least 20 credits of course work in English and approval of the Director of Student Teaching based upon an interview. (Winther 2039, phone (414)472-1123.) Applicants who are unable to come to campus for the interview prior to admission may be granted a provisional admission pending a successful interview.

M.S.T.: At least 20 credits of course work in English and certification to teach English at the secondary or post-secondary level.

Additional Degree Requirements: Both degrees require 30 credits of graduate course work and one of the following: (1) a comprehensive examination, (2) a thesis and oral defense, or (3) an additional 6 credits of courses numbered 680-XXX. Specific course requirements for each degree are given below. For the thesis option, 1-2 credits of Thesis Research may be included within the 30 credits. The 36 credit option is open only to students who have not started a thesis or failed a comprehensive examination. In addition to meeting the aforementioned requirements, M.A.T. candidates must complete 12 undergraduate credits in directed teaching and the related seminar and meet all the requirements for certification to teach English at the secondary or post-secondary level.

M.A.T.:

	Credits
1. Professional Education (12 credits)	
424-740 Techniques of Research	3
(424-740 is waived if 680-790 is completed.)	
Elective courses offered by the College of Education	9-12
2. Courses in the Teaching Major or Minor (18 credits)	
680-790 Research in English	3
(680-790 is waived if 424-740 is completed.)	
Courses numbered 680-XXX	9-12
Elective courses	6
3. Undergraduate Directed Teaching and Seminar (12 credits)	
439-411 Directed Teaching: Secondary	10
436-470 Post Student Teaching Seminar	2

Course electives should be selected in consultation with the Program Coordinator and the Director of Certification (Winther 2031, phone (414)472-4677) to assure meeting certification requirements.

M.S.T.:

1. Liberal Arts (3-6 credits)	
Elective courses offered by the College of the Arts, the College of Letters and Sciences excluding courses numbered 680-XXX, or the Department of Economics	3-6
2. Professional Education (6-9 credits)	
424-740 Techniques of Research	3
(424-740 is waived if 680-790 is completed.)	
Elective courses offered by the College of Education	3-9

3. English (15-21 credits)	
680-790 Research in English	3
(680-790 is waived if 424-740 is completed.)	
Elective courses numbered 680-XXX	12-21

GEOGRAPHY

Both a Master of Arts in Teaching (M.A.T.) degree and a Master of Science in Teaching (M.S.T.) degree are offered in Geography. The M.A.T. program is designed for those who lack the course work required for teacher certification. It provides the background for certification as a secondary or post-secondary geography teacher while providing an opportunity to strengthen or develop teaching disciplines. The M.S.T. program is designed to extend and improve the professional preparation of secondary or post-secondary teachers who are already certified to teach geography.

Program Coordinator:

Dr. Howard A. Botts
Upham 219 Phone (414)472-1071

Additional Admission Requirements:

M.A.T.: Thirty-four undergraduate credits in history and social studies, consent of the Program Coordinator, and approval of the Director of Student Teaching based upon an interview. (Winther 2039, phone (414)472-1123.) Applicants who are unable to come to campus for the interview prior to admission may be granted a provisional admission pending a successful interview.

M.S.T.: Thirty-four undergraduate credits in history and social studies, consent of the Program Coordinator, and certification to teach geography at the secondary or post-secondary level.

Additional Degree Requirements: Both degrees require 30 credits of graduate course work and (1) a comprehensive examination or (2) a thesis and oral defense. Specific course requirements for each degree are given below. For the thesis option, 1-6 credits of Thesis Research may be included within the 30 credits. In addition to meeting the aforementioned requirements, M.A.T. candidates must complete 12 undergraduate credits in directed teaching and the related seminar and meet all the requirements for certification to teach geography at the secondary or post-secondary level.

M.A.T.:

	Credits
1. Professional Education (12 credits)	
424-740 Techniques of Research	3
Elective courses offered by the College of Education	9
2. Courses in the Teaching Major or Minor (18 credits)	
Courses numbered 722-XXX	12
Elective courses	6
3. Undergraduate Directed Teaching and Seminar (12 credits)	
439-411 Directed Teaching: Secondary	10
436-470 Post Student Teaching Seminar	2

Course electives should be selected in consultation with the Program Coordinator and the Director of Certification (Winther 2031, phone (414)472-4577) to assure meeting certification requirements.

M.S.T.:

- | | |
|---|-------|
| 1. Liberal Arts (3-6 credits) | |
| Elective courses offered by the College of the Arts, the College of Letters and Sciences excluding courses numbered 722-XXX, or the Department of Economics | 3-6 |
| 2. Professional Education (6-9 credits) | |
| 424-740 Techniques of Research | 3 |
| Elective courses offered by the College of Education | 3-6 |
| 3. Geography (15-21 credits) | |
| Elective courses numbered 722-XXX | 15-21 |

GUIDANCE AND COUNSELING

The Master of Science (M.S.) degree program in Guidance and Counseling provides graduate level training for students interested in preparing themselves for counseling in a variety of educational and community settings. Emphases are available in elementary and/or secondary school counseling, higher education, and vocational/general.

Program Coordinator:

Dr. J. Charles Park
Winther 6035 Phone (414)472-1380

Additional Admission Requirements:

1. A 2-3 page typed, personal essay pertaining to career goals and plans.
2. A personal resume including names, addresses, and telephone numbers of 3 references.
3. A personal interview with a potential adviser after meeting other admission requirements.
4. An applicant whose undergraduate grade point average is below 2.75, but at least 2.40, may be admitted on probation; however, the student must achieve grades of at least B in at least two required 3-credit courses or in all counseling courses taken during the first term of study. Those failing to do so, will be dropped from the program.
5. An applicant whose undergraduate grade point average is below 2.40 must achieve a score at least at the 40th percentile on either the Graduate Record Examination or the Miller Analogies Test in order to be considered for admission on probation.

Additional Program Policies:

1. All changes made in a student's initial program of study must have the prior approval of the student's adviser. Any change made without such approval may result in the student being dropped from the program or other action at the discretion of the counselor education faculty.

2. The counselor education faculty formally review each student's progress after 6 credits of required course work have been completed. The review is continued as students progress through the program.
3. Elective courses must be approved by students' advisers prior to enrollment in those courses.
4. No more than 3 one-credit courses and/or workshops may be counted toward elective credits in the program.
5. A grade of at least **B** must be earned in all required courses. Courses in which a grade of less than **B** is earned may be repeated subject to the course repeat policy.
6. The one academic year required practicum must begin in the fall. Practicum policy statements may be obtained from the Program Coordinator.
7. Students who want to practice in the public schools should check state requirements for counselor certification.
8. Students interested in associate or clinical membership in the American Association of Marriage and Family Therapy or in Wisconsin certification as alcohol and/or drug counselors may be required to do course work and clinical supervision beyond the program requirements in order to meet the academic preparation and professional standards.

Program Prerequisites: Six credits (undergraduate or graduate) in psychology and/or sociology and 3 credits (undergraduate or graduate) in statistics or measurement. Students who have not completed this work as part of their undergraduate degree must schedule the courses with their adviser and complete the courses prior to enrolling in advanced courses. This course work can not be applied toward the degree requirements.

Additional Degree Requirements: Forty-two credits of course work which may include a thesis for 1-6 credits. Course and emphasis requirements are given below. However, emphases, required course sequences, and elective courses should be selected in consultation with advisers to match individual career paths.

	Credits
1. Required courses (27 credits)	
421-718 Principles of Counseling	3
421-719 Appraisal Procedures in Counseling	3
421-721 Group Procedures in Counseling	3
421-722 Theories of Counseling	3
One of:	
424-740 Techniques of Research	3
421-727 Program Development, Research and Evaluation for School Counselors	3
429-790 Supervised Practicum	12
2. Emphasis (15 credits)	
One of the following emphases:	
a. School Counseling Emphasis	
421-720 Career Development and Information Services	3
421-738 Perspectives in School Counseling	3

One of:		
421-723	Counseling in Elementary and Junior High Schools	3
421-724	Career Counseling of Adolescent and Adult	3
Elective courses		6

b. Vocational/General Emphasis

One of the following sequences:

1.	421-720	Career Development and Information Services	3
	421-724	Career Counseling of Adolescent and Adult	3
2.	421-731	Introduction to Marriage and Family Counseling	3
	One of:		
	421-732	Practices of Marriage and Family Counseling	3
	421-733	Theory and Techniques of Marriage and Family Counseling	3
	421-737	Counseling and Human Services in the Community	3
	421-746	Counseling and the Chemical Dependency Process	3
3.	421-731	Introduction to Marriage and Family Counseling	3
	421-737	Counseling and Human Services in the Community	3
	421-746	Counseling and the Chemical Dependency Process	3
4.	421-731	Introduction to Marriage and Family Counseling	3
	421-737	Counseling and Human Services in the Community	3
	421-746	Counseling and the Chemical Dependency Process	3
	421-749	Chemical Dependency-Treatment and Rehabilitation	3
	Elective courses		3-9

c. Higher Education Emphasis

421-720	Career Development and Information Services	3
421-729	Student Services in Higher Education	3
421-747	Consultation Models and Outreach Applications in Student Services	3
421-748	Administration in College Student Personnel	3
Elective courses		3

HISTORY

Both a Master of Arts in Teaching (M.A.T.) degree and a Master of Science in Teaching (M.S.T.) degree are offered in History. The M.A.T. program is designed for those who lack the course work required for teacher certification. It provides the background for certification as a secondary or post-secondary history teacher while providing an opportunity to strengthen or develop teaching disciplines. The M.S.T. program is designed to extend and improve the professional preparation of secondary or post-secondary teachers who are already certified to teach history.

Program Coordinator:

Dr. Everett L. Long
Baker 214 Phone (414)472-1103

Additional Admission Requirements:

M.A.T.: Thirty-four credits in history and social studies, or the equivalent of a history minor, and approval of the Director of Student Teaching based upon an interview. (Winther 2039, phone (414)472-1123.) Applicants who are unable to come to campus for the interview prior to admission may be granted a provisional admission pending a successful interview.

M.S.T.: Thirty-four credits in history and social studies, or the equivalent of a history minor, and certification to teach history at the secondary or post-secondary level.

Additional Degree Requirements: Both degrees require 30 credits of graduate course work and one of the following: (1) a comprehensive examination, (2) a thesis and oral defense, or (3) for the M.S.T. only, an additional 6 credits of courses numbered 740-XXX. Specific course requirements for each degree are given below. For the thesis option, 1-6 credits of Thesis Research may be included within the 30 credits. The 36 credit option is open only to M.S.T. candidates who have not started a thesis or failed a comprehensive examination. Of the 36 credits, at least 18 must be in 700 level courses. The History Department does not waive this requirement. In addition to meeting the aforementioned requirements, M.A.T. candidates must complete 12 undergraduate credits in directed teaching and the related seminar and meet all the requirements for certification to teach history at the secondary or post-secondary level.

M.A.T.:

	Credits
1. Professional Education (12 credits)	
Elective courses offered by the College of Education	12
2. Courses in the Teaching Major or Minor (18 credits)	
740-705 Historiography and Historical Research	3
Courses numbered 740-XXX	9-15
Elective courses in the Social Sciences	0-6
3. Undergraduate Directed Teaching and Seminar (12 credits)	
439-411 Directed Teaching: Secondary	10
436-470 Post Student Teaching Seminar	2

Course electives should be selected in consultation with the Program Coordinator and the Director of Certification (Winther 2031, phone (414)472-4677) to assure meeting certification requirements.

M.S.T.:

1. Liberal Arts (3-6 credits)	
Elective courses offered by the College of the Arts, the College of Letters and Sciences excluding courses numbered 740-XXX, or the Department of Economics	3-6
2. Professional Education (6-9 credits)	
Elective courses offered by the College of Education	6-9
3. History (15-21 credits)	
740-705 Historiography and Historical Research	3
Elective courses numbered 740-XXX	12-18

MATHEMATICS

Both a Master of Arts in Teaching (M.A.T.) degree and a Master of Science in Teaching (M.S.T.) degree are offered in Mathematics. The M.A.T. program is designed for those who lack the course work required for teacher certification. It provides the background for certification as a secondary or post-secondary mathematics teacher while providing an opportunity to strengthen or develop teaching disciplines. The M.S.T. program is designed to extend and improve the professional preparation of secondary or post-secondary teachers who are already certified to teach mathematics.

Program Coordinator:

Dr. David M. Stoneman
Baker 119 Phone (414)472-1313

Additional Admission Requirements:

M.A.T.: Completion of 36 credits of mathematics courses equivalent to those required of a UW-Whitewater secondary education mathematics major. These include three semesters of calculus, discrete mathematics, college geometry, matrices, probability, modern algebra, Pascal programming, and a project for majors. If there are deficiencies, these must be made up, but the courses taken to correct deficiencies may also be used to meet graduation requirements if they are also listed as graduate courses. Applicants must also obtain approval of the Director of Student Teaching based upon an interview. (Winter 2009, phone (414)472-1123.) Applicants who are unable to come to campus for the interview prior to admission may be granted a provisional admission pending a successful interview.

M.S.T.: Certification to teach mathematics at the secondary or post-secondary level and completion of 36 credits of mathematics courses equivalent to those required of a UW-Whitewater secondary education mathematics major. These include three semesters of calculus, discrete mathematics, college geometry, matrices, probability, modern algebra, Pascal programming, and a project for majors. If there are deficiencies, these must be made up, but the courses taken to correct deficiencies may be used to meet graduation requirements if they are also listed as graduate courses.

Additional Degree Requirements: Both degrees require 30 credits of graduate course work and one of the following: (1) a comprehensive examination, (2) a thesis and oral defense, or (3) an additional 6 credits of courses numbered 760-XXX or 765-XXX. Specific course requirements for each degree are given below. For the thesis option, 1-6 credits of Thesis Research may be included within the 30 credits. The 36 credit option is open only to students who have not started a thesis or failed a comprehensive examination and to those who have maintained a grade point average of at least 3.50 for the first 18 credits of graduate level mathematics. In addition to meeting the aforementioned requirements, M.A.T. candidates must complete 12 undergraduate credits in directed teaching and the related seminar and meet all the requirements for certification to teach mathematics at the secondary or post-secondary level.

M.A.T.:

	Credits
1. Professional Education (12 credits)	
424-740 Techniques of Research	3
Elective courses offered by the College of Education	9
2. Mathematics (18 credits)	
Graduate courses numbered 760-XXX or 765-XXX	18

3. Undergraduate Directed Teaching and Seminar	(12 credits)	
439-411 Directed Teaching: Secondary		10
436-470 Post Student Teaching Seminar		2

Course electives should be selected in consultation with the Program Coordinator and the Director of Certification (Winther 2031, phone (414)472-4677.) to assure meeting certification requirements.

M.S.T.:

1. Liberal Arts	(3-6 credits)	
Elective courses offered by the College of the Arts, the College of Letters and Sciences excluding courses numbered 760-XXX or 765-XXX, or the Department of Economics		3-6
2. Professional Education	(6-9 credits)	
424-740 Techniques of Research		3
Elective courses offered by the College of Education		3-6
3. Mathematics	(18-21 credits)	
Elective courses numbered 760-XXX or 765-XXX		18-21

MUSIC

Both a Master of Arts in Teaching (M.A.T.) degree and a Master of Science in Teaching (M.S.T.) degree are offered in Music. The M.A.T. program is designed for those who lack the course work required for teacher certification. It provides the background for certification as a secondary or post-secondary music teacher while providing an opportunity to strengthen or develop teaching disciplines. The M.S.T. program is designed to extend and improve the professional preparation of secondary or post-secondary teachers who are already certified to teach music.

Program Coordinator:

Dr. Howard G. Inglefield
Center of the Arts 2038 Phone (414)472-1310

Additional Admission Requirements:

M.A.T.: An undergraduate music major and approval of the Director of Student Teaching based upon an interview. (Winther 2039, phone (414)472-1123.) Applicants who are unable to come to campus for the interview prior to admission may be granted a provisional admission pending a successful interview.

M.S.T.: An undergraduate music major and certification to teach music at the secondary or post-secondary level.

Additional Degree Requirements: Both degrees require 30 credits of graduate course work and (1) a comprehensive examination or (2) a thesis and oral defense. Specific course requirements for each degree are given below. For the thesis option, 1-6 credits of Thesis Research may be included within the 30 credits. In addition to meeting the aforementioned requirements, M.A.T. candidates must complete 12 undergraduate credits in directed teaching and the related seminar and meet all the requirements for certification to teach music at the secondary or post-secondary level.

M.A.T.:

	Credits
1. Professional Education (12 credits)	
Elective courses offered by the College of Education	12
2. Courses in Music Education and Music (20 credits)	
150-740 Seminar in Music Education Research Techniques	3
Electives in Music Education	7
Electives in music divided among areas of applied music, music theory, and music history	10
3. Undergraduate Directed Teaching and Seminar (12 credits)	
439-411 Directed Teaching: Secondary	10
436-470 Post Student Teaching Seminar	2

Course electives should be selected in consultation with the Program Coordinator and the Director of Certification to assure meeting certification requirements. (Winther 2031, phone (414)472-4677.)

M.S.T.:

1. Liberal Arts (3 credits)	
Elective courses offered by the College of the Arts, the College of Letters and Sciences excluding courses numbered 150-XXX, or the Department of Economics	3
2. Professional Education (6 credits)	
Elective courses offered by the College of Education	6
3. Music (21 credits)	
150-740 Seminar in Music Education Research Techniques	3
150-764 Foundations of Music Education	3
One of the following:	
a. Kodaly Emphasis:	
150-759 Beginning Training in Kodaly Music Skills	3
150-760 Advanced Training in Kodaly Music Skills	3
150-762 Folk Music in the Kodaly Curriculum	3
150-763 Principles of Kodaly for Choral Directors	3
150-765 Methodology in the Kodaly Curriculum	3
b. General Emphasis:	
150-791 Seminar in Music Education	3
Elective(s) in music education	3
Electives in music divided among areas of applied music, music theory, and music history	9

PROFESSIONAL DEVELOPMENT

The Master of Education-Professional Development (M.E.P.D.) degree is designed to provide experienced teachers a master's degree program that can be tailored to meet their individual needs and goals not covered by other degree programs at UW-Whitewater. This program is

designed to help educators who desire to keep up-to-date, effective and competitive in their fields, who wish to attain certification in additional areas, who have acquired responsibilities in areas of marginal preparation, and who plan to broaden their academic background.

Program Coordinator:

Dr. Richard J. Teller
Roseman 2047 Phone (414)472-1006

Additional Admission Requirements: Two years of teaching experience.

Additional Degree Requirements: Thirty credits of course work and a thesis or a comprehensive examination, or 36 credits of work and a capstone report. A specific program of study is planned by each student in consultation with their adviser, and is given final approval by the M.E.P.D. Program Review Committee. While each program is individually designed, all programs must satisfy the course requirements given below. In addition, each program is expected to contain at least six credits in the content of the specialty, an appropriate balance of course work including both content and process (methodology), and only learning experiences appropriate to the professional goals of the student.

1. Research Techniques Course (3 credits)

To be selected in consultation with the student's adviser from the following:

	Credits
424-740 Techniques of Research (most students take this course)	3
110-607 Drawing VII: Research	3
110-625 Painting V: Research	3
110-637 Printmaking V: Research	3
110-645 Sculpture V: Research	3
110-655 Ceramics V: Research	3
110-675 Metal and Jewelry V: Research	3
110-685 Graphics Design V: Research	3
150-740 Seminar in Music Education Research Techniques	3
662-712 Research Methods in Communicative Disorders	3
680-790 Research in English	3
740-705 Historiography and Historical Research	3

The above courses numbered 110-XXX are restricted to those students selecting a thesis in the arts area.

2. Theory Relevant to the Specialty (3 credits)

To be selected in consultation with the student's adviser from the following. Courses are categorized below for clarity; only one course need be completed of those listed in the entire section.

a. Courses which are appropriate for all M.E.P.D. students:

422-634 Instructional Technology	3
423-683 Teaching Strategies	3
428-675 Understanding and Dealing with Disruptive Classroom Behavior	3
428-679 Discipline at Home and School	3
480-564 Introduction to Learning Disabilities	3
480-721 The Exceptional Child	3

b. Courses which are appropriate for those students whose professional goal is in Elementary Education:

430-720	Advanced Techniques in the Teaching of Language Arts and English	3
430-721	Trends in Art Education	3
430-761	Advanced Techniques in the Teaching of Mathematics	2-3
430-763	Advanced Techniques in the Teaching of Social Studies	2-3
430-765	Advanced Techniques in the Teaching of Science	2-3
432-764	Developmental Reading in the Elementary School	3
434-714	Current Issues in Early Childhood Education	3

c. Courses which are appropriate for those students whose professional goal is to expand their certification to additional areas in Secondary Education:

432-768	Developmental Reading in the Secondary Schools	3
437-626	Methods of Teaching English and Language Arts	3
437-628	Methods of Teaching Mathematics	3
437-629	Methods of Teaching Science	3
437-630	Methods of Teaching Social Studies	3
437-631	Methods of Teaching Speech	3
437-632	Methods of Teaching Journalism	3

d. Courses which are appropriate for those students whose professional goal is in Health, Physical Education, and Recreation:

442-675	Adapted Physical Education	3
442-710	Trends in Physical Education	3
444-645	Teaching Health Education	3
444-745	Exercise and Health	3
446-691	Recreation Administration	3

e. Course which is appropriate for those students whose professional goal includes Coaching:

411-660	Organization and Administration of Interscholastic Athletics	3
---------	--	---

f. Course which is appropriate for those students whose professional goal is in Business Education:

220-762	Current Problems in Business Education	1-3
---------	--	-----

g. Courses which are appropriate for those students whose professional goal includes Music:

150-764	Foundations of Music Education	3
150-791	Seminar in Music Education	3

3. Humanistic and Behavioral Studies Requirement (2-3 credits)

To be selected in consultation with the student's adviser from the following:

220-660	Principles of Vocational Education	2
420-645	History and Philosophy of Education	3
420-702	Philosophical Foundations of Education	3
420-704	Sociological Foundations of Education	3
420-706	John Dewey's Educational Philosophy	3
420-707	Significant Issues in Education	3

423-681	Human Abilities and Learning	3
423-703	Psychological Foundations of Education	3
428-673	Human Intergroup Relations for Educators	3
428-687	Principles of Human Resource Development	3
428-765	Group Dynamics in the Classroom	3
430-550	Introduction to Multicultural Education	3
430-722	Issues in Elementary Education	3
430-762	Curriculum in the Elementary School	3
434-711	Early Childhood Education: From Theory to Practice	3
437-710	Curriculum in the Secondary School	3
442-712	Curriculum in Physical Education	3
480-625	Introduction to Gifted Education	3
480-628	General Instructional Models for Gifted Education	3

PUBLIC ADMINISTRATION

A cooperative program between UW-Whitewater and UW-Oshkosh enables students in south-eastern Wisconsin to take up to 15 credits at UW-Whitewater and have the credits apply toward a Master of Public Administration (M.P.A.) degree granted by UW-Oshkosh. The M.P.A. degree program is designed to enhance the administrative knowledge and skills of those employed in public and not-for-profit agencies. It is a blend of academic and field-related training accessible to professionals who may not be able to come to campus on a regular basis.

Cooperative Program Coordinator:

Dr. John F. Kozlowski
Salisbury 202 Phone (414)472-1120

Admission Requirements: Applicants must meet the admission requirements of UW-Oshkosh.

Degree Requirements: Students should contact the M.P.A. Program Director at UW-Oshkosh for their current degree requirements as program advising is the responsibility of that institution. However, students participating in the cooperative program will be assigned an adviser at UW-Whitewater to assist them in selecting appropriate UW-Whitewater courses. UW-Whitewater offers a broad range of courses that fulfill the M.P.A. degree requirements. Most of these courses are offered in the evening both on campus and at the UW-Waukesha County and UW-Rock County Centers. Normally, students will take up to twelve UW-Whitewater credits to fulfill the professional emphasis requirement of the degree. With joint approval and supervision, students also may enroll for their field projects at UW-Whitewater.

READING

The Master of Science in Education (M.S.E.) degree is offered in Reading to prepare teachers to provide special services in reading at the elementary and secondary level, and to certify students as reading teachers (315) and/or as reading specialists (317).

Program Coordinator:

Dr. Joan Helmich
Winther 4043 Phone (414)472-1973

Additional Admission Requirements: Eligible for Wisconsin certification to teach.

Additional Degree Requirements: Thirty-four credits of course work and a comprehensive examination or a thesis. Course requirements are given below. However, a specific program of study should be planned by students in consultation with their adviser in order to meet State requirements for reading teacher or reading specialist certification.

	Credits
1. Reading Sequence (25 credits)	
432-764 Developmental Reading in the Elementary School	3
432-768 Developmental Reading in the Secondary School	3
432-766 Diagnosis and Treatment of Reading Disabilities (K-6)	3
432-767 Diagnosis and Treatment of Reading Disabilities (7-12)	3
432-772 Reading in the Content Areas	3
439-790 Practicum (Elementary)	2
(Secondary)	2
(Prereq: 432-764, 432-766, 432-767, 432-768)	
432-771 Planning and Implementing Reading Programs	3
432-773 Research Related to the Teaching of Reading	2
439-774 Field Experience in Reading Programs	1
(432-773 and 439-774 are to be taken concurrently.)	
2. Research Course (3 credits)	
424-740 Techniques of Research	3
3. Related Reading Requirement (3 credits)	
To be determined in consultation with the student's adviser from the following:	
433-769 Supervision of Instruction	3
480-564 Introduction to Learning Disabilities	3
480-778 Remediation of Learning Disabilities-Elementary	3
480-779 Remediation of Learning Disabilities-Secondary	3
430-720 Advanced Techniques in the Teaching of Language Arts and English	3
430-740 Techniques for Improving Elementary and Middle School Children's Writing	3
430-716 Integrating Software and Technology into the Reading and Early Childhood Curriculum	3
432-769 Reading Process: Vocabulary and Comprehension Development	3
434-561 Children's Literature	2
435-799 Thesis Research	1-6
In addition, certain English courses featuring writing, language, or literature may be considered by the adviser as appropriate.	
4. Humanistic and Behavioral Studies Requirement (3 credits)	
To be selected in consultation with the student's adviser from the following:	
430-635 Language Acquisition for the Bilingual Child	3
430-722 Issues in Elementary Education	3
434-714 Current Issues in Early Childhood Education	3
423-681 Human Abilities and Learning	3
423-703 Psychological Foundations of Education	3
420-702 Philosophical Foundations of Education	3
420-704 Sociological Foundations of Education	3
430-762 Curriculum in the Elementary Schools	3
434-715 Children in Crisis	3

437-710	Curriculum in the Secondary Schools	3
480-625	Introduction to Gifted Education	3

Cooperative Program with UW-Parkside: To accommodate students in the Racine-Kenosha areas, there is a consorial arrangement between UW-Whitewater and UW-Parkside to offer all the course work leading to the M.S.E. degree in Reading on the UW-Parkside campus. Courses are taught by professors from both institutions and the degree is conferred by UW-Whitewater. Students are subject to all the aforementioned requirements with one exception - the nine credit limit on transfer credits is extended to allow an additional six credits from appropriate UW-Parkside courses to substitute for UW-Whitewater courses. Students should consult with the Reading Program Coordinator in selecting appropriate courses.

SAFETY

The Master of Science (M.S.) degree program in Safety is designed to enable students to pursue graduate-level experience in the occupational, institutional, and traffic emphasis areas of safety studies. The program provides opportunities for students to develop a specialized grouping of courses in each emphasis area.

Program Coordinator:

Dr. Jerome Witherill
Winther 6034 Phone (414)472-1117

Additional Admission Requirements: A score at least in the 50th percentile on the Miller Analogies Test, a successful interview with the Safety Studies Department Admissions Committee, and the completion of the prerequisites for the selected emphasis area.

Additional Degree Requirements: Thirty-six credits of course work including (1) at least 18 credits in safety studies; (2) one of the required sequences of courses listed below within the occupational, institutional, or traffic emphases; (3) 460-799 Thesis Research (1-6 credits) or 460-700 Individual Studies (3 credits); (4) a thesis and oral defense in conjunction with 460-799, or a designated original research paper and oral defense in conjunction with 460-700; and (5) an oral or written proficiency examination. Emphases, required course sequences, and elective courses should be selected in consultation with advisers to match individual career paths.

Occupational Safety Emphasis

Prerequisites: Industrial Accident Prevention (462-380), Chemistry (640-101 or the equivalent), and Probability and Statistics (760-231 or the equivalent).

Required Courses:

	Credits
469-790 Practicum (469-790 is waived for those with appropriate work experience.)	3-6
One of the following sequences:	
1. 840-615 Research Design	3
462-683 Industrial Safety Management	3
462-753 Legal Aspects in Occupational Safety	3
462-783 Corporate Safety Management	3
460-787 System Safety Analysis	3
460-650 Behavioral Aspects of Accident Prevention	3
460-688 Human Factors Engineering	3

2. 840-615	Research Design	3
462-684	Industrial Hygiene	3
462-680	Industrial Hygiene Instrumentation	2
460-688	Human Factors Engineering	3
462-689	Chemical Safety	3
662-644	Occupational Hearing Conservation	3
630-566	Environmental Radiation Protection	3
3. 840-615	Research Design	3
460-688	Human Factors Engineering	3
460-787	System Safety Analysis	3
442-672	Advanced Physiology of Exercise	3
4. 840-615	Research Design	3
460-787	System Safety Analysis	3
462-583	Introduction to Security	3
462-753	Legal Aspects in Occupational Safety	3
460-752	Safety Communications	3
462-763	Corporate Safety Management	3
240-721	The Legal Environment of Business	3
One of:		
250-771	Strategic Management and Planning	3
250-720	Organization Theory and Policy	3
(250-720 may not be taken by those who have taken 250-301 Organizational Behavior.)		

Institutional Safety Emphasis

Prerequisites: Industrial Accident Prevention (462-380), Principles of Environmental Safety (463-420), and Chemistry (540-101 or the equivalent).

Required Courses:

	Credits
424-740 Techniques of Research	3
462-657 Principles of Occupational Epidemiology	3
463-672 Organization and Administration of School Safety	3
462-684 Industrial Hygiene	3
462-685 Fire Protection/Prevention	3
462-689 Chemical Safety	3
463-711 Principles of Institutional Safety	3
469-790 Practicum	3-6
(469-790 is waived for those with appropriate work experience.)	

Traffic Safety Emphasis

Prerequisites: Introduction to Safety (460-251), Basic Traffic Safety (461-260), and Techniques of Laboratory Instruction (461-464). 461-464 is required only of those who plan to teach driver education.

Required courses:

	Credits
461-767 Traffic Engineering	3
One of the following sequences:	

1. 424-740	Techniques of Research	3
460-650	Behavioral Aspects of Accident Prevention	3
460-655	Alcohol and Other Drugs	3
460-752	Safety Communications	3
461-666	Police in Highway Traffic Enforcement	3
437-710	Curriculum in Secondary Schools	3
2. 840-615	Research Design	3
460-787	System Safety Analysis	3
220-645	Records Management	3
461-767	Traffic Engineering	3
461-765	Highway Traffic Administration	3
461-666	Police in Highway Traffic Enforcement	3
620-516	Police and Criminal Justice Administration	3
620-615	Criminal Justice and the Constitution	3
469-790	Practicum	3
(469-790 is waived for those with appropriate work experience.)		

SCHOOL BUSINESS MANAGEMENT

The Master of Science in Education (M.S.E.) degree in School Business Management provides students an opportunity to pursue a course of study which will qualify them for certification as a school business manager. An undergraduate degree from an accredited institution with a major in the field of business or business education is desirable. However, the program has the flexibility to tailor programs to capitalize on the student's past education and work experience.

Program Coordinator:

Dr. George Gray
Administrative Wing, Library 2244 Phone (414)472-1926

Additional Admission Requirements: An undergraduate major in business education or business administration or the equivalent is desirable. Applicants with an undergraduate grade point average of 2.50 or less must take the Miller Analogies Test and attain a raw score of at least 44 to be accepted on probation.

Additional Degree Requirements: Thirty-six credits of course work, or 30 credits and a thesis or comprehensive examination. Each student is required, upon completion of the program, to have 9-12 graduate credits in school business management, 9-12 graduate (or undergraduate) credits in business administration, and 9-12 graduate (or undergraduate) credits in educational foundations areas. Specific course requirements are given below.

1. School Business Management (12 credits)

	Credits
290-770 School Finance and Accounting	3
290-771 School Business Management Techniques	3
290-772 Legal Aspects of Education	3
One of:	
290-773 School Plant Planning	3
290-777 School Auxiliary Services Management	3
260-636 Purchasing and Materials Management	3

2. Business Administration (0-9 credits)

(Courses below may be waived if similar courses have been completed as an undergraduate. Course substitutions in this area must have prior departmental approval.)

240-646 Insurance	3
6 credits from the following:	
210-541 Intermediate Accounting I	3
210-701 Accounting Foundations	3
230-737 Managerial Economics	3
290-782 Collective Negotiation in Education	3

3. Electives (9-24 credits)

Graduate-level courses in the areas of accounting, business administration, business education, finance, management, economics, or educational foundations determined in consultation with the student's adviser on the basis of the candidate's background and interests. (Students with fewer than six undergraduate credits in accounting are strongly advised to select additional accounting courses to improve their chances for employment. Noneducation students should consult with their adviser in regard to the Wisconsin Human Relations Requirement.)

SCHOOL PSYCHOLOGY

The Master of Science in Education (M.S.E.) program is part of a two-year, 60-credit program which fulfills the academic requirements for certification as a School Psychologist. This area of study concerns itself with the application of psychological theories and skills to the problems of schools, with special attention to children as they interact with the school. It provides comprehensive knowledge in psychological and educational foundations and competence in psychological assessment and intervention. Elective courses and practicum experiences can also equip graduates for work in other mental health areas.

Program Coordinator:

Dr. Judy Oehler-Stinnett
Winther 5042 Phone (414)472-1026

Additional Admission Requirements:

1. An overall undergraduate grade point average of at least a 3.00. Applicants who do not meet this requirement may appeal for an exception on the basis of other factors (e.g., relevant work experience, outstanding job performance, recommendations, and evidence of appropriate personal qualifications.)
2. An appropriate academic background with a minimum of 12 credits including a course in each of the following: psychology of childhood or adolescence, abnormal psychology, principles of behavior modification, and basic statistical methods. For a student with insufficient background, the School Psychology Committee may require that specific undergraduate courses be completed with a grade of B or better before the application for admission will be processed.
3. An autobiographical letter outlining one's interest, intent and goals regarding the School Psychology degree sent to the Program Coordinator.

4. Three letters of recommendation from appropriate persons (such as former professors or work supervisors) who are familiar with the applicant's academic and personal qualifications for graduate study in school psychology sent to the Program Coordinator.
5. Upon review of all of the above materials, individual personal interviews with three faculty members of the School Psychology Committee.

Additional Degree Requirements: Thirty credits consisting of courses required for certification with specific courses determined in consultation with the student's adviser depending upon individual professional goals and past academic course work. A comprehensive examination designed to assess proficiency and general knowledge is required of every degree candidate. Students must maintain a grade point average of B or better throughout the program. Only one C is allowed in the psychology area and only two C's are allowed in the entire program of study. No course in the program may be repeated. A full-time student in good standing may carry a maximum load of 12 credits per semester.

Admission Requirements for Specialist-level Certification Program: A master's degree in school psychology or a related area. If the student's degree is not in school psychology from UW-Whitewater, an autobiographical statement, letters of recommendation, and personal interviews are required. Before admission to Supervised Clinical Practicum, all prerequisite course work and the successful completion of the comprehensive examination are required.

Requirements for Provisional School Psychologist Certification: Forty-eight graduate credits (i.e., 18 credits beyond the master's degree) of psychology and professional education work completed with an overall grade point average of at least 3.00, completion of the Wisconsin Human Relations Requirements, and a letter of recommendation from the Program Coordinator in consultation with the School Psychology Committee. Specific course work requirements are as follows:

1. Psychology (39 credits)

	Credits
840-615 Research Design	3
840-624 Human Learning	3
840-640 Psychological Tests and Measurements	3
840-745 Individual Intelligence Testing	3
840-746 Psychopathology of Childhood and Adolescence	3
840-766 Interview and Psychotherapy Techniques-Child	3
840-767 Interview and Psychotherapy Techniques-Adolescent	3
840-768 Clinical Applications of Behavior Therapy	3
840-770 Assessment of Personality	3
840-780 Supervised Clinical Practicum I	6
840-781 Supervised Clinical Practicum II	6

2. Professional Education (9 credits)

480-626 Introduction to Individual Diagnostic Assessment of Exceptional Educational Needs	3
Courses from educational foundations and special education selected in consultation with the student's adviser to complement specific emphases and specialization	6

Requirements for School Psychologist Certification: Sixty credits of course work including the 48 credits listed above plus 12 additional credits in areas relevant to school psychology, one year of satisfactory supervised experience, and a letter of recommendation from the Program

Coordinator in consultation with the School Psychology Committee and the student's internship supervisor(s).

SPECIAL EDUCATION

The Master of Science in Education (M.S.E.) degree program in Special Education is offered with or without Wisconsin teaching certification. The general program without certification is designed to increase the knowledge, skills, and general teaching competencies of those already certified to teach and/or to prepare students for other professional responsibilities such as administration, curriculum development, or adult programming of the developmentally disabled. The degree program may also be used to attain teaching certification in early childhood: exceptional educational needs, emotional disturbance, learning disabilities, mental retardation or severely/profoundly handicapped. Emphases in these areas of specialization prepare teachers to work with individuals having exceptional educational needs. Individuals planning to teach in a state other than Wisconsin should obtain the list of certification requirements of that state prior to meeting with an adviser.

Program Coordinators:

Early Childhood: Exceptional Educational Needs:

Ms. Mary D. Bross
Winther 3049 Phone (414)472-4831

Emotional Disturbance:

Dr. Nomsa Gwalla-Ogisi
Winther 3046 Phone (414)472-5807

General (without certification):

Dr. Hans R. Hahn
Winther 4037 Phone (414)472-5811

Learning Disabilities:

Dr. George S. Mischio
Winther 3052 Phone (414)472-4877
Roseman 2023 Phone (414)472-5237

Mental Retardation:

Dr. Frieda E. Meier
Winther 3051 Phone (414)472-5804

Severely/Profoundly Handicapped:

Dr. Penny Simmons
Winther 3050 Phone (414)472-5809

Transitional/Special Needs:

Dr. Richard C. Lombard
Winther 4039 Phone (414)472-5813

Additional Admission Requirements: Three letters of recommendation from individuals familiar with the applicant's personal and professional qualifications, and a conference with a designated adviser in the Department of Special Education.

Additional Degree Requirements: A minimum of thirty credits of coursework including a thesis (1-6 credits) or a comprehensive examination. At least one half of the credits must be taken in courses offered within the Department of Special Education. Specific course requirements are given below. Individual programs of study must be planned cooperatively by the student and the adviser. Those programs which include teaching certification may require some additional coursework contingent upon the student's previous training.

Required courses:

	Credits
424-740 Techniques of Research	3
480-721 The Exceptional Child (480-721 may be waived if an equivalent course was completed as an undergraduate.)	3
480-772 Lifespan Issues in Special Education	3
480-XXX A Special Education Department research course	3
One of the following:	
1. Early Childhood: Exceptional Educational Needs Emphasis	
480-520 Introduction to the Education of Young Handicapped Children	3
480-523 Developmental Therapy: The Education of Preschool Disturbed Children	3
480-555 Introduction to Emotional Disturbance	3
480-556 Introduction to Mental Retardation	3
480-564 Introduction to Learning Disabilities	3
480-676 Techniques for the Multiple Handicapped (480-520, 480-523, 480-555, 480-556, 480-564, and 480-676 may be waived if equivalent undergraduate courses were completed.)	3
480-621 Curriculum Methods and Materials-Young Handicapped Child: Social/Motor	3
480-622 Curriculum Methods and Materials-Young Handicapped Child: Language/Cognition	3
480-623 Educating Infants with Special Needs	3
489-725 Fieldwork with Exceptional Children	1-3
One of:	
489-790G Practicum: EC: EEN	5
Inservice in EC: EEN under one of:	
480-694 Seminar-Special Education	2
489-790 Practicum	3
Electives selected in consultation with adviser	0-6
2. Emotional Disturbance Emphasis	
480-555 Introduction to Emotional Disturbance	3
One of:	
480-678 Curriculum and Methods in Learning Disabilities- Elementary	3
480-679 Curriculum and Methods in Learning Disabilities- Secondary (480-555, 480-678, and 480-679 may be waived if equivalent undergraduate courses were completed.)	3
480-660 Education of the Severely Emotionally Disturbed	3
One of:	
480-671 Curriculum and Methods in Emotional Disturbance- Elementary	3
480-672 Curriculum and Methods in Emotional Disturbance- Secondary	3
480-725 Fieldwork with Exceptional Children	1-3

One of:	
489-790C Practicum: Emotional Disturbance-Elementary	5
489-790D Practicum: Emotional Disturbance-Secondary	5
Inservice in Emotional Disturbance under one of:	
480-694 Seminar-Special Education	2
489-790 Practicum	3
Electives selected in consultation with adviser	0-9

3. General Emphasis (without certification)

Three of:	
480-520 Introduction to the Education of Young Handicapped Children	3
480-555 Introduction to Emotional Disturbance	3
480-556 Introduction to Mental Retardation	3
480-564 Introduction to Learning Disabilities	3
480-576 Introduction to Severely and Profoundly Handicapped	3
480-605 Programming for the Developmentally Disabled Adult	3
480-625 Introduction to Gifted Education	3
Electives selected in consultation with adviser	9-12

4. Learning Disabilities Emphasis

480-564 Introduction to Learning Disabilities	3
480-681 Remediation of Written Language Disorders	2
(480-564 and 480-681 may be waived if equivalent undergraduate courses were completed)	
One of:	
480-678 Curriculum and Methods in Learning Disabilities- Elementary	3
480-679 Curriculum and Methods in Learning Disabilities- Secondary	3
489-725 Fieldwork with Exceptional Children	1-3
One of:	
489-790E Practicum: Learning Disabilities-Elementary	5
489-790F Practicum: Learning Disabilities-Secondary	5
Inservice in Learning Disabilities under one of:	
480-694 Seminar-Special Education	2
480-790 Practicum	3
One of:	
432-766 Diagnosis and Treatment of Reading Disabilities (K-6)	3
432-767 Diagnosis and Treatment of Reading Disabilities (7-12)	3
Electives selected in consultation with adviser	0-9

5. Mental Retardation Emphasis

480-556 Introduction to Mental Retardation	3
(480-556 may be waived if an equivalent undergraduate course was completed.)	
One of:	
480-657 Curriculum and Methods in Mental Retardation- Elementary	3
480-659 Curriculum and Methods in Mental Retardation- Secondary	3
480-665 Curriculum and Methods in Trainable Mentally Retarded	3
489-725 Fieldwork with Exceptional Children	1-3
One of:	
489-790A Practicum: Mental Retardation-Elementary	5
489-790B Practicum: Mental Retardation-Secondary	5
Electives selected in consultation with the adviser	1-9

6. Severely/Profoundly Handicapped Emphasis

480-555	Introduction to Emotional Disturbance	3
480-556	Introduction to Mental Retardation	3
480-564	Introduction to Learning Disabilities	3
480-622	Curriculum Methods and Materials-Young Handicapped Child: Language/Cognition	3
480-676	Techniques for the Multiple Handicapped (480-555, 480-556, 480-564, 480-622, and 480-676 may be waived if equivalent undergraduate courses were completed.)	3
480-676	Introduction to the Severely and Profoundly Handicapped	3
489-725	Fieldwork with Exceptional Children	1-3
One of:		
489-790H	Practicum: Severely and Profoundly Handicapped Inservice in Severely/Profoundly Handicapped under one of:	5
480-694	Seminar - Special Education	2
489-790	Practicum	3
662-681	Language Assessment and Intervention in Communicative Disorders	3
662-683	Augmentative and Alternative Communication	3
Electives selected in consultation with adviser		0-6

7. Transitional/Special Needs Emphasis

One of:		
220660	Principles of Vocational Education	2
421718	Principles of Counseling	3
480606	Career/Vocational Programming for Exceptional Educational Needs	3
480706	Vocational Assessment of Students with Special Needs	3
480773	Consultation Techniques for Special Educators	3
480781	Programming for the Transition of Youth with Disabilities - DVI	3
480782	Seminar - Survey of Research Literature in Mild Disabilities (480782 may be taken as an alternative to 480772 by those without prior certification in special education.)	3
489725	Fieldwork with Exceptional Children	3
Electives numbered 220xxx, 230xxx, 420-429xxx, 442-446xxx, 480xxx, 840xxx, or 860xxx selected in consultation with adviser		6



Course Descriptions

SECTION III COURSE DESCRIPTIONS

GENERAL INFORMATION

In the pages to follow, the courses in effect at the time of publication of this bulletin are briefly described. The course number, title, semester credit hours, description, and prerequisites (abbreviated "prereq") are given in that order for each course. Courses are listed alphabetically by college, alphabetically by departments within colleges, and numerically within departments.

Course Numbers: Courses at UW-Whitewater are designated by six-digit numbers. The first two digits generally indicate the department offering the course, while the third digit distinguishes between sub-disciplines within departments. The last three digits indicate the level of the course. Courses numbered 500 or higher are graduate courses, whereas those numbered under 500 are undergraduate courses. Courses numbered 500 through 599 are junior-graduate courses, and those numbered 600 through 699 are senior-graduate courses. Courses numbered 700 or higher are open only to graduate students.

Course Currency Policy: Graduate courses which have not been offered for the four calendar years immediately preceding the issuance of a new bulletin are dropped from the list of approved courses. The term "offered" is defined as (1) a course wherein there has been actual enrollment and wherein instruction has occurred (in graduate/undergraduate courses, undergraduate enrollment will meet this criterion) or (2) a course which during the semester immediately preceding bulletin issuance has been scheduled for registration. Exceptions to this policy must be approved by the Graduate Council.

At the request of the department, courses which are deleted from the bulletin may be banked in an inactive course file for a maximum of four years. Banked courses are not listed in the bulletin. A banked course may be returned to active status by the department with approval of the Graduate Council. Department requests must be accompanied by an updated course outline and bibliography.

COLLEGE OF THE ARTS

ART (11-)

LIBERAL ARTS FOUNDATION COURSE

- 115-701 Art and the Artist in Contemporary Culture** **3 credits**
A slide lecture and discussion course to acquaint students with theories concerning art today as it is affected by the society in which they live, its thought pattern, as well as the social, political, economic and religious setting.

ART STUDIO (110)

- 110-524 Watercolor** **3 credits**
A studio course where exercises and experimentation lead to individual techniques that will be combined with art principles to form aesthetic judgments in watercolor.
- 110-606 Drawing VI** **3 credits**
Advanced studio experience in drawing. Prereq: 9 credits in drawing.
- 110-607 Drawing VII: Research** **3 credits**
A highly specialized course offering directed research in a specific problem related to drawing. Prereq: 9 credits in drawing.
- 110-624 Painting IV** **3 credits**
Advanced studio experience in painting. Prereq: 9 credits in painting.
- 110-625 Painting V: Research** **3 credits**
A highly specialized course offering directed studio research in a specific problem related to painting. Prereq: 9 credits in painting.
- 110-636 Printmaking IV** **3 credits**
Advanced studio experience in printmaking. Prereq: 9 credits in printmaking.
- 110-637 Printmaking V: Research** **3 credits**
A highly specialized course offering directed research in a specific problem related to printmaking. Prereq: 9 credits in printmaking.
- 110-644 Sculpture IV** **3 credits**
Advanced studio experience in sculpture. Prereq: 9 credits in sculpture.
- 110-645 Sculpture V: Research** **3 credits**
A highly specialized course offering directed studio research in a specific created problem related to sculpture. Prereq: 9 credits in sculpture.
- 110-654 Ceramics IV** **3 credits**
Advanced studio experience in ceramics. Prereq: 9 credits in ceramics.
- 110-655 Ceramics V: Research** **3 credits**
A highly specialized course offering directed studio research in a specific creative problem related to ceramics. Prereq: 9 credits in ceramics.
- 110-656 Technical Study in Ceramics** **3 credits**
Exploration of technical concerns within ceramics. Emphasis on clay composition and analysis, glaze calculation and formulation, study of ceramic minerals, kiln design, construction and operation. Prereq: 6 credits in ceramics.

- 110-674 Metal and Jewelry IV** **3 credits**
An advanced course emphasizing design and creation of objects, both wearable and sculptural. Specifically aimed at the serious metals student. Prereq: 9 credits in metal and jewelry.
- 110-675 Metal and Jewelry V: Research** **3 credits**
A highly specialized course offering directed research in a specific creative problem related to metals and jewelry. Prereq: 9 credits in metal and jewelry.
- 110-684 Graphics Design IV** **3 credits**
Emphasis is on conceptual and visual graphic design problem solving in the third dimension. The student analyzes, defines objectives and develops and presents in comprehensive 3-D format, graphic design solutions for package design, point of purchase promotional display, exhibit design and a 3-D area of special interest. Prereq: 9 credits in graphic design.
- 110-685 Graphics Design V: Research** **3 credits**
With consultation and guidance from the instructor, the student defines objectives and realizes graphic design solutions for a self-promotional "resume" and an area of defined graphic special interest. The final presentation encompasses an imaginatively coordinated portfolio of accumulated communication graphics projects reflecting individual interests, capabilities and potential. Prereq: 9 credits in graphic design.
- 110-690 Workshop** **1-3 credits**
A short term studio workshop offering concentrated study of art media or technique. Prereq: Permission of the Workshop Director.
- 110-696 Special Studies** **3-4 credits**
Designed to enable the Art Department to offer special studies, such as study abroad or independent research of a highly specified area. Prereq: Consent of the instructor.
- 110-700 Individual Studies** **1-3 credits**
An opportunity for a student to explore in more detail a specific field of study. Student and adviser decide the study, with the consent of the professor in charge of the study. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to individual studies.
- 110-710 Graduate Studio I** **3-6 credits**
A course designed to provide advanced level studio experience for the graduate art student in a free, informally structured situation with a consulting professor. Prereq: At least three courses in the chosen area or consent of the instructor.
- 110-711 Graduate Studio II** **3-6 credits**
A course designed to provide advanced level studio experience for the graduate art student in a free, informally structured situation with a consulting professor. Prereq: At least three courses in the chosen area or consent of the instructor.
- 110-721 Trends in Art Education** **3 credits**
430-721 A course designed to acquaint the teacher with recent trends in the teaching of art. The sources of contemporary knowledge of the function and structure of art education, the child and his growth in art expression, the development of skills and building the art curriculum will be considered during lecture-discussion sessions. A variety of materials and techniques will be explored in the art workshop.
- 110-740 Research in Studio Art** **3 credits**
An individualized course designed to explore research techniques applicable to the artist-teacher in a designated area of specialization. Restricted to graduate students selecting the thesis exhibition degree requirement.

- 110-798 Workshop** **1-6 credits**
A course characterized by individualized and participatory activities within a group context, the results of which activities are shared with the entire group. Announcement of specific workshops being offered are made as the workshops are developed. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to workshops.

- 110-799 Thesis Research** **1-6 credits**
Guided investigation of an approved thesis topic. Students may receive credit for research activities planned in conjunction with their adviser and leading to the completion of a master's degree. See the Thesis section under Academic Requirements and Policies for credit limitations pertaining to thesis research.

ART HISTORY (115)

- 115-503 Survey of American Art** **3 credits**
A historical survey of American art from Colonial to Contemporary periods. The emphasis is on specific American qualities in comparison with similar European developments and how these qualities were motivated by unique characteristics in American social and cultural developments.
- 115-504 Survey of African and Oceanic Art** **3 credits**
The course is designed to survey the art of two distinct cultural areas which have similar motivations for their visual expression. Emphasis is placed on equatorial Africa, Melanesia, Polynesia and Micronesia.
- 115-505 History of Women in Art** **3 credits**
A study of the contribution of women artists to the fields of architecture, painting, sculpture, printmaking and fibre from the middle ages to the present.
- 115-511 History of Greek and Roman Art** **3 credits**
This course is designed to cover Greek and Roman art and architecture from pre-classical times to the late Roman Empire. Students are introduced to classical archaeology, technology, style, and iconography. Vase painting, architecture, and sculpture are emphasized in the context of the development of the classical tradition.
- 115-512 History of Medieval Art** **3 credits**
A focus on Romanesque and Gothic Art from the late 11th to the 15th centuries, with pre-Romanesque study of the Imperial Roman tradition in architecture, sculpture, and minor arts. Relationships between artistic context, expression, and techniques are explored in the context of medieval cultural history. Emphasis on the development of the Gothic Cathedral and the synthesis of technology, art, and social ideology in medieval France and England.
- 115-513 History of Italian Renaissance Art** **3 credits**
A course designed to trace the development of architecture, painting and sculpture from the early fifteenth century through the sixteenth century in Italy. Emphasis is on the revival of interest in classical traditions and the combination of classic ideals and forms with contemporary artistic themes.
- 115-514 History of Northern Renaissance Art** **3 credits**
This course is designed to study in depth the unique development of Renaissance art outside Italy, specifically in the Lowlands, France, Germany and Spain during the fifteenth and sixteenth centuries.
- 115-515 History of Baroque Art** **3 credits**
An art lecture course covering the leading work in painting, sculpture and architecture in Italy, France, Spain, Germany and The Netherlands, from the Mannerist period to 1800. Slide illustrated.

- 115-516 History of Nineteenth Century Art** **3 credits**
A slide illustrated lecture course examining major social, scientific and technical factors affecting stylistic progressions in painting, photography, architecture and sculpture during the nineteenth century. European art movements will be the principal concern of the course.
- 115-517 History of Modern Architecture** **3 credits**
The major emphasis of this course is the development of the experimental nature of contemporary architectural forms. The student will study this trend from the early engineering solutions of mid-nineteenth century to the complex social and technological solutions of today.
- 115-518 History of 20th Century Art to 1945** **3 credits**
An investigation of the complex visual imagery generated by the social milieu from 1900 to 1945. Emphasis will be on origins, stylistic progressions, and experimental approaches with implications for today's movements. Offered fall semester only.
- 115-519 Concepts in Art Since 1945** **3 credits**
A course designed to study the complex developments in art since 1945. Emphasis will be placed on experimental concepts, their evolution, and their manifestation in today's society. Offered spring semester only.
- 115-696 Special Studies** **1-3 credits**
This course is designed to enable the Art Department to offer special study in the fields of Art History and Art Theory. The specific area will be announced at the time the course is offered.

MUSIC (150)

LIBERAL ARTS FOUNDATION COURSE

The liberal arts foundation course listed below is not to be enrolled in by those in the music emphasis.

- 150-701 Music in Contemporary Culture** **3 credits**
The study of music in the contemporary world. Includes the study of all facets of classical music, trends in contemporary music theater, and the influence of American jazz and popular music on other countries and cultures.

SPECIALIZED COURSES

APPLIED MUSIC

- 150-756 Advanced Conducting** **2 credits**
Advanced study and analysis of conducting techniques. Score reading and interpretation of masterpieces from standard instrumental and choral repertoire.
- 150-767 Advanced Instrumental Techniques (Strings)** **2 credits**
An advanced course in string techniques.
- 150-768 Advanced Instrumental Techniques (Woodwind, Brass, Percussion)** **1 credit**
An advanced course in the theory and practice of playing the woodwind, brass and percussion. May be repeated one semester for credit.
- 150-777 Advanced Voice Class** **1 credit**
Group instruction in singing techniques with emphasis on posture, breathing, diction and tone production for students whose major performance is not voice. May be repeated one semester for credit.

- 150-780 Graduate Applied Music** 1-2 credits
150-781
150-782

- 150-787 Advanced Piano Class** 1 credit
 Group instruction in piano technique, sight-reading and accompaniment for students whose major performance is not piano. May be repeated once for credit.

MUSIC LITERATURE AND HISTORY

- 150-645 Medieval and Renaissance Music** 2 credits
 A study of western music from chant to the advent of opera. Analysis of representative works.
- 150-646 Music of the Baroque Period** 2 credits
 Detailed analysis of representative works by such composers as Monteverdi, Schulz, Corelli, D. Scarlatti, Bach and Handel. Study of performance practices in vocal and instrumental forms. Formerly 150-741.
- 150-647 The Music of the Rococo and Classical Periods** 2 credits
 Musical trends from c. 1720-1827, the development of musical style from Style Galant and Empfindsamer Stil to Haydn, Mozart and Beethoven. Analysis of representative works. Formerly 150-742.
- 150-648 Music of the Romantic Period** 2 credits
 A study of the styles and trends of the nineteenth century through study and analysis of representative works. Formerly 150-743.
- 150-694 Seminar in Music History** 3 credits
 Investigation and discussion of specialized problems in music literature and history. Topics selected on basis of needs and interests of participants in such areas as studies of individual composers, musical styles, and performance practices.

MUSIC THEORY

- 150-655 Form and Analysis** 2 credits
 A study of the basic structural components as they are employed in the traditional long forms. Analysis of selected examples extracted from traditional music literature.
- 150-656 Twentieth Century Theory** 2 credits
 A study of the melodic, rhythmic, and harmonic elements of twentieth century music. Students will work with readings, scores, and recordings and will study the compositional aspects and sight singing skills involved in twentieth century music.
- 150-658 Improvisation: Jazz** 1 credit
 A study of the nomenclature and theoretical principles of jazz from a performance and analytical view using scale and chordal sources in present practice. Prereq: Students should have a technical command of their instruments, voice, or be a member of the Jazz Laboratory Band, or be a director of a school jazz ensemble.
- 150-659 Jazz Arranging and Composition** 2 credits
 A study and analysis of basic jazz and popular music theory, arranging techniques and compositional devices with emphasis on learning scoring practices for ensembles of varied size and instrumentation, including vocal scoring and writing instrumental accompaniments to vocal solos. Prereq: Graduate student, or have completed basic theory sequence if undergraduate student.

- 150-753 Advanced Arranging** **2-3 credits**
Techniques in scoring both small and large vocal and instrumental ensembles. Students enrolling for three credits are required to complete an additional special project in arranging, or to present a written report of research in the area of instrumentation approved in advance by the instructor.
- 150-755 Composition** **2-3 credits**
Original work in various forms and idioms. Students enrolling for three credits are required to submit a composition in one of the more extended forms. Prereq: Consent of instructor.
- 150-792 Seminar in Music Theory** **3 credits**
Investigation and discussion of significant problems in music theory. Topics are selected on basis of needs and desire of participants in such areas as twentieth century practices, theory pedagogy, harmonic and melodic styles.

MUSIC EDUCATION

- 150-625 Music Education for the Exceptional Child** **3 credits**
A course in music education of children and adolescents with specific physical, mental, learning, and emotional handicaps. Emphasis on assessment of handicaps as related to music, construction of individual education programs and mainstreaming techniques. (A 15 credit add-on certification in music for the exceptional child is available. Contact the Music Department Office for details.) Prereq: Consent of instructor.
- 150-667 Jazz Ensemble Techniques** **1 credit**
A study of the techniques needed to direct a school jazz ensemble such as the functions of the instruments, individually and in sections, the various articulations necessary to perform the various styles of jazz, and basic theoretical knowledge for understanding jazz ensemble scores and teaching basic improvisational techniques.
- 150-668 Marching Band Techniques** **1 credit**
A study of the techniques in producing a marching band performance including marching fundamentals, show planning, music selection, auxiliary groups and rehearsal techniques.
- 150-675 Adaptive Music** **4 credits**
A course which provides understanding of the physical, psychological and social functions of music; planning and evaluation procedures for music education, basic music skills for the non-musician; adaptive techniques for using music with and teaching music to EEN children.
- 150-740 Seminar in Music Education Research Techniques** **3 credits**
A basic course for graduate music education students in research methodology in music and music education. Topics covered: Bibliographic techniques in music and music education, basic research design, basic statistical analysis, basic tests and measurement in music education, and the writing of research papers in music education. Prereq: Graduate standing with undergraduate music education major.
- 150-764 Foundations of Music Education** **3 credits**
An examination of the historical, philosophical, and psychological bases for current approaches to music education. Evaluation of present practices with respect to goals, techniques employed, and evidence of effectiveness.
- 150-791 Seminar in Music Education** **3 credits**
Investigation and discussion of contemporary, significant problems in music education. Topics are selected on basis of needs and desires of participants in

such areas as music curriculum, tests and measurement in music, music research techniques and criticism, history and philosophy of music education.

KODALY COURSES

- 150-759 Beginning Training in Kodaly Music Skills** **3 credits**
Practical application and practice in the use of hand signals, sight singing (solmization), ear training, dictation, and analysis, through the sub-pentatonic and pentatonic modes, as applied through the Kodaly approach to music education. Prereq: Evidence of participation in undergraduate or graduate workshops in Kodaly using basic skills and Kodaly pedagogy, or comparable basic knowledge satisfactory to the instructor.
- 150-760 Advanced Training in Kodaly Music Skills** **3 credits**
Intermediate practical application and practice in the use of hand signals, sight-singing (solmization), ear-training, dictation, analysis, and creativity, through the hexatonic and diatonic modes, as well as whole-tone and chromatic scales and harmonics, as applied through the Kodaly approach to music education. Prereq: Successful completion of 150-759 or successful achievement of a test-out exam of 150-759.
- 150-762 Folk Music in the Kodaly Curriculum** **3 credits**
An introduction to folk music analysis, with emphasis upon the traditional folk music literature of the multicultural entities of the United States.
- 150-763 Principles of Kodaly for Choral Directors** **3 credits**
Kodaly principles applied to choral rehearsal and performance.
- 150-765 Methodology in the Kodaly Curriculum** **3 credits**
Collating Kodaly's philosophy, contemporary learning theory folk song materials and pedagogy, into building a music curriculum compatible with the Kodaly approach. Prereq: 150764.

MUSIC MISCELLANEOUS

- 150-690 Workshop** **1-6 credits**
Workshops are established in various areas as need is determined by the department. Announcements of specific workshops being offered are made as the workshops are developed. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to workshops.
- 150-696 Special Studies** **1-4 credits**
A course that is not included in the curriculum but which is offered on topics selected for their timeliness, need, and interest. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to special studies.
- 150-700 Individual Studies** **1-3 credits**
An opportunity for a student to explore in more detail a specific field of study. Student and adviser decide the study, with the consent of the professor in charge of the study. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to individual studies.
- 150-798 Workshop** **1-6 credits**
A course characterized by individualized and participatory activities within a group context, the results of which activities are shared with the entire group. Announcement of specific workshops being offered are made as the workshops are developed. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to workshops.

- 150-799 Thesis Research** **1-6 credits**
 Guided investigation of an approved thesis topic. Students may receive credit for research activities planned in conjunction with their adviser and leading to the completion of a master's degree. See the Thesis section under Academic Requirements and Policies for credit limitations pertaining to thesis research.

THEATRE (133) AND DANCE (131)

Graduate students may elect theatre courses in proper balance in the speech communication emphasis when appropriate to their degree program (M.S. - Communication). Also, when making degree plans, graduate students may elect theatre courses under the M.E.P.D. program instead of election in the M.S. - Communication program.

LIBERAL ARTS FOUNDATION COURSE

- 133-704 Foundations of Dramatic Art** **3 credits**
 An intensive study of the theatre as an art and as a cultural force. The approach is an aesthetic and historical consideration of dramatic literature and the interpretative arts of stage, motion pictures, radio and television.

SPECIALIZED COURSES

- 133-500 Summer Theatre Production** **1-6 credits**
 This course is designed for qualified students to participate in the performance, management, costume and set construction, lighting, and sound operation of an on-campus repertory theatre. Prereq: Audition or interview and consent of department.
- 133-507 Theatre Management and Promotion** **3 credits**
 A study of theory and practice in theatre management, including ticket office procedures, house management, publicity and promotion and the special problems in educational, community, and professional theatre.
- 133-525 Improvisational Drama** **3 credits**
 A study of the techniques of non-scripted drama, including theatre games, improvised scenes, creative drama and story dramatization. Implications and uses of non-scripted drama for education and performance are explored through lectures, demonstrations and group participation.
- 133-543 Theatrical Costuming** **3 credits**
 A lecture/laboratory course to study and practice the basic principles of theatrical costuming, including the process of costuming a play and the fundamentals of pattern making and costume construction. Construction of a costume is required.
- 133-546 Survey of Modern Drama** **3 credits**
 A study of the trends and developments in the modern theatre from the Romantics and early Realists to the Theatre of the Absurd, with emphasis on literary history and staging problems. May be team-taught with English faculty. Prereq: 133-270 or consent of instructor.
- 133-633 Directing II** **3 credits**
 The study and application of contemporary directing theories and an exploration of approaches to production styles; includes the direction of a 30-40 minute studio production. Prereq: 133-332 or consent of instructor.
- 133-643 Costume Design** **3 credits**
 A lecture/laboratory course to study the history and the basic principles and techniques of costume design and to practice the design of historical, naturalistic and non-realistic costumes.

- 133-671 History of the Theatre Through 1550 A.D.** **3 credits**
Traces the development of theatre from its origins to 1550 A.D., including theatre and drama in ancient Greece, Rome, the Middle Ages, the Italian Renaissance and the Orient. The course also examines the impact of outside forces on the various arts of the theatre. Prereq: 133270 or consent of instructor.
- 133-672 Theatre History and Drama: 1550-1830** **3 credits**
Traces the development of the theatre in the West from 1550 to 1830, including Neoclassicism, Elizabethan and Restoration theatre and the development of Romanticism. The impact of outside forces on the various arts of the theatre will be examined.
- 133-678 Contemporary Drama** **3 credits**
Analysis of the trends and developments in the theatre of the past 30 years, including the impact of television, motion pictures and other forces on the theatre of today. Prereq: 133-270 or consent of instructor.
- 133-680 Workshop** **1-6 credits**
A study group of less formal organization than the usual college course in which students share in the identification of problems and issues to be studied, principles to be discussed or methods and resources to be used. Offered on demand.
- 133-692 Field Study** **1-6 credits**
A study for which data is gathered from sources broader than the classroom or laboratory, often involving off-campus work study experience in an area which has been selected for exploration, such as summer tours in theatre. Offered on demand.
- 133-696 Special Studies** **1-3 credits**
A course which is not regularly included in the curriculum but which is offered from time to time on topics in theatre selected on the basis of need, interest or timeliness.
- 133-699 Production Project** **3 credits**
Directing, designing or writing a full-length play, or the planning and presentation of a full-length acting recital or theatrical promotion campaign. The project will be conducted under the supervision of the Theatre/Dance Department faculty, and will be presented for the university and community. Prereq: 25 credits in theatre and submission and approval of proposal by the Theatre Department.
- 133-700 Individual Studies** **1-3 credits**
An opportunity for a student to explore in more detail a specific field of study. Student and adviser decide the study, with the consent of the professor in charge of the study. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to individual studies.
- 133-758 Workshop** **1-6 credits**
A course characterized by individualized and participatory activities within a group context, the results of which activities are shared with the entire group. Announcement of specific workshops being offered are made as the workshops are developed. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to workshops.

COLLEGE OF BUSINESS AND ECONOMICS

ACCOUNTING (210)

- 210-541 Intermediate Accounting I** **3 credits**
Interpretation and application of accounting principles involving current assets and liabilities, investments and noncurrent liabilities along with internal and external reporting of operations in these areas. Prereq: 210-244 or 210-701.
- 210-543 Intermediate Accounting II** **3 credits**
Interpretation and application of accounting principles involving stockholders' equity, intangibles, plant and equipment, funds flow, financial statement analysis, and price-level adjusted statements. Prereq: 210-341 or 210-541.
- 210-651 Income Tax Accounting** **3 credits**
A study of United States and Wisconsin income tax laws with emphasis on the individual taxpayer. The study includes a review of current proposals, discussion of practical problems in tax planning and practice in the preparation of tax returns. Prereq: 210-244 or 210-701.
- 210-690 Workshop** **1-3 credits**
Workshops are established in various areas as the need is determined by the department. Announcements of specific workshops being offered are made as the workshops are developed. Prereq: Consent of instructor.
- 210-696 Special Studies** **1-3 credits**
A course designed to give students an opportunity to pursue special topics in accounting according to the individual interests and career objectives of the student. A limit of three credits can be applied toward the accounting major and limit of six credits toward a degree.
- 210-700 Individual Studies** **1-3 credits**
An opportunity for a student to explore in more detail a specific field of study. Student and adviser decide the study, with the consent of the professor in charge of the study. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to individual studies. May be repeated one time.
- 210-701 Accounting Foundations** **3 credits**
This course involves an in-depth coverage of financial accounting topics similar to Accounting Concepts at the undergraduate level. The content includes a study of the accounting cycle, financial statement preparation and interpretation, assets, liabilities, and owner's equity.
- 210-725 Profit Planning and Control** **3 credits**
An in-depth look at the concepts and techniques of creating a firm's financial plan. Emphasis is on analysis of past costs so as to predict the future patterns, forecasting of sales, production, cash, and other components, while stressing the need for the commitment, involvement and coordination of management. Prereq: 210-701.
- 210-726 Management Cost Accounting** **3 credits**
This course examines the acquisition, analysis, and application of accounting information in the management decision process. Topics discussed are product costing, joint-cost allocation, C-V-P analysis, profit planning and control, pricing strategies, and tactical decisions. Prereq: 210-701.
- 210-751 Financial Accounting** **3 credits**
Advanced study of the theory and accounting for joint ventures, consignments,

installment sales and estates and trusts. Application of actuarial science principles and procedures to business problems. A study of insolvency and receivership accounting, the principles of governmental (fund) accounting, and recent FASB Statements not covered in 210-541, 210-543 and 210-752. Prereq: 210-543.

- 210-752 Advanced Financial Accounting** **3 credits**
An in-depth study of (1) partnership accounting, (2) accounting for business combinations and segments of the business, (3) international aspects of accounting. A review of current issues relating to business combinations and consolidated statements. A discussion of international accounting standards. Prereq: 210-543.

- 210-755 Managerial Accounting and Controllershship** **3 credits**
Managerial requirements and uses of accounting information, flexible budgeting, capital budgeting and break-even analysis. Analysis of cost-profit-volume relationships, direct costing, historical costs, current costs and price level adjustments. Includes application of regression analysis, linear programming, discounted cash flow techniques, PERT, and EOQ. Prereq: 210-726 and 230-703.

- 210-756 Corporate and Special Entities Taxation** **3 credits**
An in-depth study of (1) corporate taxation, (2) partnership and subchapter S taxation, and (3) estate and gift taxation. Compliance and tax planning are both emphasized. Fundamentals of tax research are explored. Prereq: 210-651.

- 210-761 Accounting and Management Information Systems** **3 credits**
A study of the theory and principles underlying the design and installation of accounting and management information systems; consideration of the integration and impact of the computer on the total information system. Prereq: 250-705 and 210-543.

- 210-765 Advanced Auditing** **3 credits**
An extensive study of audit programs, standards, responsibilities and controls. A review of AICPA releases and publications. Consideration of the impact of the computer and the uses of statistical sampling techniques on auditing procedures and practice. Prereq: 210-761 and 210-543.

- 210-781 Advanced Accounting Theory I** **3 credits**
A study of accounting theory at the advanced level. An in-depth study of accounting principles and standards with particular reference to established theory. Prereq: 210-543 or consent of instructor.

- 210-790 Readings and Research in Accounting** **1-3 credits**
Study of selected contemporary areas in accounting through readings in current research and literature. Prereq: Consent of instructor.

- 210-798 Workshop** **1-6 credits**
A course characterized by individualized and participatory activities within a group context, the results of which activities are shared with the entire group. Announcement of specific workshops being offered are made as the workshops are developed. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to workshops.

BUSINESS EDUCATION AND OFFICE ADMINISTRATION (220)

LIBERAL ARTS FOUNDATION COURSE

- 220-701 Consumers in Contemporary Society** **1-3 credits**
Study for managing personal resources; emphasis on goals, financial analysis, decision making related to acquiring goods, services, credit; protections through health, life, property and social insurances; enhancing financial position through

savings alternatives, stocks, bonds, mutual funds, tax shelters; utilized microcomputer and compound interest tables in the decision process. Not to be enrolled in by those in the business education emphasis.

SPECIALIZED COURSES

- 220-545 Introduction to Word Processing** **3 credits**
An introductory course in word processing emphasizing how word processing interacts with other office systems components. Development of hardware and software abilities continue. Field trips to word/information processing centers as well as case problems bring realism to the classroom setting. Prereq: 220-255 or consent of instructor.
- 220-561 Merchandise Management** **3 credits**
Instruction concerning business functions involved in bringing goods to the retail point of sale and adjusting and merchandising stock so the retail businessman can satisfy customer demand. The course explores in depth the issues, basic concepts, problems and techniques involved in effective retail merchandising management.
- 220-562 Visual Merchandising** **2 credits**
A specialized course dealing with application of principles of visual display for retail merchandise. Designed to familiarize students with aspects of visual merchandising from window and interior display standpoints. Intended for students who plan to teach appropriate business courses or work in retailing.
- 220-563 Retail Sales and Distribution** **3 credits**
The various methods of retail selling and distribution of products and services are covered with emphasis on the technical and psychological aspects of department store as well as small retail store distribution.
- 220-643 Administrative Office Management** **3 credits**
The solution of office problems from the point of view of the supervisor, including principles of management and office organization with consideration to physical facilities, the general nature of office work, personnel relations, and managerial control of office output.
- 220-645 Records Management** **3 credits**
The development of the principles of records administration including creation, use, maintenance and destruction. A discussion of storage facilities, records classification, forms and reports control, protection of vital records and micro-image systems.
- 220-647 Data Processing for Business Teachers** **3 credits**
A study of the concepts, procedures, and hardware used in business in a systems approach to data processing. An introduction to program development with BASIC programming through microcomputer and mainframe experience. An understanding of how data processing can be integrated throughout the business education curriculum.
- 220-660 Principles of Vocational Education** **2 credits**
History and development of vocational education both in the United States and Wisconsin are explored. The administrative structure of vocational education at the local, state, and national levels is outlined. Vocational program areas are discussed with emphasis given to issues, trends, and problems in vocational education. Meets the Department of Public Instruction's course requirement for vocational certification and fulfills one of the certification requirements of the Wisconsin Board of Vocational, Technical and Adult Education.

- 220-661 Organization and Administration of Vocational Programs** **3 credits**
 Study of vocational occupational preparation programs which utilize the project/simulation method or cooperative method of instruction. Includes the knowledge and procedures necessary to implement the quality components of an occupational program. Current issues facing vocational education will be discussed. The cooperative method, procedures, and techniques are stressed. Meets the Department of Public Instruction's course requirement for vocational certification. Prereq: 220-460 or 220-660 or equivalent.
- 220-662 Coordination Techniques** **1 credit**
 This course covers techniques of how a vocational education teacher can successfully coordinate a vocational program using the cooperative method. Students will have the opportunity to demonstrate their skill in coordination techniques through field experience and role playing. Specific topical areas covered are: how to locate job training sites, how to convince the employer to participate in the program, and how to articulate the classroom curriculum with the part-time job experience. Prereq: 220-460 or 220-660 or equivalent.
- 220-690 Workshop** **1-3 credits**
 A course characterized by individualized and participatory activities within a group context. The results of these activities are shared with the entire group. Announcement of specific workshops being offered are made as the workshops are developed. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to workshops.
- 220-696 Special Studies** **1-3 credits**
 A course which is not included in the curriculum but which is offered on topics selected for their timeliness, need, and interest. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to special studies.
- 220-700 Individual Studies** **1-3 credits**
 An opportunity for a student to explore in more detail a specific field of study. Student and adviser decide the study and number of credits with the consent of the professor in charge of the study. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to individual studies.
- 220-738 Seminar in Business Communication** **3 credits**
 A course consisting of the study of levels of language, organizational techniques, the development of ideas, and clarity of expression. Frequent writing exercises and extensive analyses of actual business communication are a major part of this course. The culmination of the course is the development of an article written for publication.
- 220-751 Improvement of Instruction in Skill Subjects** **3 credits**
 A study of current trends in the teaching of skill subjects at the secondary and post-secondary levels. Current literature and research are utilized in discussing curriculum, objectives, instructional materials, equipment and methodology.
- 220-752 Improvement of Instruction in Accounting and Basic Business Education** **3 credits**
 Study of the teaching-learning system for accounting and courses involved with education about business as related to learning domains, objectives, teaching techniques, new materials, review and application of research, present status through current literature, incorporating economic education into subjects, and utilizing microcomputers as a tool for learning.

- 220-754 Improvement of Instruction in Business Communication** **3 credits**
A course designed to provide help in developing a business communication course and course materials. Innovative approaches to the teaching of business communication will be explored and creative teaching materials will be developed.
- 220-756 Improvement of Instruction in Marketing and Distributive Education** **2 credits**
A study of the issues, trends, and problems that are unique to marketing and distributive education. Included as topics of study in the course would be curriculum development updates and updates on the three major support methods that are used with the related in-class instruction. Additional topics will focus on current or changing business practices in marketing occupations that could have a direct impact on the marketing and distributive education curriculum.
- 220-758 Trends in Business Teaching — Secretarial** **2 credits**
Designed to improve classroom instruction in the office occupations area through an evaluation of research and current literature.
- 220-762 Current Problems in Business Education** **1-3 credits**
A study of the problems currently confronting the supervisor, teacher, and student of business education on both secondary and post-secondary levels. Includes a study of curriculum development and objectives of business education.
- 220-764 Administration and Supervision of Business Education** **3 credits**
Administration and supervisory problems of business education programs in secondary and post-secondary schools. Topics include determining goals and objectives; building strategies and curriculum to reach the goals and objectives; evaluation systems; and leadership skills in building team consensus and motivation.
- 220-765 Occupational Information and Vocational Guidance** **3 credits**
Study of guidance and career selection procedures particularly appropriate for use with students in secondary and post-secondary vocational education programs; teaching occupational information, career exploration, interviewing techniques, employment and training opportunities for the new employee and those retraining; networking with businesses, State agencies, career counselors for keeping current.
- 220-766 Word Processing and Management** **3 credits**
A panoramic view of word processing equipment to be used in business offices. An opportunity for business teachers to use effectively equipment found in word processing systems through discussion and hands-on experience.
- 220-767 Office Communications, Systems, and Procedures** **3 credits**
The modern office as the center of communications for the business enterprise. Exploration of worker competencies necessary for employment in the office of today. Designed for business teachers in secondary and post-secondary schools who are concerned with preparing students for office occupations.
- 220-769 Basic Business Concepts** **3 credits**
Study of the organization and operation of the business enterprise system in the American economic system and in the global world economy, the functional and supportive dimensions, relation of economics and social issues to business, world interdependence, and utilizes current periodicals for the latest state of the art.
- 220-771 Administrative Support Information Processing** **2 credits**
As an introduction to office information support systems this course will provide theory and application of equipment used in the automated office. "Hands-on" experience will be provided. Prereq: 220244 or equivalent or consent of instructor.

- 220-792 Occupational Experience** **3-6 credits**
Designed to be undertaken by qualified business teachers and prospective teachers through participation in a coordinated work-study program in certain business offices of retail establishments. This course correlates classroom training and experience with office or distributive experience and standards. Prereq: Advance approval of instructor.

- 220-796 Special Studies in Business Education** **1-6 credits**
A course which is not included in the curriculum but which is offered on topics selected for their timeliness, need, and interest. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to special studies.

- 220-798 Workshop** **1-3 credits**
A course characterized by individualized and participatory activities within a group context. The results of these activities are shared with the entire group. Announcements of specific workshops being offered are made as the workshops are developed. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to workshops.

- 220-799 Thesis Research** **1-3 credits**
If a student elects a thesis, a total of not more than 6 credits may be given for work on a thesis throughout the sessions in which the thesis is being written. The number of credits allowed for the thesis is arranged with emphasis professor and paper adviser.

ECONOMICS (230)

SPECIALIZED COURSES

- 230-545 Business Statistics II** **3 credits**
Development of probability theory and distributions, frequency and sampling distributions, inferential statistics including estimation, hypothesis testing and Bayesian techniques, decision theory under uncertainty, multiple correlation and regression, time series analysis, analysis of variance, and statistical use of computers. Applications oriented to business and economics. Prereq: 230-245.
- 230-604 History of Economic Thought** **3 credits**
A study of the development of economic ideas, with emphasis on classical, neoclassical, socialist, Keynesian and institutional schools of thought. Prereq: 230-211, 230-212.
- 230-611 Intermediate Microeconomic Analysis** **3 credits**
Price and modern microeconomic theory, pricing of products and factors of production under different market structures; modern approaches to theories of consumption and production; general equilibrium theory. Prereq: 230-212.
- 230-612 Intermediate Macroeconomic Analysis** **3 credits**
Income and modern macroeconomic theory; general aggregative systems; national income determination theory; composition and measurement of the national income; analysis of income generation; government policy. Prereq: 230-212.
- 230-638 Urban Economics** **3 credits**
Focusing on the important aspects of urban economics: the theory of housing, location, property values and race, slums and urban renewal, public policy and the urban environment. Practical aspects of proposed solutions. Prereq: 230-211.

- 230-641 The Economics of Industrial Organization** **3 credits**
Application of economic theory and analysis to case studies in industry in terms of market structure, market conduct, and industry performance. Extensive treatment of the related problems of establishing criteria, gathering and evaluating empirical evidence, and formulating and implementing various public policies concerned with industrial organization and market behavior. Prereq: 230-212 or consent of instructor.
- 230-659 Comparative Economic Systems** **3 credits**
A study of the major types of economic organizations: Capitalistic, socialistic, communitistic; study of several real world economies with special emphasis on Soviet-type economies. Prereq: 230-212.
- 230-690 Workshop** **1-3 credits**
A workshop emphasizing a critical examination of current problems in economics. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to workshops.
- 230-696 Special Studies** **1-3 credits**
A course which is not included in the curriculum but which is offered on topics selected for their timeliness, need, and interest. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to special studies.
- 230-700 Individual Studies** **1-3 credits**
An opportunity for a student to explore in more detail a specific field of study. Student and adviser decide the study, with the consent of the professor in charge of the study. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to individual studies.
- 230-703 Statistics Foundations** **3 credits**
Introduction to descriptive statistics and basic statistical methods as applied to scientific problem solving and decision making. Topics covered include: Descriptive statistics, elementary probability theory, theoretical distributions, sampling distributions, estimation, tests of hypothesis, simple linear regression and correlation analysis, and index numbers.
- 230-704 Economic Foundations** **3 credits**
A study of micro and macro economic tools of analysis. The functioning of a market economy in product and factor markets under alternative market structures. National income, fiscal policy and the role of the money supply.
- 230-734 Economic Concepts for Teachers (4-8)** **3 credits**
This course is designed to introduce teachers to selected economic concepts and principles deemed fundamental to economic understanding, and to provide for the development of teaching related materials which will permit teachers to bring their newly acquired economic understanding to the student. Special attention will be given to the use of video and microcomputer equipment.
- 230-736 Business Conditions Analysis** **3 credits**
A study of the macroeconomic structure and operations of the economic system. Analysis of fluctuations in national income, output, employment, and prices and the implication of such changes on business decisions. Evaluation of the influence of monetary and fiscal policies on economic activity. Assessment of the various approaches and methodologies available for forecasting business conditions. Prereq: 230-704.

- 230-737 Managerial Economics** **3 credits**
Applications of microeconomic theory to problems of formulating managerial decisions. Emphasis on economics as a science that facilitates decision making. Topics considered include optimization techniques, risk analysis and estimation of demand and costs of production, market structures and pricing practice, and antitrust economics. Integrates theory and practice. Prereq: 230-703, 230-704, and 260-702.
- 230-751 Economics of Regulation** **3 credits**
The rationale for government regulation and intervention in different situations. Antitrust policy. Several different models of regulation. The economic effects of regulation on public utilities, transportation, pollution control, protection of consumers. Prereq: 230-704.
- 230-754 Monetary Theory and Policy** **3 credits**
Theories of money and inflation, structure of debt, policies of selected financial institutions, including the Federal Reserve System and their effects on the money supply and its velocity. Prereq: 230-704.
- 230-758 Advanced International Economics** **3 credits**
A study of international trade and finance issues; Multinational enterprises, international investments, currency problems, balance of payments issues. Analyzes the structure and scope of world trade and international financial markets in developed and developing countries. Prereq: 230-704.
- 230-761 Business and Economic Forecasting** **3 credits**
Techniques for operational business forecasting with emphasis on time-series methods. Topics covered include single and multiequation regression models; trend analysis; smoothing techniques, decomposition methods; Box-Jenkins time series methods; evaluation of forecasts; and the integration of forecasting in the decision-making process. Prereq: 230-703, 230-704.
- 230-767 Advanced Managerial Economics** **3 credits**
The course approaches managerial economics from a decision-making perspective. Discussion of the logic of mathematical tools and decision making. Demand, production, costs and pricing; functional forms, empirical results, problems of estimation. Pricing and decision making in public enterprises. Input-output analysis. Current research is emphasized. Prereq: 230-737.
- 230-790 Readings and Research in Economics** **3 credits**
Directed readings in current research and literature selected to apply to a contemporary economic field, problem or issue. Prereq: Graduate standing and consent of instructor.
- 230-796 Workshop** **1-6 credits**
A course characterized by individualized and participatory activities within a group context, the results of which activities are shared with the entire group. Announcement of specific workshops being offered are made as the workshops are developed. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to workshops.
- 230-799 Thesis Research** **1-6 credits**
Original research supervised by an adviser. A committee of three, including the adviser, will evaluate the acceptability of the thesis and number of credits allowable. Adviser and other committee members will be appointed by department chairperson after consultation with student. A total of 1-6 credits is authorized. Prereq: Graduate standing and 28 credits in undergraduate and graduate economics courses. Some of these may be taken concurrently with approval of adviser.

FINANCE AND BUSINESS LAW (240)

- 240-620 Bank Administration** **3 credits**
Commercial banking, principles and practices, comprehensively treated with emphasis on operations and administration, bank services, credit analysis, loan and investment policies, profit planning and control. This course cannot be used to satisfy the MBA degree requirement. Prereq: 240-344.
- 240-642 Estates and Trusts** **3 credits**
A study of the law relating to real and personal property, wills, estates, trusts and the responsibility of fiduciaries in handling other people's assets. Prereq: 240-341 or consent of instructor.
- 240-646 Insurance** **3 credits**
Principles of risk and insurance and their applications to business management and personal affairs. Analysis of concepts and methods of handling risks; insurance carriers and contracts; survey of policies for fire insurance, business interruption, liability, automobile, life and health. Prereq: 240-344 or consent of instructor.
- 240-656 Security Analysis** **3 credits**
A detailed examination of the various classes of securities available for investors, and the development of techniques used to reach dependable conclusions as to the safety and attractiveness of a given security at the current market price or at some assumed price. Prereq: 240-345.
- 240-660 Advanced Property and Casualty Insurance** **3 credits**
Consideration of advanced topics in property and casualty insurance. Among those items covered are direct and indirect property coverages, inland marine insurance, liability coverage, including its legal foundations, workmen's compensation, the general liability contract, crime coverages, surety and fidelity bonding and insurance regulations. Prereq: 240-446 or consent of instructor.
- 240-664 Advanced Life and Health Insurance and Pensions** **3 credits**
Consideration of advanced topics in life and health insurance. Among those topics covered are principles underlying life insurance, individual life insurance contracts, business uses of life insurance, fixed and variable annuities, individual health coverages, group insurance principles and uses, and pensions. Prereq: 240-446 or consent of instructor.
- 240-690 Workshop** **1-3 credits**
Workshops are established in various areas as the need is determined by the department. Announcements of specific workshops are made as the workshops are developed. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to workshops.
- 240-696 Special Studies** **1-3 credits**
A course offered on special topics in finance or business law on the basis of need, interest or timeliness. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to special studies.
- 240-700 Individual Studies** **1-3 credits**
An opportunity for a student to explore in more detail a specific field of study. Student and adviser will develop a proposal, with the consent of the professor(s) in charge of the study. A student may satisfy up to 3 credits of the 9 credit emphasis by pursuing this course with one or more members of the graduate faculty. A copy of the proposal must be on file in the chairman's office prior to registration.

- 240-718 Financial Management** **3 credits**
 Consideration of the finance function as it relates to other organizational roles, the use of capital budgeting techniques, other quantitative methods, and model building in decision making. Prereq: Graduate standing, 240-344, or 210-701. Not open to those who have an undergraduate finance degree.
- 240-721 The Legal Environment of Business** **3 credits**
 Macro Law (the nature, formation, and application of law in general) stressed in the environmental approach. The course includes the study of legislation relating to consumer protection, product liability, labor law, securities regulation, and antitrust legislation.
- 240-731 Advanced Trusts and Estates** **3 credits**
 This course will involve an advanced, in depth, study of the law which relates to the field of probate, including the legal responsibilities of trustees, guardians, personal representatives, conservators and other fiduciaries. Prereq: 240-721 or 240-341. Credit for Estates and Trusts: 240-442/240-642 and 240-731 will not be given.
- 240-739 Financial Planning Process** **3 credits**
 This course serves as an introduction to the Financial Services occupational area of Financial Planning. It includes study of the following areas: determining financial objectives, formulating investment objectives, tax planning, insurance planning, retirement planning and estate planning. Prereq: 240-718.
- 240-750 Real Estate Finance and Investment** **3 credits**
 Consideration of the institutional environment affecting the financing and ownership of real estate. Detailed evaluation of both the nature of and the risks associated with lender and investor yields from real estate investment. Prereq: 240-718 or consent of instructor.
- 240-755 Multinational Business Finance** **3 credits**
 An advanced course of international financial principles covering major macroeconomic factors affecting international corporate decisions, foreign exchange transactions, hedging strategies, international capital structure decisions, capital budgeting, international financial markets and taxation. Prereq: 240-344/240-718 or equivalent.
- 240-760 Financial Markets** **3 credits**
 Structure and operation of the markets for corporate debt and equity securities, municipal obligations and mortgages. Detailed examination of stock markets and their use by investors. Prereq: 240-344 and 240-345 or 240-718.
- 240-770 Capital Budgeting** **3 credits**
 Financial planning for working capital management and long range investment projects. Emphasis on capital budgeting problem solving. Readings on capital budgeting and related topics; cost of capital structure, and dividend policy. Prereq: 240-718 or concurrent enrollment.
- 240-780 Portfolio Theory and Practice** **3 credits**
 Formulation of objectives and the development of portfolios to meet these objectives for individuals and institutions. Special attention will be focused on statistical and analytical techniques for portfolio selection and management. Prereq: 240-718 and 260-731 or consent of instructor.
- 240-790 Readings and Research in Finance** **3 credits**
 Selected readings in current periodicals and publications chosen to deal with contemporary problems and issues in investments, banking institutions and financial management.

- 240-798 Workshop** **1-6 credits**
 A course characterized by individualized and participatory activities within a group context, the results of which activities are shared with the entire group. Announcement of specific workshops being offered are made as the workshops are developed. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to workshops.
- 240-799 Thesis Research** **1-6 credits**
 Original research supervised by an adviser. A committee of three, including the adviser, will evaluate the acceptability of the thesis and number of credits allowable. Adviser and other committee members will be appointed by department chairperson after consultation with student. A total of 1-6 credits is authorized. Prereq: Graduate standing and 28 credits in undergraduate and graduate economics courses. Some of these may be taken concurrently with approval of adviser.

MANAGEMENT (250)

Students should check with the Associate Dean, College of Business and Economics, to find out when courses will be offered and the current prerequisites.

- 250-551 Productivity Analysis** **3 credits**
 Deals with key functions of Work Simplification and Work Measurement in implementing cost reduction. Work Simplification training programs have proven especially successful in a wide variety of companies. Work Measurement often establishes the required time for an operation. Standard Data and Methods Time Measurement are additional areas studied. Prereq: 250-306 or con reg.
- 250-696 Special Studies** **1-3 credits**
 A course offered on special topics in management on the basis of need, interest or timeliness. A limit of three credits can be applied toward a major or six credits toward degree. Prereq: Consent of instructor.
- 250-700 Individual Studies** **1-3 credits**
 An opportunity for a student to explore in more detail a specific field of study. Student and adviser decide the study, with the consent of the professor in charge of the study and the approval of the College Graduate Studies Committee. Consult the Associate Dean's Office for further information/limitations.
- 250-705 Information System Foundations** **3 credits**
 An introductory course intended to provide a basic knowledge of information systems and computers. Includes the study of information system concepts, the use of information systems for management decision-making, the impact of information systems on management, user application development, hands-on experience, elementary programming, and productivity packages.
- 250-719 Operations Management** **3 credits**
 A survey course focusing on the performance of managerial activities entailed in selecting, designing, operating, controlling, and updating productive systems. This life cycle approach will include treatment of non-manufacturing activities, and will draw heavily upon latest developments in the field. Prereq: 260-702, 230-703, and 250-705.
- 250-720 Organization Theory and Policy** **3 credits**
 An analysis of organization theory and research. The history of organization theory and the economic, political and social influences on its development. Major theories in scientific management, classical administrative organization, neoclassical management theory and modern organization theory, and policy formation are covered.

- 250-734 Introduction to Computer Based Information Systems** **3 credits**
A course applicable to all MBA students that examines the role and nature of Computer Based Information Systems (CBIS) in organizations and investigates the effects of these systems on managerial decision making. Emphasis is placed on the analysis of business environment, planning/organizing/controlling CBIS effort, and designing/implementing in a fourth generation language. Prereq: 250-705 or its equivalent or consent of instructor.
- 250-741 Managerial and Organizational Behavior** **3 credits**
Case analysis of human problems in the business organization. Application of findings of behavioral science research to organizational problems. Development and leadership skills. Prereq: 250-720 and 9 credits.
- 250-742 Decision Support Systems** **3 credits**
A study of computer information systems which assist managers in their problem solving and decision-making responsibilities. Emphasis is on the specification and design of such systems including user interfaces, modeling, and data analysis and design. Students will learn to use a DSS/fourth generation modeling language. Applicable to all MBA students. Prereq: 250-734 or its equivalent.
- 250-743 Data Base Management** **3 credits**
An introduction to data design and the management of data as a corporate resource. An in-depth study of the relational database model with emphasis on loading, modifying and querying the database using a host language like SQL. Prereq: 250-734.
- 250-751 Management of Human Resources I** **3 credits**
An examination of the organization and administration of the personnel function in management. It is concerned with the employment, training, safety and health, employees services, and employee relations functions of personnel administration. Attention is focused on a limited number of topics drawn from these areas so more crucial concepts and methods involved may be dealt with in depth.
- 250-752 Management of Human Resources II** **3 credits**
An examination of compensation programs in profit/nonprofit organizations. It is concerned with a detailed study of job structures, job evaluation, performance appraisal, wage surveys, basic systems/plans of compensation, and fringe benefits. Attention is focused on a limited number of topics from these areas so more crucial concepts/methods may be dealt with in depth. Prereq: 250-751.
- 250-754 Expert Systems in Business** **3 credits**
An introduction to the application of expert systems to the solution of business problems. The student learns to select business problems which can be solved through the use of expert systems. The student learns to structure expert systems to solve appropriate business problems. Prereq: 250-742 and 250-743.
- 250-758 Conflict Resolution in Labor Relations** **3 credits**
Primary concern is with contract negotiation and administration. Emphasis is on understanding the forces affecting the decisions of the parties to a labor contract. A dynamic approach is taken to examine difficulties that arise in attempting to administer a collectively established relationship. Study of conflict resolution including mediation and arbitration.
- 250-759 Business and Society** **3 credits**
Analyzes (1) a broad spectrum of social, political, ethical, and legal frameworks within which firms must function, and (2) social trends and their underlying causes as they can affect businesses. Prereq: 250-720 or 240-721.

- 250-761 Operations Planning and Control** **3 credits**
A case-study course focusing on major strategic operating decisions faced by production vice-presidents and their staffs. These decisions include production capacity, type of production system, vertical integration and timing of change. The requirement for operational performance which originates in the corporate planning process and the task of profit planning in various industries is considered via case studies of real world business situations. A research paper and presentation covering in depth an industry of interest to the student are required. Text and cases are used. Prereq: 250-719.
- 250-762 Inventory Systems** **3 credits**
A quantitative course providing a thorough treatment of the many common and most useful inventory systems and their impact on materials management. Systems covered will include purchase/production order quantity systems, fixed order size and interval systems under risk and uncertainty, and single and multiproduct stochastic models. Prereq: 250-719 and 250-731.
- 250-768 Manufacturing Policy** **3 credits**
A course focusing on the strategic implications of major manufacturing decisions facing the top manager, such as the manufacturing vice-president. Different industries are explored relative to their evolving technologies, critical processes, cost structures, and competitive conditions, including global competition. Prereq: 250-719.
- 250-769 Manufacturing Seminar** **3 credits**
A quantitative course focusing on techniques that are primarily unique to the production/manufacturing area. Topics may include facility layout, line balancing, scheduling, sequencing, reliability, quality control, and others of use to the functional specialist in systems producing goods or services. A research paper and seminar presentation covering a topic of interest will be used. Prereq: 250-719.
- 250-770 Organization Design** **3 credits**
A course that examines organizational analysis implications and develops rationale for management practice, effective organizational structures through analysis of relationships of organizational variables, and firm-environment matches. Provides analysis of the major overall considerations relevant to the effective design of organizations. Prereq: 250-720 or equivalent.
- 250-771 Strategic Management & Planning** **3 credits**
The course deals with practical methods and applications based upon sound theory, research, and practice of strategic management and planning, and management control and operational control systems. Comparative analysis of emerging strategic management frameworks will be examined with implications for management practice. Prereq: 250-720 or equivalent.
- 250-777 International Management** **3 credits**
The course deals with concepts, problems, and research in the managerial aspects of international business. Prereq: 250-720 or equivalent.
- 250-790 Readings and Research in Management** **3 credits**
Study of a selected area in management through readings and/or empirical research. Prereq: Permission of instructor and department chairperson.
- 250-791 Business Policy and Environment** **3 credits**
Study of the legal, political, social, technological and economic environment in which business operates. The course integrates this environmental study with development of organization policy concerning planning and administration of the functional activities of the business. A coverage of corporate social responsibility and business ethics is also included in this course. Prereq: Last semester of program.

250-798 Workshop **1-6 credits**
Workshops are established in various areas as the need is determined by the department. Announcement of specific workshops being offered are made as the workshops are developed.

250-799 Thesis Research **1-6 credits**
Guided investigation of an approved thesis topic. Student may receive credit for research activities planned in conjunction with his/her adviser and thesis committee and leading to the completion of a master's degree. Requires advance approval of the MBA Program Director.

MARKETING (260)

260-551 International Marketing **3 credits**
A survey of the structure, techniques, problems and general environment of marketing abroad. Subjects include organization, promotion, finance, legal aspects and operation. Prereq: 260-311.

260-620 Consumer Behavior **3 credits**
Survey of social science theories pertinent to information processing, human behavior, and social interaction. Emphasis is placed on using this information to develop marketing strategies. Prereq: 260-311.

260-636 Purchasing and Materials Management **3 credits**
An integrated approach to the problems of inventory determination, purchasing, incoming traffic and industrial marketing from the viewpoint of the manager of materials. Cases studied. Prereq: 260-311.

260-642 Physical Distribution Systems Analysis **3 credits**
Analysis of the problems encountered in the physical movement of goods from the end of production to the consumer. Surveyed in this course are various techniques and methods for analyzing spatial arrangements of markets, plant and warehouse location, inventory systems, selection of carrier alternatives and physical movement channels. Prereq: 260-311 and 230-245.

260-696 Special Studies **1-3 credits**
A course which is offered on special topics in marketing on the basis of need, interest, or timeliness. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to special studies.

260-700 Individual Studies **1-3 credits**
An opportunity for a student to explore in more detail a specific field of study. Student and adviser decide the study, with the consent of the professor in charge of the study. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to individual studies.

260-702 Mathematics Foundations **3 credits**
Development of analytical concepts of mathematics needed for business applications. The course is designed to help students improve their understanding of quantitative and statistical applications in business and related areas.

260-716 Marketing **3 credits**
Analysis of the institutional, behavioral, competitive, legal and intra-firm aspects of the marketing function in business and other organizations. Prereq: Graduate standing and Microeconomics.

260-731 Advanced Statistical Methods **3 credits**
Applications of advanced statistical methods to managerial problems of prediction, inference, parametric and nonparametric, and decision making under uncer-

tainty. Topics emphasized are multiple regression and time series. Prereq: Graduate standing and demonstrated proficiency in mathematics and statistics or 260-702 and 230-703, or 760-143, 760-243 and 230-245.

- 260-732 Operations Research** **3 credits**
Application of scientific problem solving techniques to the business decision process. The model-building process includes linear programming and its applications, both deterministic and stochastic models such as network models, queueing theory, and simulation. Prereq: Graduate standing and demonstrated proficiency in mathematics and statistics or 260-702 and 230-703 or 760-143, 760-243 and 230-245.
- 260-733 Seminar in Methodology of Business Research** **3 credits**
Designed to acquaint graduate students with the research process, its tools and techniques, as well as the methods which form a basis for business planning, decision making and problem solving. Prereq: 260-731 or consent of instructor.
- 260-735 Applied Multivariate Data Analysis** **3 credits**
A study of selected multivariate statistical techniques and their applications in the analysis of business and marketing data.
- 260-751 Buyer Behavior** **3 credits**
The study and explanation of the behavior of consumers, research methods and findings from the behavioral sciences. Prereq: 260-716 or equivalent.
- 260-760 Seminar in Marketing Theory** **3 credits**
Marketing theory is probed and analyzed in terms of its historical development, foci and the current investigation for more systematic and rigorous conceptions of the marketing process. Prereq: 260-716 or equivalent.
- 260-761 International Business (Marketing)** **3 credits**
Fundamental aspects of international business will be studied. Emphasis is placed on decision making in an international setting and appraisal of market opportunities world-wide. Cases will be used to illustrate operational problems of multinational organizations as well as international intermediaries. Prereq: 260-716 or equivalent.
- 260-764 Sales Planning and Market Analysis** **3 credits**
Focus is directed toward the construction of an operational sales model and determination of market potential. Prereq: 230-761 or 230-736 or 260-731 or 260-716.
- 260-770 Product and Price Management** **3 credits**
An in-depth examination of the theoretical framework and empirical findings as they relate to product and pricing decisions. The marketing tasks of new product development and old product management will be examined. Current methods of setting prices will also be discussed. Prereq: 260-716 or equivalent, 230-737 or consent of instructor.
- 260-774 Corporate Marketing Planning** **3 credits**
Analysis of the planning process in the marketing oriented enterprise culminating with the development of a marketing plan based on a current business problem. The supportive nature of staff functions is analyzed from the viewpoint of its contribution to total marketing planning and strategy. Prereq: 260-716 or equivalent.
- 260-780 Seminar in Current Marketing Topics** **3 credits**
Intensive and critical examination focused on a specific substantive marketing problem area. Topics will vary. Prereq: 260-716 or equivalent.

- 260-790 Readings and Research in Marketing** **3 credits**
Study of a selected area in marketing through readings and/or empirical research. Areas of study will be selected by the student in consultation with an adviser. Prereq: Consent of instructor.

- 260-798 Workshop** **1-6 credits**
A course characterized by individualized and participatory activities within a group context, the results of which activities are shared with the entire group. Announcement of specific workshops being offered are made as the workshops are developed. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to workshops.

- 260-799 Thesis Research** **1-3 credits**
Guided investigation of an approved thesis topic. Students may receive credit for research activities planned in conjunction with their adviser and leading to the completion of a master's degree. See the Thesis section under Academic Requirements and Policies for credit limitations pertaining to thesis research.

SCHOOL BUSINESS MANAGEMENT (290)

Courses marked by an asterisk (*) are designed specifically for School Business Management majors and will not apply toward the M.S.T., M.S.-Accounting, or the M.B.A. degrees except by special permission of the major or emphasis department.

- 290-700 Individual Studies** **1-3 credits**
An opportunity for a student to explore in more detail a specific field of study. Student and adviser decide the study, with the consent of the professor in charge of the study. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to individual studies.

- 290-770 School Finance and Accounting*** **3 credits**
For administrators and other educators who desire to learn the principles and concepts of school finance, of school business and fiscal affairs, of school budgeting and of school accounting practices and procedures. Restricted to students admitted to School Business Management degree program or with consent of program coordinator.

- 290-771 School Business Management Techniques*** **3 credits**
Designed specifically for prospective school business managers and other school administrators who desire to become acquainted with various management concepts and techniques in school business operations and with applications that can utilize machine systems for efficient operations. Prereq: 290-770. Restricted to students admitted to School Business Management degree program or with consent of program coordinator.

- 290-772 Legal Aspects of Education** **3 credits**
427-772 Seeks to present in nontechnical language to educational practitioners legal information on all facets of school operations, including the liability of school districts and employees, school fund and indebtedness, administration, pupil governance, retirement benefits, and employment relations.
433-772

- 290-773 School Plant Planning*** **3 credits**
A study of school plant needs of the local district: School buildings survey, site selection, estimating enrollments, economy, modernization of old school buildings and functional planning of various areas of the school building.

- 290-775 Administration and Organization of the Public Schools** **3 credits**
433-775 A survey of the foundation, organization and administration of the American public school system. Designed for teachers, administrators, and school business managers.

- 290-777 School Auxiliary Services Management 3 credits**
This course is designed for students seeking background knowledge and training in the management of school auxiliary services. The course emphasizes the processes and procedures necessary in the management of food services operations, school transportation operations and plant/maintenance operations. Restricted to students admitted to School Business Management degree program or with consent of program coordinator.
- 290-778 Internship in School Business Management 1-6 credits**
The internship is a clinical experience which provides prospective school business managers with varied opportunities to learn in an actual school setting. The internship is normally a 9 or 18 week assignment in a local school system. Applications must be made one semester in advance of the desired internship period. Prereq: 290-770, or two of the following: 290-771, 290-776, or 290-772.
- 290-782 Collective Negotiation in Education 3 credits**
Designed for school administrators and other educators who desire to learn the principles and concepts, and acquire the skills needed in collective negotiations and contract management in the public schools. Prereq: 290-772 or consent of instructor.
- 290-788 The Law and Athletic Administration 2 credits**
411-788 The course is designed to examine case law, State and Federal laws, State and Federal regulations and association regulations pertaining to the administration of school sports program.
- 290-798 Workshop 1-6 credits**
A course characterized by individualized and participatory activities within a group context, the results of which activities are shared with the entire group. Announcement of specific workshops being offered are made as the workshops are developed. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to workshops.
- 290-799 Thesis Research 1-6 credits**
If a student elects a thesis in lieu of a comprehensive examination, a total of not more than six credits may be given for work on the thesis throughout the sessions in which the thesis is being written. The number of credits allowed for the thesis is arranged with major professor and paper adviser.

COLLEGE OF EDUCATION

COACHING (41-)

- 411-660 Organization and Administration of Interscholastic Athletics** **3 credits**
This course is designed for those individuals who wish to become athletic coaches or administrators. The place of athletics education and the organization and administration of an athletic program will be covered. A research paper dealing with an appropriate topic will be required.
- 411-661 Prevention and Care of Athletic Injuries** **2 credits**
Principles governing the prevention and treatment of common athletic injuries. A research paper dealing with a mutually agreed upon topic will be required.
- 411-664 Managing Athletic Practice Sessions** **2 credits**
This course is designed for the practitioner (coach) who wants to learn how to maximize the athletic potential of individuals. The course teaches the coach how to determine and rank behaviors that are needed for individuals to be successful in sport. The coach will also learn how to develop systematic reinforcement procedures through the use of drills and other contingencies. Coaches will also become familiar with observational techniques and problem solving strategies in sport. Prereq: Undergraduates must have completed Psychology 111 or equivalent and have consent of instructor.
- 411-788 The Law and Athletic Administration** **2 credits**
290-788 The course is designed to examine case law, state and federal laws, state and federal regulations and association regulations pertaining to the administration of a school sports program.
- 413-690 Workshop in Intercollegiate or Interscholastic Athletics** **3 credits**
Workshops will be designed to meet the needs of men and women working in the field of interscholastic or intercollegiate athletics. Workshops will vary in purpose and content depending on current needs of prospective students and the latest trends of the various sports and related areas. A research paper will be required dealing with a mutually agreed upon topic between the student and instructor.
- 413-692 Field Study** **1-6 credits**
Studies designed to increase the student's understanding of specific areas of coaching through involvement in coaching experiences. Repeatable. Prereq: Consent of instructor or department.
- 413-696 Special Studies** **1-4 credits**
Special studies is a course not offered regularly in the curriculum but which is offered on topics selected on the basis of timeliness, need and interest. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to special studies.
- 413-700 Individual Studies** **1-3 credits**
Individual study and investigation of a problem arrived at by the student and a sponsoring instructor with a minimum of external guidance. The graduate student may select 1-3 credits of work per semester.
- 413-798 Workshop** **1-4 credits**
Workshop will be designed to meet the needs of men and women working in the field of interscholastic or intercollegiate athletics. Workshops will vary in purpose and content depending on current needs of prospective students and the latest trends of the various sports and related areas.

- 419-692 Field Study** **1-3 credits**
 A study in which data is gathered from sources broader than the classroom or laboratory, often involving off-campus work study experience in an area which has been selected for exploration. Prereq: Consent of instructor and chairperson.

EDUCATIONAL FOUNDATIONS AND COUNSELOR EDUCATION (420-429)

FOUNDATIONS (420)

- 420-643 Education in Urban Society** **3 credits**
 Designed for students who plan to teach disadvantaged students urban schools. Attention will be directed to major problems confronting urban education, the social and psychological experiences of disadvantaged students and an analysis of the role of the teacher in urban society.
- 420-645 History and Philosophy of Education** **3 credits**
 The development of contemporary public education from its historical backgrounds with emphasis on the evolution of education philosophy as it relates to present-day needs and practices of teachers.
- 420-702 Philosophical Foundations of Education** **3 credits**
 Identification of problems, ideas and values that western man has found to be of continuing concern as each generation has sought to educate its children.
- 420-704 Sociological Foundations of Education** **3 credits**
 Designed to relate the discipline of sociology to the field of education; to provide a meaningful background to social experiences; to acquaint the student with relevant research in the field of educational sociology.
- 420-705 Educational Classics** **3 credits**
 Selected writings which have been of significance to education will be explored in depth. For each work, the social and cultural context in which it was written will be examined, and the author's thesis and purposes will be analyzed. Expert opinion as to its educational value will be reviewed.
- 420-706 John Dewey's Educational Philosophy** **3 credits**
 The philosophical and psychological bases of the pragmatic-experimentalist impulse in education will be explored. Several of Dewey's major works which are of particular significance for education will be analyzed in detail.
- 420-707 Significant Issues in Education** **3 credits**
 An examination of significant issues in education and their ideological and social bases. Open to elementary and secondary school teachers and to others interested in the topic.
- 420-708 The History of Education in the American Culture** **3 credits**
 This course is designed to give the student the historical base necessary to the recognition and solution of current and future problems in American education. It will deal with American education as it developed within the changing cultural setting from colonial times to the present.
- 420-760 Comparative Education in Overseas Fieldwork** **1-6 credits**
 This course is designed to provide experienced teachers and others with the opportunity to study comparative education in an overseas schools or other educational agencies. This is an individualized program, including the opportunities to travel, meet, and work with professional educators in countries around the world.

COUNSELING (421)

- 421-650 Introduction to Counseling** **3 credits**
This is a survey course intended to introduce the student to the field of counseling and guidance. An overview of the purposes, procedures, and expected outcomes of counseling and guidance programs, the counselor's role and relationship to other functionaries will be dealt with.
- 421-677 Counseling Women and Girls** **3 credits**
Practicing and graduate counselors and undergraduates who have had experience in working with women or counseling will analyze traditional and current theories and practices of counseling women. Alternative programs and strategies will be developed and practiced. Prereq: 840-486/686 or 860-492 or 421-718 or consent of instructor.
- 421-718 Principles of Counseling** **3 credits**
Principles of relationship building, conducting interviews and the counseling process are discussed and practiced in a laboratory setting. Role-playing and videotaping are used to provide feedback and experience. Prereq: Admission to the counselor education program or consent of instructor.
- 421-719 Appraisal Procedures in Counseling** **3 credits**
Methods of appraising individual differences will be considered. Emphasis will be placed on the utilization of measurement procedures in the counseling setting. Discussions and laboratory experiences will center on the use and interpretation of standardized and nonstandardized measures of appraisal with individuals and groups. Prereq: 421-718 or consent of instructor; concurrent enrollment permitted.
- 421-720 Career Development and Information Services** **3 credits**
The course focuses upon the major theories of career development and sources of occupational and educational information. The course will also cover other areas such as career-development exploration techniques, approaches to career decision-making processes and the relationship between career choice and lifestyle. Students will be given opportunities to explore and become involved with career information and theories of career development. Prereq: 421-718 or consent of instructor; concurrent enrollment permitted.
- 421-721 Group Procedures in Counseling** **3 credits**
A discussion and laboratory course designed to assist students to learn concepts and skills related to working with small growth groups. Group development and group dynamics are investigated through didactic assignments and participation in laboratory group. Consideration is given to the application of group procedures in specific counseling settings. Prereq: 421-718, and 421-722 or concurrently.
- 421-722 Theories of Counseling** **3 credits**
Exploration of the prominent theories of counseling. Each participant will develop an understanding of the relationships among philosophy, theory, and practice. The course will examine psychoanalytic, humanist/existential, behavioral and cognitive-behavioral approaches, trends and issues in theory and application. Each participant will begin to identify the theoretical approach which will serve as a guideline for their practice of counseling. Prereq: Successful completion of or concurrent enrollment in 421-718.
- 421-723 Counseling in Elementary and Junior High Schools** **3 credits**
Counseling services and program for elementary and junior high school students as well as the role of the elementary school counselor are studied. The developmental guidance needs of all children are identified along with the specific guidance needs of particular student populations. Individual and group counseling procedures with children are examined. Prereq: 421-718.

- 421-724 Career Counseling of Adolescent and Adult** **3 credits**
Principles of counseling with adolescents and adults in employment, vocational education and rehabilitation agencies or institutions are considered. Emphasis is placed on current trends, organizational patterns of programs and the personal concerns of clients in these settings. Attention is given to procedures for counseling with persons of varying cultural, social and educational experiences. Prereq: 421-718 or consent of instructor.
- 421-725 Counseling in Secondary Schools** **3 credits**
Counseling services and programs for secondary school students are investigated along with the role of the secondary school counselor. The developmental guidance and counseling needs of all secondary school students as well as the specific needs of particular student populations are identified. Discussions focus on individual and group counseling approaches with adolescents. Prereq: 421-718, 421-722.
- 421-726 Seminar in Counseling** **3 credits**
Current trends, issues and practices pertaining to a variety of counseling settings are identified and explored. Emphasis is placed on contemporary topics of interest to counselors of all levels of education and experience. Prereq: 421-718 or consent of instructor; concurrent enrollment permitted.
- 421-727 Program Development, Research and Evaluation for School Counselors** **3 credits**
The course focuses upon program development, implementation, and management competencies for the school counselor or guidance director. It involves development of program planning skills — formulating objectives and goals, needs assessment, and rationale. Evaluation and research competencies for school counselors will be emphasized.
- 421-728 Clinical Studies in Counseling** **3 credits**
Principles and methods concerning study of the individual in terms of human development, learning and adjustment as these relate to counseling functions. Emphasis will be on critical analysis of the literature and procedures in conducting case studies. Prereq: 421-718 or consent of instructor.
- 421-729 Student Services in Higher Education** **3 credits**
An introductory course designed to familiarize students with basic student services, historical philosophical foundations and theories of student development. In addition some attention will be given to campus ecology and special needs of certain student subgroups. Prereq: 421-718 or consent of instructor.
- 421-730 Consulting Skills for Counselors** **3 credits**
An elective course for students in counseling and guidance designed to provide specific skills in methods of consultation. Students will be introduced to a number of alternative approaches to consultation and will have the opportunity of practicing their newly learned skills through role-playing and videotaping experiences.
- 421-731 Introduction to Marriage and Family Counseling** **3 credits**
An introductory course which provides counselors with information and skills relevant to conducting marital and family counseling services. Emphasis will be placed on the dynamics of family interaction, and the initial skills in assessment and treatment of dysfunctional marital and family relationships. Prereq: Admission to counselor education program or consent of instructor.
- 421-732 Practices of Marriage and Family Counseling** **3 credits**
An advanced course in counseling which focuses on various issues related to marriage and family counseling; divorce counseling and adjustment; abusive

families; alcohol and the family; parenting; premarital counseling. Emphasis will be placed on advanced assessment and the development techniques of marital and family intervention. Prereq: Successful completion of an introductory course or training in marriage and family counseling or comparable experience or written consent of instructor.

421-733 Theory and Techniques of Marriage and Family Counseling 3 credits

A professional course designed for individuals who are interested in family counseling as a profession. The course will focus on the major theoretical orientations of family process and the associated techniques necessary for implementation. Prereq: Successful completion of an introductory course or training in marriage and family counseling or consent of instructor.

421-734 Families: Assessment and Treatment of Abusive Behaviors 3 credits

A professional course in counseling designed for individuals seeking advanced training in assessment and treatment of abusive family systems. Prereq: 421-731 and 421-746.

421-737 Counseling and Human Services in the Community 3 credits

This course will explore the role of the counselor in a variety of community agency settings. Historical development, professional identity, licensure and certification of counselors will be addressed. The participant will develop an understanding of the counselor's role in prevention, intervention, and consultation services, as well as, a recognition of techniques of community needs assessment.

421-738 Perspectives in School Counseling 3 credits

A course designed for students planning to become school counselors. Counseling and guidance are examined within the context of the total school structure. Roles of school counselors are considered along with those factors which impact upon counselor role. Significant topics and issues for school counselors are explored. Prereq: Admission to counselor education program or consent of instructor.

421-746 Counseling and the Chemical Dependency Process 3 credits

A study of alcohol and other drug abuse, the process of chemical dependency and its importance in the area of counseling. This course will enable the counselor to identify and assess the substance abuser and examine the counselor's role in the prevention and intervention process. The student will learn to identify the various symptoms of progressive stages of chemical dependency and counseling modalities for treatment. Prereq: Admission to the Counselor Education Program or consent of instructor.

421-747 Consultation Models and Outreach Applications in Student Services 3 credits

This course is designed to help counselors learn outreach methods to extend their skills to others and increase accountability. The primary methods to be covered are program development, consultation theory and skills and paraprofessional training models. In addition, special topics will be covered utilizing these methods such as leadership training, alcohol programming, orientation and dropout identification and retention.

421-748 Administration in College Student Personnel 3 credits

This course is designed to focus upon administration skills for professionals in student affairs. Topics covered will include managerial leadership, fiscal resource and facility management, human resource development, legal issues, due process, collective bargaining, and environment assessment.

- 421-749 Chemical Dependency-Treatment and Rehabilitation** **3 credits**
 This course is for the student who wishes to develop and refine skills in the area of alcohol and drug counseling with interest in pursuing a counseling career in the specialty area of alcohol and drug counseling or a broader human services context. This course will help the student to gain knowledge and develop skills in individual, group, and family counseling as applied to chemically dependent client and/or family members. Special treatment needs of specific populations (i.e. adolescents, women, elderly) will also be addressed. Prereq: Counselor Education Major and 421-718, 421-722, 421-746.

LIBRARY MEDIA (422)

- 422-543 Adolescent Literature and Related Media** **3 credits**
 Designed primarily to acquaint the student with books and nonprint media which appeal to the adolescent interest. Emphasis will be placed on adolescent human growth and development, reading interests and principles of selection.
- 422-544 Children's Literature and Related Media** **3 credits**
 Survey of historical development of children's literature emphasis on standards for selection of materials related to the interests, abilities and needs of children and the curriculum. Open as an elective.
- 422-550 Reference and Bibliography** **3 credits**
 Basic reference theory and an introductory survey of materials and bibliographies useful in manual and automated reference service.
- 422-551 Building Media Collections** **3 credits**
 Principles of building collections for all types of libraries. Study of the standard bibliographies used in the selection of materials for libraries. Emphasis will be placed on the principles of selection of books and other library materials. The publishing field will be examined.
- 422-634 Instructional Technology** **3 credits**
 An introduction to instructional technology as it relates to present and future curriculum objectives. Basic techniques for operating audiovisual equipment, producing graphic, projected and electronic media are developed including use of video systems and microcomputer applications for the classroom and media center. Prereq: Junior standing or above.
- 422-635 Design and Production of Instructional Materials** **3 credits**
 Designed to train students in the preparation and use of a variety of visual media. Students will prepare a number of graphic projects, including a dry mounting, laminating, lettering, and transparency production.
- 422-637 Photographic Design and Production for the Teacher** **3 credits**
 Designed to present communication skills relevant to the needs of the classroom teacher in the production of black and white photographic materials.
- 422-638 Utilization of Instructional Television Resources** **3 credits**
 This course, presented at the introductory level, provides students with both experiences in hands on production of instructional programs, as well as evaluation and utilization of off-air and commercially available programs. Class time will be divided between classroom activities and studio sessions.
- 422-640 Developing Library/Media Skills** **3 credits**
 This course is designed to be taken by library/media specialists, in-service teachers, public librarians, and the pre-service library/media specialists who may wish to develop skills to effectively serve the users of the Instructional Media Center.

- 422-641 Computer Applications in the Library and Media Center** **3 credits**
This course prepares students to identify and critically select available library hardware and software through the process of analysis of needs, design and evaluation of currently available systems and services. Prereq: 422-434/634 or consent of instructor.
- 422-651 Classification and Cataloging** **3 credits**
Introduction to bibliographic control of library media materials. Study of the principles governing the classification of print and non-print library materials emphasizing the Dewey Decimal Classification and the basic methods of descriptive cataloging according to new standards, as well as subject headings and filing procedures.
- 422-654 Library and Media Center Administration** **3 credits**
Organization and administration of libraries and school media centers. Includes the study of library objectives and theory and practice of acquiring, processing, disseminating, and housing all types of educational materials according to management principles.
- 422-715 Current Trends in Young People's K-12 Literature and Related Media** **3 credits**
The course is structured so that students will be introduced to a variety of selections from contemporary media and from the viewpoints of the ideas expressed by teachers and bibliographers of the current literature for young people. Prereq: Previous course in the field, educational experience or consent of instructor.
- 422-751 Administration of Educational Media Programs** **3 credits**
Consideration of administrative policies and practices pertinent to operation of effective media programs in schools, school systems, and higher educational institutions. Includes such aspects as development planning, fiscal management, educational and coordination with overall instructional development objectives of the system.
- 422-753 Advanced Photographic Design and Production Techniques for Teachers** **3 credits**
Instruction will center on the more sophisticated techniques in black and white photography, lighting, composition, filtration and exposure; basic motion picture production, large format camera operation, processing and printing color materials. Prereq: 422-437/637 or consent of instructor. Adjustable 35mm camera required.
- 422-754 Advanced Design and Production of Instructional Materials** **3 credits**
Designed to develop advanced skills in the production of graphic materials. Techniques include lettering, silk screening, mounting, layout and duplication. Prereq: 422-435/635.

EDUCATIONAL PSYCHOLOGY AND DEVELOPMENT (423)

- 423-522 Pre-school Child Development** **3 credits**
A study of theory and principles of development and learning from conception to age eight; techniques of observing and the role of play in development.
- 423-523 Life-Span Development for Educators** **3 credits**
The course is designed to encourage knowledge and understanding of the central factors in life-span development. Major concerns involve physical, cognitive/mental, social/personal and emotional development. The course should be of particular interest for educators and counselors, and persons working in the helping professions.

- 423-664 Educational Methods of Teaching for Thinking** **3 credits**
 This course is intended to raise awareness of the variety of models, processes and techniques available for enhancing student thinking. Focus will be on skills training and applications of models and techniques. Demonstrations of applications and processes in teaching classroom content will be available. Skills to be stressed include higher-order thinking, divergent-production, strategic reasoning, scientific inquiry and problem solving. Emphasis is on their use in teaching the regular curriculum.
- 423-665 The Educational Psychology of Critical Thinking Skills** **3 credits**
 This course focuses on the teaching/learning strategies which facilitate critical thinking within the classroom. The cognitive psychology underlying the processes is studied along with relevant research findings. Critical thinking processes which are explored include deductive and inductive reasoning, questioning, problem solving and decision making. Emphasis is on the integration of thinking skills and classroom content.
- 423-674 Enhancing Classroom Motivation** **3 credits**
 This course is designed to help teachers and future teachers reduce the day-to-day frustrations caused by motivational problems in the classroom. The course will (1) help teachers develop a broader understanding of the philosophical and psychological complexities of classroom motivation problems, and (2) help teachers develop practical realistic strategies for reducing these problems.
- 423-678 Adolescent Development** **3 credits**
 Adolescent Development acquaints students with the major theories related to adolescent development and helps students interpret the theories in ways which are meaningful in understanding and working with adolescents. Focus is on the changes of adolescence with special attention given to the biological, cognitive, social and emotional systems.
- 423-681 Human Abilities and Learning** **3 credits**
 This course is designed to help educators comprehend and apply the fundamental psychological principles underlying the teacher-learning process. Among the areas considered are motivation, classroom management, instructional applications, individual differences and creativity.
- 423-682 Educational Statistics** **3 credits**
 Designed for students at the senior or graduate level who have no statistical background. Emphasis is on measure of central tendency and dispersion, correlational techniques, linear regression, probability, hypothesis testing, chi-square, analysis of variance and covariance and an overview of non-parametric techniques.
- 423-683 Teaching Strategies** **3 credits**
 This course is designed to assist teachers at all levels to develop a variety of teaching strategies for use in the classroom.
- 423-701 Issues in Human Development** **3 credits**
 Designed to present the relative influences of biological, psychological, social and environmental factors on human development at different stages in the life cycle.
- 423-703 Psychological Foundations of Education** **3 credits**
 Designed to provide psychological background about human abilities and behavior, individual differences, learning and evaluation, with implications for teaching.
- 423-752 Instructional Design** **3 credits**
 This course deals with the theory and practice of curricular development applied to the design of individual course materials and curriculums at all levels of education. Students will acquire skills in the design, development and evaluation of curriculum materials.

- 423-763 Educational Psychology of Teaching the Gifted: Alternative Learning Approaches for the Gifted** **3 credits**
 This course is designed to help present and future educators of the gifted acquire the knowledge and skills necessary to accommodate the learning needs of gifted students. The focus of the course will be the psychological underpinnings for a variety of educational prescriptions which allow the gifted to learn faster and in greater depth. The course includes a comprehensive review of theoretical models and the research-support base behind each model. Prereq: 480-426/426 or consent of instructor.
- 423-764 Educational Psychology of the Gifted: The Development of Educational Programs for the Gifted** **3 credits**
 This course is intended for all school personnel — administrators, teachers, counselors, social workers — who interact with talented, gifted, and creative students. It will focus on the following aspects of gifted program development and implementation: issues in programming for gifted students, a survey of educational programs for the gifted, talented, and creative, evaluation of strengths and weaknesses of various models, processes by which programs might be implemented, and advocacy for gifted programming within both school and community.
- 423-778 Educational Psychology: Mastery Learning** **3 credits**
 This course will provide students with an understanding of the psychological and theoretical assumptions underlying the concept of mastery learning. Several mastery learning models will be examined, and problems associated with implementation of mastery learning in school settings will be considered.

MEASUREMENT AND RESEARCH (424)

- 424-621 Educational Measurement, Research and Evaluation** **3 credits**
 This course includes the techniques of measurement, application of measurement and evaluation to the teaching-learning process, basic methods of research and the analysis of data, and an emphasis on the teacher as a consumer of educational research.
- 424-624 Measurement and Evaluation in the Elementary School** **3 credits**
 This class is designed for special education and elementary education majors. It includes teacher testing and assessment of students, basic statistical procedures, the use and interpretation of standardized tests, appropriate use of observational techniques and various grading and reporting systems.
- 424-625 Measurement and Evaluation in the Secondary School** **3 credits**
 This class is designed for secondary education majors. It includes teacher testing and assessment of students, basic statistical procedures, secondary school use of standardized tests, appropriate use of observational techniques, and various grading and reporting systems.
- 424-740 Techniques of Research** **3 credits**
 A basic course in the methods of research in education, including a study of the literature and techniques of research, the planning of a research paper, the basic types of research and design; a brief introduction to the statistics used in research; and the elements included in program evaluation.
- 424-743 Improving Classroom Testing** **3 credits**
 Improving Classroom Testing focuses on more effective classroom assessment. The course consists of writing instructional objectives for students at different skill ability levels, measuring these objectives by writing effective test items, scoring and grading procedures, and the analysis of classroom tests to improve their validity. Prereq: A basic course in measurement or its equivalent.

SPECIALIZED STUDIES (426)

- 426-690 Workshop** **1-6 credits**
A course characterized by individualized and participatory activities within a group context, the results of which activities are shared with the entire group. Announcement of specific workshops being offered are made as the workshops are developed. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to workshops.
- 426-696 Special Studies** **1-3 credits**
A study of special topics in education, not included in the curriculum, but which are timely and of interest to the senior or graduate student. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to special studies.
- 426-700 Individual Studies** **1-3 credits**
An opportunity for graduate level students to explore in more detail a specific field of study. The student with the supervising professor decide on the procedures and evaluation criteria. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to individual studies.
- 426-798 Workshop** **1-6 credits**
A course characterized by individualized and participatory activities within a group context, the results of which activities are shared with the entire group. Announcement of specific workshops being offered are made as the workshops are developed. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to workshops.
- 426-799 Thesis Research** **1-6 credits**
Guided investigation of an approved thesis topic. Students may receive credit for research activities planned in conjunction with their adviser and leading to the completion of a master's degree. See the Thesis section under Academic Requirements and Policies for credit limitations pertaining to thesis research.

SCHOOL ADMINISTRATION (427)

- 427-772 Legal Aspects of Education** **3 credits**
290-772 Seeks to present in nontechnical language to educational practitioners legal information on all facets of school operation, including the liability of school districts and school employees, school fund and indebtedness administration; the admission, attendance and instruction of pupils; retirement benefits; and the employment contract and professional negotiations.
- 433-772**

HUMANISTIC STUDIES (428)

- 428-606 Assertive Training** **1 credit**
A course to learn and practice assertive behaviors. The class activity will include role playing with video feedback, assertive homework assignments and group participation.
- 428-607 Censorship and American Education** **3 credits**
The course will review the nature of censorship in schools and libraries and explore the rights and responsibilities of educators and librarians to protect and assure the rights of students, teachers, librarians, and parents in a pluralistic democratic society.
- 428-672 Models of Accelerated Classroom Learning** **3 credits**
This course is intended to instruct teachers how to use the latest "whole brain" learning theories and techniques in the classroom. It will employ accelerated learning, whole brain instruction, positive and holographic learning.

- 428-673 Human Intergroup Relations for Educators** **3 credits**
The course is for teachers who deal with students who are culturally different. This includes racial, handicapped, disadvantaged and nontraditional learner population. The emphasis of the course will be on attitudes, feelings and values of both the teacher and the learner.
- 428-675 Understanding and Dealing with Disruptive Classroom Behavior** **3 credits**
Designed to give students an opportunity to discuss the various theoretical approaches to handling disruptive behavior in the classroom and to apply these approaches to actual problem situations. Emphasis will also be placed on the prevention of behavior problems through the development of effective classroom procedures. Recommended for all Education majors.
- 428-676 Interpersonal Helping Skills for Educators** **3 credits**
Designed to (1) help educators develop an increased awareness of their own feelings and conflicts within the classroom, and to examine a wider variety of potentially appropriate responses to these feelings, and (2) present the Gatzert/Carknuff theory of interpersonal helping and to train participants in process skills consistent with the theory.
- 428-679 Discipline at Home and School** **3 credits**
This course is designed for both parents and teachers. It explores several different discipline programs as to their application in the home and the classroom. Students will become aware of many alternative approaches in dealing with discipline and management problems.
- 428-687 Principles of Human Resource Development** **3 credits**
Identification and interpretation of policies and practices connected with the development of human resources. Emphasis is placed on personnel needs assessment and training programs in government agencies at all levels. The implication of in-service training in business, educational organizations, and the various professions will be examined.
- 428-765 Group Dynamics in the Classroom** **3 credits**
This course is designed to provide an opportunity for participants to explore the dynamics of group processes as they relate to elementary and secondary school classrooms. Emphasis will be placed on the developmental stages of classroom groups. Participants will not only examine the teacher behaviors and activities which help students in classrooms become effective groups, they will also experience these stages themselves.
- 428-777 Classroom Survival: Perspectives on Discipline** **3 credits**
This course is designed to utilize both university faculty and specially trained public school teachers. Emphasis will be placed on (1) self awareness as it relates to teacher attitudes and beliefs about disruptive students, (2) improving communication skills with disruptive students, (3) various methodologies to reduce disruptive behavior.

FIELD PRACTICUM (429)

- 429-790 Supervised Practicum** **1-6 credits**
The practicum provides graduate students with opportunities to participate in directed teaching/clinical experiences in practical situations under the guidance of carefully selected, qualified professional staff and University supervisors. Prereq: Graduate status, application and interview, completion of 9 credits at UW-Whitewater, and designated curriculum check sheet requirements. (Not to be used for first-time certification.)

CURRICULUM AND INSTRUCTION (430-439)

ELEMENTARY EDUCATION (430)

- 430-550 Introduction to Multicultural Education** **3 credits**
437-550 History, philosophy and rationale for bilingual/bicultural education. A study of different models of bilingual education programs as well as different types of bilinguals. Cultural socioeconomic and psychological factors influencing learning in the bilingual child.
- 430-635 Language Acquisition for the Bilingual Child** **3 credits**
437-635 An examination of the process involved in the acquisition of a first and second language and the implications this has for the curriculum and language instruction in the bilingual school. Special emphasis on stages of language development; the role of adult models, teachers, and environment in language learning; social classes and differences in language development; dialect differences and language development; etc.
- 430-655 Teaching Content in the Bilingual Classroom** **3 credits**
437-655 An examination of various techniques and materials being used to teach subject matter in bilingual programs with emphasis on Spanish materials. Other topics of discussion are: language assessment and adaption of materials to the learner's language proficiency and cultural experience. Course will be taught in English and Spanish, so that students may have the opportunity of expanding their command of the other language being used as a medium of instruction.
- 430-672 Understanding and Using LOGO in the Classroom** **1 credit**
The course is a brief introduction to the computer language designed for education — LOGO. The LOGO language is adaptable to a wide range of content areas. The language is available on nearly all makes of microcomputers. After mastery of fundamental key words of the language, the student will prepare materials to integrate the use of the language into their prospective teaching area.
- 430-673 Understanding and Using PILOT in the Classroom** **1 credit**
The course is a brief introduction to the computer software designed for education — PILOT (Programming Instruction Learning Or Teaching). PILOT software is available on nearly all makes of microcomputers. After mastery of a few fundamental key words of the language, the student will prepare materials to integrate the use of the language into their prospective teaching area.
- 430-674 Understanding and Using VisiCalc in the Classroom** **1 credit**
The course is a brief introduction to the computer software package — VisiCalc. VisiCalc is an electronic spreadsheet type of software that may be used to keep records and construct models to be used in a variety of content areas. This software is available for nearly all makes of microcomputers. After mastery of a few fundamentals of the software, the students will prepare materials to integrate the use of software into their prospective teaching area.
- 430-699 Employment Strategies** **1 credit**
480-699 Designed to acquaint the teacher education student with the problems and procedures of securing a teaching position. Includes consideration of professional ethics, preparation of placement credentials, teacher certification practices, interviewing techniques and teaching contracts. Reviews opportunities for professional advancement through graduate study. (Open to teacher education students. Should be taken the semester prior to graduation or the semester of graduation.)
- 430-716 Integrating Software and Technology into the Reading and Early Childhood Curriculum** **3 credits**
This course introduces teachers to the evaluation of software, and to the integration of software into the reading and early childhood curriculum.

- 430-720 Advanced Techniques in the Teaching of Language Arts and English** **3 credits**
Survey and critical appraisal of research programs, problems, practices and trends in the study and teaching of the language arts, media, composition and the application of linguistic knowledge.
- 430-721 Trends in Art Education** **3 credits**
110-721 A course designed to acquaint the teacher with recent trends, issues, and practices in the teaching of art. The sources of contemporary knowledge about the function and structure of art education will be considered as well as recent theoretical and research studies in art and art education. Opportunity for a specific level or teaching situation.
- 430-722 Issues in Elementary Education** **3 credits**
Current critical issues in education on the state, national and international levels, with particular reference to the elementary schools.
- 430-730 The Teaching of Computer Science** **3 credits**
This course is designed for teachers who currently teach or will be teaching computer science. Techniques, including specific classroom activities, will be introduced for a variety of computing topics. A high level authoring language, test scoring systems and record keeping systems will be studied.
- 430-740 Techniques for Improving Elementary and Middle School Children's Writing** **3 credits**
Elementary and middle school teachers will become familiar with current materials which provide the opportunity to be cognizant of and reaffirm the importance of writing/composition skills in the elementary content areas. Examination of research, analysis of current knowledge and the exchange of experiences can facilitate growth.
- 430-752 Microcomputer Applications in the Classroom** **3 credits**
This course is designed for teachers who have little or no knowledge about microcomputers and are interested in learning about microcomputers and their use in schools. This introduction to microcomputer applications in education will include teaching about computers, teaching with microcomputers, managing instruction with microcomputers, developing instructional materials using computers, and evaluating software designed to be used in schools. This course does not satisfy any of the requirements for K-12 certification on computer science.
- 430-759 Art for the Exceptional Child/Adult** **3 credits**
480-759 A preparatory course in art education for teachers of exceptional children and adolescents. The course will provide a background for curriculum development in art for children and adolescents with specific physical, mental, learning, and emotional needs.
- 430-760 Art in the Elementary School** **3 credits**
A consideration of the visual arts in the elementary school curriculum. Designed for elementary teachers and teachers of art or for those planning to teach in these areas. The course will include studio experiences using art media and techniques, curriculum resources, innovative approaches to teaching art and art appreciation, as well as the analysis and evaluation of art programs.
- 430-761 Advanced Techniques in the Teaching of Mathematics** **2-3 credits**
Consideration of the current trends in method and curriculum in elementary school arithmetic; the scope, sequence and content of the modern arithmetic program with special emphasis on modern innovations in arithmetical content and method; and the relationship of methods, curriculum and evaluation to child development.

- 430-762 Curriculum in the Elementary Schools** **3 credits**
 Consideration of basic concepts of curriculum development and the relations of foundation areas to the problems of curriculum; assistance to the individual teacher in understanding procedures and plans for bringing about curriculum changes at the local level; opportunity to put theory into practice with guidance from the instructor.
- 430-763 Advanced Techniques in the Teaching of Social Studies** **2-3 credits**
 A comprehensive consideration of the K-12 social studies curriculum, its traditions, underlying assumptions, and approaches to curriculum improvement; special emphasis placed on effective teaching techniques designed to facilitate the learning of social studies content and skills.
- 430-765 Advanced Techniques in the Teaching of Science** **2-3 credits**
 Consideration of the present courses of study in elementary science; basic principles of science appropriate to elementary grades; techniques of teaching the science principles; materials used in the teaching of science, and the techniques of evaluation in science.
- 430-770 Supervision of Student Teachers** **2-3 credits**
 Basic course in supervision of student teachers, open to UW-W cooperating teachers, explores the respective roles and responsibilities of all student teaching personnel, nature of student teaching programs, procedures followed in the selection of cooperating teachers and assignment of student teachers. Attention is also given to the recognition of skills and activities fundamental to the development of effective teachers. Prereq: previous arrangements with instructor and admission to the Graduate School.
- 430-770A Supervision of Student Teachers** **2-3 credits**
 Advanced course in supervision of student teaching focuses on identification of specific teaching competencies and the improvement of supervision through the use of more effective supervision techniques. Current trends and new field experience programs are also explored. Prereq: 430-770 or consent of instructor.
- 430-771 Principles of Mentoring** **3 credits**
 Mentoring, a recently developed concept related to Teacher Induction and staff development, emphasizes the historical development, roles of mentors, mentoring skills and processes, as well as evaluation of the mentor/protege relationships. This course is designed to provide training to present and potential staff who are interested in becoming mentors.
- 430-772 Improvement of Instruction through Collegial Coaching for Classroom Teachers** **3 credits**
 Peer supervision, a recently developed concept related to staff development, emphasizes the historical development, roles of collegial coaches, coaching skills and processes, as well as evaluation of the collegial relationships. This course is designed to provide training for experienced staff who are or want to become involved in collegial coaching.

HOMEMAKING (431)

- 431-540 Nutrition and Health: Early Childhood** **3 credits**
 A course in nutrition and health pertaining to the needs of the young child of pre-school age through the third grade, with emphasis on teaching the child good food and health habits and aiding nursery school directors and families in utilizing available community resources in health and nutrition.

READING (432)

- 432-764 Developmental Reading in the Elementary School 3 credits**
An overview of the elementary developmental reading program including the skills necessary for critical reading; development of appropriate attitudes and tastes, and adjustment of materials and methods to meet individual needs.
- 432-766 Diagnosis and Treatment of Reading Disabilities (K-6) 3 credits**
A comprehensive consideration of types of reading and study difficulties; the principles and techniques of diagnosing such difficulties, and the methods and materials useful to the classroom teacher in the remediation of reading problems.
- 432-767 Diagnosis and Treatment of Reading Disabilities (7-12) 3 credits**
A course designed to give experience in the use and analysis of formal and informal tests used in diagnosing reading problems and related disabilities.
- 432-768 Developmental Reading in the Secondary School 3 credits**
An in-depth examination of the principles underlying the reading process as it relates to secondary school reading demands. This course will offer the opportunity to explore theories of reading, examine techniques and materials, and develop applications to middle, junior high, and high school situations.
- 432-769 Reading Process: Vocabulary and Comprehension Development 3 credits**
This course will include an in-depth study of the reading process with an emphasis on current vocabulary and comprehension theory and research. Students will be involved in developing and exploring the use of semantic-based instructional strategies and reading materials.
- 432-771 Planning and Implementing Reading Programs 3 credits**
A study of the process and procedures which may be employed in planning and implementing defensible reading programs. Students are involved in planning individual programs appropriate for their school or system. Prereq: 432-764.
- 432-772 Reading in the Content Areas 3 credits**
Utilization of reading skills, study strategies and materials as applied to the content fields, and techniques for incorporating reading into content area instruction. Prereq: 432-764.
- 432-773 Research Related to the Teaching of Reading 2 credits**
Comprehensive review and evaluation of the literature and research in reading. The influence of research studies upon teaching procedures and upon the selection and use of materials for reading instruction will be considered. Prereq: 432-764.
- 432-774 Emergent Literacy 3 credits**
This course is designed to acquaint graduate students with children's reading and writing development from birth through age 8 and with educational approaches used to promote literacy development. The creation of literate environments at home and at school is emphasized.
- 432-775 Symposium in Reading Education 3 credits**
The keystone of the course is the annual University of Wisconsin Reading Symposium on Factors Related to Reading Performance. The purpose of the symposium is to inform educators of current thinking on factors that appear to influence students' reading performance. The course will include attendance at the symposium and at additional class sessions.

EDUCATIONAL ADMINISTRATION (433)

- 433-769 Supervision of Instruction** **3 credits**
Analysis of basic concepts of supervision and competencies essential to effective supervisory performance. Extended examination of current and emerging supervisory practices found in local school districts. Supervision as a process is considered in a variety of roles and positions of leadership.
- 433-772 Legal Aspects of Education** **3 credits**
290-772 Seeks to present in nontechnical language to educational practitioners legal information on all facets of school operation, including the liability of school districts and school employees, school fund and indebtedness administration; the admission, attendance and instruction of pupils; retirement benefits; and the employment contract and professional negotiations.
- 433-775 Administration and Organization of the Public Schools** **3 credits**
290-775 A survey of the foundation, organization and administration of the American public school system. Designed for teachers, administrators and school business managers.
- 433-776 The School Principalship** **3 credits**
Study of the application of theories to the administrative behavior problems of leadership in an elementary school. The course content will present research concerning the operation and management of an elementary school. It is designed for students who will have a leadership function or role in their school duties, such as team leader, supervisor, coordinator, or elementary principal.

EARLY CHILDHOOD (434)

- 434-561 Children's Literature** **2 credits**
A study of literature and media for early childhood (ages preschool through grade 3) including techniques for evaluating/selecting/presenting materials.
- 434-650 Creative Activities for Young Children** **3 credits**
This course will consist of an exploration of the role of fine arts in the education of young children accompanied by the selection and exploration of activities in the fine arts areas which are appropriate for young children. Students will be involved in planning for and participating in activities. Prereq: Consent of instructor.
- 434-652 Programs and Curriculum for Infants and Toddlers** **3 credits**
This course will enable students to plan a sequential curriculum for children from birth to age three. Issues, concepts, and research findings pertaining to group care of infants and toddlers in a variety of settings will be considered, as well as teaching strategies employed with very young children. Prereq: 423-322 or consent of instructor.
- 434-675 Early Childhood Education — Administration of PreSchool Programs** **3 credits**
The concentration of this course is upon managerial skills. Areas of emphasis are licensing, programming, staffing, finances, and public relations. Prereq: Consent of instructor.
- 434-711 Early Childhood Education: From Theory to Practice** **3 credits**
A study of the historical and theoretical foundations; current models and practices; and significant research regarding early childhood education.
- 434-713 Trends in Curriculum for the PreSchool/Primary Child** **3 credits**
This course is designed to give students sufficient skills to develop, implement and evaluate curriculum for children from ages 3-8.

- 434-714 Current Issues in Early Childhood Education** **3 credits**
Identification of significant issues and consideration of research having an impact on emerging trends as well as current practices in early childhood education.

- 434-715 Children in Crisis** **3 credits**
Feelings experienced by parents and children who are going through crises, the behavioral effects of these crises, and effective ways for the school to relate to them at these times. Students will also become familiar with adult reading and children's books in these areas.

SPECIAL STUDIES (436)

- 436-690 Workshop** **1-6 credits**
A course characterized by individualized and participatory activities within a group context, the results of which activities are shared with the entire group. Announcement of specific workshops being offered are made as the workshops are developed. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to workshops.

- 436-696 Special Studies** **1-3 credits**
A course which is not included in the curriculum but which is offered on topics selected for their timeliness, need, and interest. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to special studies.

- 436-700 Individual Studies** **1-3 credits**
An opportunity for a student to explore in more detail a specific field of study. Student and adviser decide the study, with the consent of the professor in charge of the study. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to individual studies.

- 436-797 Seminar** **3 credits**
Investigation and discussion of contemporary, significant problems in elementary education. Topics are selected on basis of needs and desire of participants in such areas as curriculum, instruction, school and classroom organization, and staff in-service improvement.

- 436-798 Workshop** **1-6 credits**
A course characterized by individualized and participatory activities within a group context, the results of which activities are shared with the entire group. Announcement of specific workshops being offered are made as the workshops are developed. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to workshops.

- 436-799 Thesis Research** **1-6 credits**
Guided investigation of an approved thesis topic. Students may receive credit for research activities planned in conjunction with their adviser and leading to the completion of a master's degree. See the Thesis section under Academic Requirements and Policies for credit limitations pertaining to thesis research.

SECONDARY EDUCATION (437)

- 437-550 Introduction to Multicultural Education** **3 credits**
430-550 History, philosophy and rationale for bilingual/bicultural education. A study of different models of bilingual education programs as well as different types of bilinguals. Cultural, socioeconomic and psychological factors influencing learning in the bilingual child.

- 437-620 Methods of Teaching Physical Education K-12** **3 credits**
Techniques of teaching physical education including selection of content, methods of presentation, class management, supervision, community influences, curriculum planning and professional responsibilities. Prereq: 423-212 or 423-222.
- 437-626 Methods of Teaching English and Language Arts** **3 credits**
Engages the students in shaping viable perspective for teaching Subject English in today's secondary school; in planning, developing, and evaluating a course, a unit, and a lesson series; in considering and practicing several modes of instructing-learning; in individualizing learning for particular adolescents; and in preparing generally for the Teaching Practicum.
- 437-628 Methods of Teaching Mathematics** **3 credits**
A study of the materials, methods, curriculum and structure of secondary school mathematics. Review of current objectives in secondary school mathematics.
- 437-629 Methods of Teaching Science** **3 credits**
Designed to acquaint students with basic educational techniques; to develop in students the ability to utilize effectively techniques characteristic of science programs, namely, laboratory learning to acquaint students with new approaches to science; to familiarize students with new developments in the science curriculum; to help students gain a broad vision of their teaching profession, their science area and their responsibilities to all students.
- 437-630 Methods of Teaching Social Studies** **3 credits**
The study of the teaching-learning process, objectives in social studies, planning for teaching, selection of content and resources, teaching-learning strategies and evaluative methods.
- 437-631 Methods of Teaching Speech** **3 credits**
Designed to help students develop a philosophy of speech education; skill in preparing courses of study, unit and lesson plans adapted to the needs and abilities of their students; methods of improving skill in evaluating the work of their students; and to give direction in planning and conducting extracurricular activities.
- 437-632 Methods of Teaching Journalism** **3 credits**
This course is designed to meet the needs of teachers or prospective teachers who wish to prepare themselves for teaching journalism, for teaching communications units, or for sponsoring publications in secondary schools.
- 437-635 Language Acquisition for the Bilingual Child** **3 credits**
430-635 An examination of the processes involved in the acquisition of a first and second language and the implications this has for the curriculum and language instruction in the bilingual school. Special emphasis on stages of language development, the role of adult models, teachers and environment in language learning, social class and difference and in language development, dialect differences and language development, etc.
- 437-655 Teaching Content in the Bilingual Classroom** **3 credits**
430-655 An examination of various techniques and material being used to teach subject matter in bilingual programs with emphasis on Spanish materials. Other topics of discussion are: Language assessment and adaption of materials to the learner's language proficiency and cultural experience. Course will be taught in English and Spanish, so that students may have the opportunity of expanding their command of the other language being used as a medium of instruction. Prereq: Language proficiency in Spanish.

- 437-701 Modern School Mathematics Curriculum** **3 credits**
A survey of selected school mathematics curriculum development projects, topics in comparative mathematics education and selected topics in ongoing research in mathematics education. Prereq: Consent of instructor.

- 437-710 Curriculum in the Secondary Schools** **3 credits**
The study of the theory, substance and development of curriculum in the American secondary schools. Special attention is given to the impact of recent innovations in the secondary school curriculum and the influence of mandated programs.

- 437-725 Art Education for the Secondary School** **3 credits**
A graduate course for art or secondary teachers or those preparing to teach in these areas. The study of contemporary approaches to teaching art education as aesthetic education in the middle and senior high curriculum; class discussions, studio and laboratory experiences and original research for the implementation of individualized art teaching.

FIELD PRACTICUM (439)

- 439-712 Residency in Teaching** **3-12 credits**
A comprehensive residency in teaching in an accredited local educational agency participating in the Teacher Residency Program. The resident teacher is under contract for a full school year for less than a full teaching load, is salaried, and works under the guidance of an assigned team of professional and seminars. Prereq: Successful completion of certification. Admittance to the Residency Program and Graduate School. Limited to first year teachers. Repeatable.

- 439-774 Field Experience in Reading Programs** **1 credit**
Observation and directed practice in the area of reading. Students are placed in an approved station or stations for a semester. Prereq: 439-790.

- 439-790 Practicum (Elementary) (Secondary)** **1-6 credits**
The practicum provides graduate students with opportunities to participate in directed teaching/clinical experiences in practical situations under the guidance of carefully selected, qualified professional staff and University supervisors. Prereq: Graduate status, application and interview, completion of 9 credits at UW-Whitewater, and designated curriculum check sheet requirements (Not to be used for first-time certification.)

HEALTH, PHYSICAL EDUCATION, AND RECREATION (44-)

PROFESSIONAL (442)

- 442-514 Techniques of Teaching Dance** **3 credits**
A course designed to emphasize techniques of teaching dance and the organization of rhythms and dance programs for the elementary and secondary levels.

- 442-524 Techniques of Teaching Gymnastics** **3 credits**
A course for physical education majors and minors designed to develop an understanding of progressions in and mechanical skill analysis of tumbling, apparatus, and floor exercise activities to be used in the teaching of gymnastics. It includes hands on teaching experiences.

- 442-525 Physical Education for the Kindergarten-Primary (K-3) Classroom Teacher** **2 credits**
Required of students in elementary education who intend to teach children in the kindergarten through third grade levels. Emphasis is placed upon the preparation of the classroom teacher to meet the developmental needs of children in grades K-3 through the medium of motor activities.

- 442-526 Physical Education for the Elementary (4-8) Classroom Teacher** 2 credits
Required of students enrolled in the elementary education curriculum. Specific emphasis is placed upon preparing the classroom teacher to meet the needs of children in grades 4-8 in the area of physical education.
- 442-527 Motor Programming for Early Childhood** 2 credits
This course is designed for those who plan to work with children in any type of pre-school program. Emphasis will be placed on providing ideas for developmental motor activities that will aid children with their 1) physical coordination, 2) emotional reactions to various experiences, 3) social interactions and, 4) mental development.
- 442-530 Techniques of Teaching Movement Activities in Elementary School** 3 credits
A course which combines the theory of curriculum development with the planning and conducting of lessons suitable for both the K-3 grades and the upper elementary grades. Emphasis is on the planning for lessons suitable for the K-3 child including basic manipulative, non-manipulative and locomotor skills, activities of simple organization and lead-up activities in progression.
- 442-540 Team and Individual Sports** 3 credits
An integration of organizational procedures, lesson planning, program planning progression and teaching techniques related to team and individual sports.
- 442-571 Kinesiology** 3 credits
The study of mechanical principles which are essential to the analysis of sport techniques as well as the performance of motor skills. The course includes a review of muscle-skeletal anatomy and the thorough study of human movement.
- 442-580 Perceptual Motor Activities for Young Children** 3 credits
A study of motor maturation, developmental variances affecting motor efficiency, gross motor assessment instruments, and prescriptive techniques involving perceptual motor activities.
- 442-615 Corporate and Community Fitness** 3 credits
Theoretical considerations and practical applications of exercise assessment and exercise prescription. Exercise assessment includes tests of muscular strength, endurance and flexibility, tests of aerobic capacity, pulmonary function testing, electrocardiography and graded exercise testing. Exercise prescription includes prescription techniques, exercise leadership and administration. Applications in commercial fitness, corporate fitness, community fitness and cardiac rehabilitation.
- 442-660 Behavioral Aspects of Sports and Physical Activity** 3 credits
Physical activity and sport examined from the standpoint of the factors influencing sport participation, the effects of sport participation, and the methods used to enhance the quality of sport performance.
- 442-671 Physiology of Exercise** 3 credits
A comprehensive study of physiological changes which occur during exercise and the adaptations which occur during exercise training. The student receives practical experience in the organization, interpretation and reporting of laboratory experiences relative to class discussion.
- 442-672 Advanced Physiology of Exercise** 3 credits
Theoretical considerations and laboratory experiences in physiology of exercise at an advanced level. Includes exercise biochemistry, biochemical analysis, environmental considerations, exercise histochemistry, cardiorespiratory considerations, animal experimentation, electromyography and aids to performance. Prereq: 442-471/671.

- 442-673 Organization and Administration of Physical Education** **2-3 credits**
Relationships and procedures involved in effective administration and organization of physical education programs.
- 442-675 Adapted Physical Education** **3 credits**
A study of the problems of the atypical child in relation to the physical education activity program. Emphasis is placed on the atypical child in the public school. Areas studied include postural deviations, orthopedic and neurological disabilities, sensory handicaps, the mentally handicapped and the behaviorally deviant child.
- 442-678 Physical Education for the Exceptional Child** **3 credits**
Course emphasis is on exploring physical education programs for the self-contained classroom teacher and for recreational leaders in institutional settings and day care centers who deal with exceptional children who are handicapped in physical activities.
- 442-680 Fitness Program Operations** **3 credits**
Theoretical considerations and practical applications of management, operations and programs for health and fitness organizations. Begins with the planning, design, financing and construction of health and fitness facilities. Includes the hiring and organization of staff members, the development and marketing of special programs and the administration and finance of fitness organizations.
- 442-690 Workshop in Physical Education** **.5-6 credits**
Course is designed to give students a hands-on experience in a Physical Education area of study where new or changing trends are evolving. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to workshops.
- 442-692 Field Study** **1-12 credits**
A course designed to increase the student's understanding of a specific area of recreation through involvement in an off-campus internship at a recognized Physical Education agency or business which is suited to the student's area of interest. Prereq: Consent of department chairperson.
- 442-694 Seminar** **1-3 credits**
An advanced course which may involve research on, and/or study of, sources pertinent to a selected area of physical education, pursued by a group under the guidance of an instructor. Prereq: Consent of instructor.
- 442-696 Special Studies** **.5-3 credits**
A course which is not included in the curriculum but which is offered on topics selected for their timeliness, need, and interest. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to special studies.
- 442-700 Individual Studies** **1-3 credits**
An opportunity for a student to explore in more detail a specific field of study. Student and adviser decide the study, with the consent of the professor in charge of the study. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to individual studies.
- 442-710 Trends in Physical Education** **3 credits**
Designed to improve instruction through an analysis of current objectives, new materials, revised curriculum and methods, current literature, current legislation, and organization of physical education within school and related learning laboratories.

- 442-712 Curriculum in Physical Education** **3 credits**
This course will assist the teacher with the process of curriculum development through an analysis of influences that effect curriculum change. Identification of aims, objectives, methods, materials and evaluation which are instrumental in development of efficient and effective programs in physical education.
- 442-715 Facility Planning Design and Management in Physical Education and Sport** **3 credits**
A study of the planning process for provision of facilities that will be conducive to a beautiful and safe environment for the conduction of physical education, athletic and recreation programs. Efficient management and use of the physical plant is a major consideration.
- 442-725 Cardiorespiratory Physiology** **3 credits**
An advanced course in the anatomy and physiology of the cardiac, vascular and pulmonary systems with an emphasis on the impact and adaptations during exercise to these systems. Prereq: 442-472 or consent of instructor.
- 442-752 New Dimensions in Teaching Lifetime Sports** **3 credits**
The course is designed to explore new curriculum ideas, skills, and teaching techniques used in Lifetime Sports. Utilization will be made of lectures, field trips, and participation and discussion of new techniques and activities.
- 442-770 Assessing Motor Behavior** **3 credits**
A study of motoric behavioral changes and skills acquisition of the maturing human and instruments currently available for assessing motor development and skill.
- 442-772 Construction of Motor Performance Assessment Instruments** **3 credits**
A study of the theory underlying motor performance assessment, and practice in constructing, administering and validating assessment instruments for motor performance.
- 442-790 Practicum** **1-6 credits**
The practicum provides graduate students with opportunities to participate in directed teaching/clinical experiences in practical situations under the guidance of carefully selected, qualified professional staff and University supervisors. Prereq: Graduate status, application and interview, completion of 9 credits at UW-Whitewater, and designated curriculum check sheet requirements. (Not to be used for first-time certification.)
- 442-798 Workshop** **1-3 credits**
The course is designed to enable the Health, Physical Education and Recreation Department to offer workshops where there is sufficient demand for specialized study of topics appropriate to graduate level study.
- 442-799 Thesis Research** **1-6 credits**
Guided investigation of an approved thesis topic. Student may receive credit for research activities planned in conjunction with his/her adviser and leading to the completion of a master's degree of educational professional development.

HEALTH (444)

- 444-545 Secondary Health Education Topics** **2 credits**
An investigation of secondary school health topics, their implication for sequential development and effective strategies for positive impact.

- 444-560 High Level Wellness** **3 credits**
A sensitization to, interpretation and evaluation of wellness as it relates to self, others and the environment with opportunities for personal wellness advancement. Areas include stress and relaxation training, health hazards that exist in behavior that tends to shorten life expectancy, nutrition and physical fitness.
- 444-562 Stress Management** **3 credits**
The course explains what stress is, its various causes and its effects. It helps develop a personal "Stress Profile" which enables the participants to pinpoint the specific sources and manifestations of stress and tension. The course shows how to combine biofeedback, relaxation techniques, exercise, diet, and other skills into an individualized "Stress Management System" that will help individuals feel healthier and cope better with daily pressure.
- 444-582 Elementary Health Education** **2 credits**
Teaching and learning experiences in selected content areas of health education. Designed for the elementary teacher.
- 444-591 Nutrition and Weight Control** **3 credits**
The course is designed to help students plan, evaluate, and analyze weight control programs. Attention will also be given to nutrients, exercise, sport, and behavior modification techniques that promote holistic health relationships.
- 444-645 Teaching Health Education** **3 credits**
A study of philosophy, trends and teaching-learning strategies. Emphasis will be placed on developing and utilizing models and strategies in health education.
- 444-690 Workshop in Health** **1-6 credits**
Course is designed to give students a hands-on experience in a Health related area of study where new or changing trends are evolving. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to workshops.
- 444-692 Field Study in Health** **1-12 credits**
Studies designed to increase the student's understanding of specific areas of health through involvement in off-campus experiences such as elementary or secondary schools, health volunteer agencies, or health maintenance organizations under the direction of department instructors. Prereq: Consent of department chairperson.
- 444-694 Seminar in Health Education** **1-3 credits**
An advanced course of study which may involve research on, and/or study of, sources pertinent to a selected area of health, pursued by a group under the guidance of an instructor. Prereq: Consent of instructor.
- 444-696 Special Studies** **1-3 credits**
A course which is not included in the curriculum but which is offered on topics selected for their timeliness, need, and interest. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to special studies.
- 444-700 Individual Studies in Health** **1-3 credits**
An opportunity for a student to explore in more detail a specific field of study. Student and adviser decide the study, with the consent of the professor in charge of the study. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to individual studies.

- 444-745 Exercise and Health** **3 credits**
 A course designed to introduce how exercise relates to an individual's health, specifically cardiovascular endurance, relaxation and nutrition. It will include background information regarding holistic health, exercise prescription, nutrition and relaxation. Application of this background information will also be a part of the course through evaluation of present levels and participation in individually designed programs.
- 444-790 Practicum** **1-6 credits**
 The practicum provides graduate students with opportunities to participate in directed teaching/clinical experiences in practical situations under the guidance of carefully selected, qualified professional staff and University supervisors. Prereq: Graduate status, application and interview, completion of 9 credits at UW-Whitewater, and designated curriculum check sheet requirements. (Not to be used for first-time certification.)
- 444-798 Workshop** **1-3 credits**
 Designed to enable the Health, Physical Education and Recreation Department to offer workshops where there is sufficient demand for specialized study of topics appropriate to graduate level study.
- 444-799 Thesis Research** **1-6 credits**
 Guided investigation of an approved thesis topic. Student may receive credit for research activities planned in conjunction with his/her adviser and leading to the completion of a master's degree of educational professional development.

RECREATION (446)

- 446-534 Recreation Programming and Leadership** **3 credits**
 A study of management strategies used by recreation professionals to develop recreation and sports activities. Programming includes preparation of activity staffing, facility, promotional, scheduling and budgetary needs. Leadership includes use of communication and group dynamics skills for work with staff, volunteers and participants.
- 446-550 Introduction to Therapeutic Recreation** **2 credits**
 An introduction to the history, philosophy and rationale of therapeutic recreation as programmed for people who are physically disabled, aged, mentally retarded, mentally ill, and socially deviant. The course will emphasize practical approaches to therapeutic recreation programming for special populations.
- 446-560 Aging and Leisure** **3 credits**
 Examines conceptualizations of leisure and aging in the leisure and gerontological literature, examines the benefits of exercise for older persons and the process of developing an exercise program for older persons as well as examining the benefits of other leisure areas such as the arts, education and outdoor recreation.
- 446-591 Outdoor Recreation Leadership** **3 credits**
 This course provides the fundamental knowledge, skills, and experience necessary to lead people in outdoor recreational activities. The course includes topics on trip planning, safety procedures, equipment and food logistics, leadership methods and expedition behavior for a variety of outdoor trip activities. The course also includes a 4 day outdoor trip experience.
- 446-690 Workshop in Recreation/Leisure Studies** **1-3 credits**
 Course is designed to give students a hands-on experience in a recreation or leisure related area of study where new or changing trends are evolving. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to workshops.

- 446-691 Recreation Administration** **3 credits**
A study of recreational management concepts in the areas of personnel management and facility operations, budgetary preparations, marketing concepts, public relation procedures, management policies development, and program services design.
- 446-692 Field Study in Recreation** **1-12 credits**
A course designed to increase the student's understanding of a specific area of recreation through involvement in an off-campus internship at a recognized recreational agency or business which is suited to the student's area of interest. Prereq: Consent of department chairperson.
- 446-694 Seminar in Recreation/Leisure Studies** **1-3 credits**
An advanced course of study which may involve research on, and/or study of, sources pertinent to a selected area of recreation and leisure pursued by a group under the guidance of an instructor. Prereq: Consent of instructor.
- 446-696 Special Studies** **1-3 credits**
A course which is not included in the curriculum but which is offered on topics selected for their timeliness, need, and interest. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to special studies.
- 446-700 Individual Studies** **1-3 credits**
An opportunity for a student to explore in more detail a specific field of study. Student and adviser decide the study, with the consent of the professor in charge of the study. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to individual studies.
- 446-790 Practicum** **1-6 credits**
The practicum provides graduate students with opportunities to participate in directed teaching/clinical experiences in practical situations under the guidance of carefully selected, qualified professional staff and University supervisors. Prereq: Graduate status, application and interview, completion of 9 credits at UW-Whitewater, and designated curriculum check sheet requirements. (Not to be used for first-time certification.)
- 446-798 Workshop** **1-3 credits**
Course is designed to give graduate students a graduate-level hands-on experience in a recreation or leisure related area of study where new or changing trends are evolving.
- 446-799 Thesis Research** **1-6 credits**
Guided investigation of an approved thesis topic. Students may receive credit for research activities planned in conjunction with their adviser and leading to the completion of a master's degree. See the Thesis section under Academic Requirements and Policies for credit limitations pertaining to thesis research.

SAFETY STUDIES (46-)

GENERAL (460)

- 460-581 Motor Fleet Safety** **3 credits**
An analysis of fleet safety problems and programs. Detailed study of the truck transportation industry, motor carrier responsibilities, federal regulations and safety supervision programs. Prereq: An industrial safety course and/or consent of instructor.

- 460-650 Behavioral Aspects of Accident Prevention** **3 credits**
 Selected theories of accident causation and countermeasures are studied. Examination of physiological, medical, psychological, and sociological factors which influence behavior, and methods for modifying unsafe behavior. Prereq: Consent of instructor.
- 460-653 Legal Aspects in Safety Education** **3 credits**
 An examination of federal and state laws with judicial interpretations having application to traffic, school, and occupational safety, and the liability of public officials. Problems such as teacher liability, professional liability, workers' compensation, insurance, and product safety laws will be dealt with in respect to their involvement with either industrial, school, or public liability. Prereq: 462-380 or consent of instructor.
- 460-655 Alcohol and Other Drugs** **3 credits**
 An investigation into the physiological, psychological and sociological problems presented by the use of alcohol and other drugs. Prevention and treatment programs will be examined. Other areas of study will include alcohol and traffic safety, alcohol and other drugs education and employee assistance programs.
- 460-688 Human Factors Engineering** **3 credits**
 Intended to provide the student with basic background information concerning human information processing capabilities and limitations. Ergonomic strategies for preventing manual material handling and other repetitive motion injuries are included. Field trips may be required. Prereq: 462-484 or consent of instructor.
- 460-690 Workshop** **1-6 credits**
 Workshops designed to meet the needs of safety educators, administrators, or other safety personnel. Workshop content will vary according to contemporary conditions. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to workshops. Prereq: Consent of instructor.
- 460-696 Special Studies** **1-3 credits**
 A study of special topics in safety for students of junior, senior or graduate standing. Prereq: Consent of instructor.
- 460-700 Individual Studies** **1-3 credits**
 An opportunity for a student to explore more deeply a specific field of study. Prereq: Consent of instructor.
- 460-752 Safety Communications** **3 credits**
 Investigation of the communication processes as related to the field of safety. Design and manipulation of the communication processes to influence safe behavior. Planning public information and community support programs.
- 460-787 System Safety Analysis** **3 credits**
 Introduction to the system technique as applied to the recognition of potential accident situations in occupational environments. Concentration will be on the qualitative aspects of safety, utilizing numerous examples and problems. Prereq: 460-688 or consent of instructor.
- 460-791 Readings and Research in Safety** **3 credits**
 Students will examine research and professional issues and apply the information to a problem of their choice. This course will be required of students who choose the proposed 36 credit option with the M.S. in Safety - Traffic. In lieu of completing a comprehensive examination or thesis, students will complete this course and 33 additional graduate credits. This course will provide a "capstone" graduate program experience.

460-7971 Institute **1-3 credits**

460-798 Workshop **1-6 credits**

A course characterized by individualized and participatory activities within a group context, the results of which activities are shared with the entire group. Announcement of specific workshops being offered are made as the workshops are developed. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to workshops.

460-799 Thesis Research **1-6 credits**

Guided investigation of an approved thesis topic. Students may receive credit for research activities planned in conjunction with their adviser and leading to the completion of a master's degree. See the Thesis section under Academic Requirements and Policies for credit limitations pertaining to thesis research.

TRAFFIC (461)

461-661 Problems and Materials of Driver Education **3 credits**

Emphasis is placed on driver and traffic safety education professional issues and classroom curricular content, methods and resources. Organization and administration of the high school program will also be examined. Prereq: 461-260 or consent of instructor.

461-666 Police in Highway Traffic Enforcement **3 credits**

An investigation of local, county, and state police activities in highway traffic law enforcement and investigation. Discussions include philosophical and psychological concepts on law enforcement. Accident records and usage by all levels of enforcement will be studied as well as police training policies and practices. Prereq: A traffic safety course.

461-765 Highway Traffic Administration **3 credits**

A critical analysis of traffic laws, traffic management, and motor vehicle administration, past, present and future. Explores agencies involved with traffic safety. Topics include records and reporting, driver control, driver improvement, driver licensing, vehicle registration and titling, vehicle inspection, violations bureaus, and traffic courts. Prereq: Consent of instructor.

461-767 Traffic Engineering **3 credits**

An overview of the development, management and operation of highway transportation systems. Includes investigation of and experiences in utilization of traffic engineering methods and techniques. Prereq: Consent of instructor.

OCCUPATIONAL (462)

462-582 Safety in the Construction Industry **3 credits**

Students will examine problems and practices posed to nation's work force involved with the construction industry. The course will examine administrative and organizational policies in developing a construction safety program. Students will be introduced to specific detailed problems and countermeasures for correction. An analysis of applicable standards will be conducted as they apply to the construction trade. Prereq: An industrial safety course or consent of instructor.

462-583 Introduction to Security **3 credits**

A study of the physical, personnel, and informational aspects of the security field. Concepts of these areas will be integrated with management as related to safety and will be discussed in relationship to industrial and business environments. Prereq: An industrial safety course or consent of instructor.

- 462-657 Principles of Occupational Epidemiology** **3 credits**
 This course will introduce the principles of occupational epidemiology and discuss the application of these principles in the recognition, control and prevention of disease and injury. The course will review the etiology of various acute, chronic, infectious, occupational and environmental diseases. Prereq: 230-245 or 423-482 or 760-231.
- 462-680 Industrial Hygiene Instrumentation** **2 credits**
 Occupational Safety students will gain a working knowledge of Industrial Hygiene and Safety equipment, which will aid them in recognizing, analyzing, and evaluating specific health hazards in industrial settings. Chemical, physical, biological and ergonomic hazards will be evaluated for potential hazards involving: noise, heat, cold, ionizing radiation, non-ionizing radiation, ventilation, electrical, illumination, hazardous atmospheres, and other related environments. Prereq: One year of general chemistry, 462-485 or concurrent enrollment or consent of instructor.
- 462-683 Industrial Safety Management** **3 credits**
 Emphasis will be on the organizational and administrative problems that relate to an occupational accident prevention program. The course is especially designed for students majoring in the business related areas as well as teachers and future safety professionals who desire to emphasize an understanding of these management problems as well as some applicable solutions. Prereq: An industrial safety course or consent of instructor.
- 462-684 Industrial Hygiene** **3 credits**
 An introduction to the science and art of industrial hygiene including the chemical, physical, and biological agents which affect the health and safety of employees; the application of control measures for the various agents. Prereq: Organic/inorganic chemistry or consent of instructor.
- 462-685 Fire Protection/Prevention** **3 credits**
 Control of fires through study of building construction to prevent fire spread, occupancy-hazard relationships, exposure to and from adjacent occupancies, lifesaving aspects, and the development of professional knowledge of flammable gases, liquids, combustible solids, dusts, chemicals, and explosives. Interpretation of appropriate codes will be covered. Prereq: Organic/inorganic chemistry or consent of instructor.
- 462-686 Safe Handling of Materials** **3 credits**
 Study the manual and mechanical safe handling of materials as major contributors to accident-causation in industry. Training and placement of personnel, maintenance and operation of equipment, interaction of manual-mechanical systems and handling of hazardous materials are emphasized.
- 462-687 Product Safety** **3 credits**
 An analysis of the trends of the product liability problem and the agencies regulating products. Special emphasis will be given to legal theories related to product liability and landmark litigation providing the basis for case law. A substantial portion of the course will be devoted to examining the elements of product safety programming. Prereq: An industrial safety course or consent of instructor.
- 462-686 Special Studies** **1-3 credits**
 A course which offers study in special topics in safety which are not regularly included in the curriculum. Repeatable to 9 credits in degree.
- 462-689 Chemical Safety** **3 credits**
 Principles, practices, regulations and procedures for the storage, transportation and use of industrial chemicals. Investigation of plant layout and process design

for chemical operations. Attention will be given to the problem of handling laboratory and macro quantities of chemicals as well as commercial chemical reactions and toxicity.

- 462-753 Legal Aspects in Occupational Safety** **3 credits**
An examination of federal and state laws with legal interpretations, having application to industrial safety professionals and to industries will be emphasized. Federal acts, such as OSHA, CPSA and others will be dealt with in respect to their involvement with the industrial problems. Liability to individuals and to the public will be stressed.

- 462-783 Corporate Safety Management** **3 credits**
This course is designed for Occupational Safety majors, prior to fieldwork experience. Attention will be given to the corporate structure of industry and loss control functions within the corporate structure. Special emphasis will be placed on developing a corporate loss control program.

SCHOOL (463)

- 463-672 Organization and Administration of School Safety** **3 credits**
Designed to prepare prospective teachers in the techniques and methods used in coordinating a school safety program. Also designed for inservice teachers, administrators, and other school personnel responsible for planning and directing safety programs in the schools. Deals with the elements of a comprehensive accident prevention program, and the policies and procedures involved in administering the program; and the structuring of programs to insure effectiveness. Prereq: A basic safety course.

- 463-711 Principles of Institutional Safety** **3 credits**
The course will review safety and environmental conditions and requirements in hospitals, nursing homes and correctional institutions. The appropriate state, federal and Joint Commission on Accreditation of Hospital regulations and standards will be covered. Problems involving infection control, laundry sanitation, fire safety, employee and patient safety, life safety codes, emergency disaster plans, hazardous materials management, public health control of insects and rodents, and environmental safety and sanitation of institutions will be discussed. The role of the Institutional Safety Committee and Safety Officer will be developed. Prereq: Consent of instructor.

PRACTICUM (469)

- 469-790 Practicum** **1-6 credits**
This experience is designed for graduate students who have not had safety work experience or who have had limited work experience. The students will be assigned according to their preparation and goals of their program. Students will be required to work with administrative and operational personnel of an organization or other agency operating a safety program. Prereq: Graduate status, application and interview, completion of 9 credits at UW-Whitewater, and designated curriculum check sheet requirements.

SPECIAL EDUCATION (480)

- 480-520 Introduction to the Education of Young Handicapped Children** **3 credits**
An introductory course designed for persons interested in the education of young children with handicaps. Course content will include typical and atypical development. An overview and history of the field of early childhood special education, model programs and service delivery systems and the role of the early childhood exceptional educational needs (EC:EEN) teacher will be studied. Prereq: 480-205 or 480-721.

- 480-523 Developmental Therapy: The Education of Young Children with Social-Emotional Needs** **3 credits**
For persons interested in young children with social-emotional problems. Students will study the causes of disturbance in young children; learn to assess their emotional maturity level, and develop therapeutic techniques designed to ameliorate maladaptive behaviors. Prereq: 480-320/520.
- 480-536 Managing the Classroom Behavioral Problems of Exceptional Children** **3 credits**
The course will introduce models, methods, and materials for effectively managing behavior problems of learners with exceptional educational needs. Skills will be developed to: (a) manage classroom behaviors that are counter productive to learning; (b) facilitate positive interpersonal behaviors; and (c) structure the instructional environment to produce desirable consequences. Prereq: 480-205.
- 480-555 Introduction to Emotional Disturbance** **3 credits**
A basic survey of behavioral and emotional disorders in children. Specific techniques and approaches in handling these problems in a classroom, the psychological role of the teacher and aspects of working with parents of disturbed children will be discussed. Prereq: 480-205 and consent of instructor.
- 480-556 Introduction to Mental Retardation** **3 credits**
An introductory course which provides current and historical perspectives of the field of mental retardation. Emphasis is placed on the educational, social, psychological, vocational and medical aspects of the problem. Prereq: 3 special education credits or consent of instructor.
- 480-564 Introduction to Learning Disabilities** **3 credits**
Provides the special educator with the basic theoretical and practical approaches to the identification and treatment of learning and language disorders. Identifies the major theoretical and conceptual approaches as well as the current issues in the field of learning disabilities. Prereq: 480-205 or 480-721 or consent of instructor.
- 480-575 Introduction to the Severely and Profoundly Handicapped** **3 credits**
For persons interested in the education of the severely and profoundly handicapped. Emphasis will be placed on the etiology and syndromes of those physically disabling conditions associated with the severely and profoundly handicapped and the broad continuum of services presently being provided for this identified group. Prereq: 6 special education credits.
- 480-600 Teaching Exceptional Children in the Regular Classroom** **3 credits**
A practical course for regular educators who teach students with exceptional educational needs. Based upon an overview of the mildly disabled and the mainstreaming philosophy, specific skills related as assessment, instruction, materials modification and behavior management will be emphasized.
- 480-605 Programming for the Developmentally Disabled Adult** **3 credits**
For students/agency staff interested in vocational rehabilitation services for developmentally disabled adults in a sheltered workshop setting. Emphasis will be on philosophies of the sheltered workshop training techniques and services provided within agencies. Prereq: 6 special education credits.
- 480-606 Career/Vocational Programming for Exceptional Educational Needs** **3 credits**
The course is designed to identify specific strategies for overcoming attitudinal and technical barriers to vocational mainstreaming of special needs students. Values clarification, vocational assessment, vocational IEP development, and elementary and secondary vocational models will be examined to assist special

and vocational educators in delivering appropriate vocational services to EEN students. Content covers grades K-12. Prereq: 480-205 and (480-355 or 480-356 or 480-354).

- 480-621 Curriculum Methods and Materials - Young Handicapped Child: Social/Motor 3 credits**
For persons interested in the education of young children with handicaps. This course will examine curricula, methods, techniques and materials designed to ameliorate adaptive social, fine motor and gross motor delays in young children. Prereq: 480-320/520.
- 480-622 Curriculum Methods and Materials - EC:EEN: Language/Cognition 3 credits**
For persons interested in the education of young children with special needs. Curriculum methods and materials will be studied so that students can develop skills in planning and implementing educational activities which will focus on language and cognitive development. Students will be required to participate in supervised fieldwork activities. Prereq: 480-320/520.
- 480-623 Working with Infants/Toddlers with Special Needs and with Their Families 3 credits**
Students will examine factors contributing to developmental delay or high-risk incidences in children from birth to three years of age. Parent training and family involvement rationale and techniques will also be examined. Students will learn appropriate techniques for screening and assessing infants and toddlers and have the opportunity to study and develop early intervention procedures. Prereq: 480-421/621.
- 480-625 Introduction to Gifted Education 3 credits**
A survey of the definitions and measures of creativity and intellectual pursuits, extraordinary products, and an examination of the genetic, environmental and social factors that develop and maintain gifted humans.
- 480-626 Introduction to Individual Diagnostic Assessment of Exceptional Educational Needs 3 credits**
A core course for special education majors to provide an overview of educational assessment and diagnosis of the handicapped. Emphasis will be placed upon testing for IEP development and teaching and the implications of the educational evaluation for multidisciplinary team decision making. Prereq: 480-205 or 480-721, 489-210.
- 480-628 General Instructional Models for Gifted Education 3 credits**
This course goes beyond a basic understanding of the nature and needs of gifted students and concentrates on presenting several models for providing curricular and instructional designs for such students in the school setting. Prereq: An introductory course dealing with the gifted or consent of instructor.
- 480-632 Working with the Family of the Young Handicapped Child 3 credits**
For persons preparing to teach young handicapped children. Teacher effectiveness is directly related to their ability to involve the parents in the early intervention process of infants, toddlers and preschoolers as well as motivation for involving parents in the early intervention process. The child, parent and professional triangle is critical — working with parents requires differential knowledge, skills and attitudes. Prereq: 480-520 or consent of instructor.
- 480-635 Introduction/Application Vocational Rehabilitation Procedures 3 credits**
Application of vocational rehabilitation principles and philosophy. Emphasis on the role of the work study and occupational adjustment program, including the utilization of local, state and federal resources. Prereq: 480-230.

- 480-657 Curriculum and Methods in Mental Retardation - Elementary** **3 credits**
Presentation of methods, materials, curriculum, and related resources for the education of mildly retarded children in the elementary school. Special emphasis upon mainstreaming and the identification of current issues and concerns will be highlighted. Prereq: 480-356/556 or consent of instructor.
- 480-659 Curriculum and Methods in Mental Retardation - Secondary** **3 credits**
Designed for professionals working with adolescent pupils who have exceptional educational needs. Emphasis will be on organization, curriculum, methods, work adjustment, causes and vocational approaches appropriate for high school special education and work-study programs. Prereq: 480-356/556 or consent of instructor.
- 480-660 Education of the Severely Emotionally Disturbed** **3 credits**
An examination of personality and behavioral dynamics associated with infantile autism, childhood schizophrenia, and other psychotic conditions of childhood. Consideration will be given to causality, teaching techniques, educational materials, and curriculum designs suitable for educating psychotic children in a variety of school settings. Prereq: 480-355/555.
- 480-661 Educational Diagnosis and Assessment of EC:EEN and SPH** **3 credits**
For persons interested in young children with special needs, as well as individuals exhibiting severe disabilities. Persons will learn how to administer diagnostic-prescriptive instruments and how to use assessment information in developing Individual Education Plan (IEPs) and present evaluative data to the multidisciplinary team. Prereq: 480-320/520 or 480-376/576; 480-426/626 or taken concurrently.
- 480-662 Educational Diagnosis and Assessment in ED, LD, MR** **3 credits**
A course to develop advanced diagnostic skills for elementary through secondary mildly/moderately handicapped (LD, ED, EMR) individuals. Particular emphasis will be placed upon the assessment of cognitive, academic, developmental and behavioral skills that effect classroom performance. The application of advanced trend analysis and data synthesis techniques for special education placement and program planning will be stressed and current issues and trends will be discussed. Prereq: 480-426/626.
- 480-665 Curriculum and Methods in Trainable Mentally Retarded** **3 credits**
Provides the prospective teacher of moderately handicapped with the basic methods and techniques specific to educating trainable mentally retarded children. Prereq: 480-356/556, 480-357 and consent of instructor.
- 480-666 Working with Parents of Exceptional Children and Community Agencies** **3 credits**
Provides insight into the adjustment problems of exceptional individuals in the home and school environments. Particular emphasis upon consultation and supportive skills for aiding the individuals and their parents in dealing with school or agency personnel and programs. Prereq: 480-205 or 480-721 or consent of instructor.
- 480-671 Curriculum and Methods in Emotional Disturbance - Elementary** **3 credits**
An examination of the varieties of therapeutic instruction available to teachers of emotionally disturbed children at the elementary school level. Evaluation of specific pathological conditions; curriculum design; placement; environmental manipulation; evaluation procedures; interpersonal management of cognition, affect, and behavior; and ethical consideration of specific interventions will be discussed. Prereq: 480-355/555.

- 480-672 Curriculum and Methods in Emotional Disturbance - Secondary** **3 credits**
An examination of the varieties of therapeutic instruction available to teachers of emotionally disturbed children at the secondary school level. Evaluation of specific pathological conditions; curriculum design; placement; environmental manipulation; evaluation procedures; interpersonal management of cognition, affect, and behavior; and ethical consideration of specific interventions will be discussed. Prereq: 480-355/555.
- 480-676 Techniques for the Multiple Handicapped** **3 credits**
For persons interested in developing techniques in the care and management of severe and profound multiple handicapped individuals with emphasis on basic life skills. Includes built-in field experiences. Prereq: 480-376/576 or consent of instructor.
- 480-678 Curriculum and Methods in Learning Disabilities - Elementary** **3 credits**
Designed to prepare educators to teach elementary level learning disabled children. Remediation strategies, programs, and techniques appropriate to this level will be reviewed and demonstrated. Emphasis will be on programming based upon an educational diagnosis and participation type activities. Prereq: 480-355/555 or 480-364/564.
- 480-679 Curriculum and Methods in Learning Disabilities - Secondary** **3 credits**
Designed to prepare educators to teach secondary level learning disabled students. Theoretical models and intervention strategies designed to promote basic skills acquisition and generalization of basic skills needed to perform in secondary level content area programs will be reviewed and demonstrated. Comprehensive educational planning for secondary LD students based on diagnostic findings and adult life roles will be emphasized. Prereq: 480-426/626 or 480-364/564.
- 480-680 Speech and Language Development in the Child** **3 credits**
662-680 Normal and abnormal language development are presented. Various language models are examined from the standpoint of their implications for assessment and treatment in an educational setting. Prereq: 480-774 or equivalent or consent of instructor.
- 480-681 Remediation of Written Language Disorders** **2 credits**
The course examines writing instruction for handicapped individuals using a language interaction approach to teaching and learning. Assessment and intervention based on the conceptual and linguistic skills of the student in relationship to the conceptual and linguistic demands of specific writing tasks will be presented. Prereq: 480-426/626, 662-350/550 and 662-360/560 or consent of instructor.
- 480-686 Instructional Systems for the Moderately, Severely and Profoundly Handicapped** **3 credits**
Specifically designed for persons majoring in education for the severely and profoundly handicapped. Provides a background of knowledge to appropriately design an individual educational plan for the severely and profoundly multiply handicapped, utilizing programs and living environments. Emphasis is placed on assessment, implementation and evaluation of the individualized program. Prereq: 480-476/676.
- 480-690 Workshop** **1-10 credits**
Students participate in the identification of problems and issues to be studied in the area of teaching handicapped children. Methods and resources are put into actual use in a classroom setting, community or institutional program or other agency activity. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to workshops.

- 480-694 Seminar - Special Education** **1-3 credits**
Designed to provide an opportunity for a group of students to participate in an in-depth study of a specific area of work with individuals with exceptional educational needs. Repeatable. Prereq: Consent of instructor.
- 480-696 Special Studies** **1-4 credits**
A study of special topics or current issues in the field of special education. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to special studies. Prereq: Consent of instructor.
- 480-699 Employment Strategies** **1 credit**
430-699 Designed to acquaint the teacher education student with the problems and procedures of securing a teaching position. Includes consideration of professional ethics, preparation of placement credentials, teacher certification practices, interviewing techniques and teaching contracts. Reviews opportunities for professional advancement through graduate study. (Open to teacher education students. Should be taken the semester prior to graduation or the semester of graduation.)
- 480-700 Individual Studies** **1-3 credits**
An opportunity for a student to explore in more detail a specific field of study. Student and adviser decide the study, with the consent of the professor in charge of the study. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to individual studies. Prereq: Consent of instructor.
- 480-706 Vocational Assessment of Students with Special Needs** **3 credits**
This course examines specific vocational assessment strategies using an ecological approach to in-school data collection. Assessment of occupational interests, aptitude, and learning styles in relationship to IEP development, placement within specific occupational clusters, and successful transition to postsecondary training and/or employment environments will be presented. Prereq: 480-205 or 480-721, 480-406/506.
- 489-712 Residency in Teaching** **3-12 credits**
A comprehensive residency in teaching in an accredited local educational agency participating in the Teacher Residency Program. The resident teacher is under contract for a full school year for less than a full teaching load, is salaried, and works under the guidance of an assigned team of professional personnel from the University and local school with allocated time for observations, planning, conferences and seminars. Prereq: Successful completion of Directed Teaching with initial or provisional teaching certification. Admittance to the Residency Program and Graduate School. Limited to first year teachers. Repeatable.
- 480-721 The Exceptional Child** **3 credits**
A survey of educationally relevant problems of exceptional children and the implications of these problems for school programs.
- 489-725 Fieldwork with Exceptional Children** **1-3 credits**
Field experiences in public or private community programs or agencies serving the exceptional educational needs. Repeatable to maximum of 6 credits. Prereq: Consent of instructor.
- 480-755 Techniques of Teaching the Emotionally Disturbed - Elementary** **3 credits**
Designed to prepare educators to teach elementary level emotionally disturbed children. Emphasis will be placed on the various educational approaches and philosophies, the use of specialized materials and curriculum, and their role in organizing and planning for the educational and emotional needs of handicapped children. Prereq: 480355/555 and consent of instructor.

- 480-756 Techniques of Teaching the Emotionally Disturbed - Adolescent** **3 credits**
 Designed to prepare educators to teach adolescent level emotionally disturbed individuals. Emphasis will be placed on the various education approaches and philosophies, the use of specialized materials and curriculum, and their role in organizing and planning for the educational and emotional needs of handicapped persons. Prereq: 480-355/555 and consent of instructor.
- 480-759 Art for the Exceptional Child and Adolescent** **3 credits**
430-759 A course for elementary and secondary teachers working with the exceptional child. The therapeutic aspects of art education in helping these children meet problems in personal adjustment and educational programming will be presented.
- 480-770 Social Issues in the Identification and Education of the Emotionally Disturbed** **3 credits**
 Designed to familiarize special educators with the major issues confronting persons involved in the diagnosis, placement, and education of children and youth termed "emotionally disturbed." Emphasis will be placed on labeling, theory, the social structure of emotional disorders, the social implications of special education programs for disturbed children, and legal considerations of the diagnosis and educational treatment of emotionally disturbed children. Prereq: 480-355/555, and 480-755 or 480-756, and consent of instructor.
- 480-772 Lifespan Issues in Special Education** **3 credits**
 This course explores current issues, trends, and instructional strategies relating to the development of curriculum for individuals with handicaps from a lifespan perspective across all categories of exceptionalities.
- 480-773 Consultation Techniques for Special Educators** **3 credits**
 Designed to acquaint special educators with procedures and strategies necessary for successful teacher consultation in the schools. Class will participate in simulation activities designed to develop skills in the consultation-problem solving process. Current practices and procedures will be reviewed. Prereq: Consent of instructor.
- 480-774 Diagnosis of Learning Disabilities** **3 credits**
 A review and presentation of educational and psychological diagnostic instruments. Students will discuss and utilize appropriate diagnostic and evaluative instruments. Emphasis is placed on educational diagnosis as the basis for educational programming. Prereq: 480-564 or consent of instructor.
- 480-775 Supervision and Administration of Special Education Programs** **3 credits**
 Presentation of a broad theoretical and practical background into the nature and role of supervisory and administrative personnel in public school programs for exceptional children. Prereq: Consent of instructor.
- 480-777 Development of Instructional Materials for EEN** **3 credits**
 Development of a curriculum consultation model and its implications for modification and development of materials and programs in special education. Prereq: Consent of instructor.
- 480-778 Remediation of Learning Disabilities - Elementary** **3 credits**
480-779 Remediation of Learning Disabilities - Secondary **3 credits**
 Designed to prepare educators to teach elementary or adolescent level learning disabled children. Remediation strategies and techniques appropriate to this level will be reviewed and demonstrated. Emphasis will be on programming based on an educational diagnosis and participation type activities. Prereq: 480-564 or consent of instructor.

- 480-780 Survey of Research Literature in Severe Disabilities** **3 credits**
A graduate level seminar exploring current research literature issues and trends in the areas of severe disabilities will be offered. Special attention upon cooperative projects, proposal development and other research techniques will be emphasized. Prereq: Consent of instructor.
- 480-781 Programming for the Transition of Youth with Disabilities - DVI** **3 credits**
This course will examine direct and indirect instructional support strategies which facilitate successful vocational programming of individuals with exceptional educational needs within secondary and post-secondary environments. The Designated Vocational Instructor model and transition methods will be emphasized. Prereq: One of the following: 480-356/556, 480-364/564, 480-465/665, 480-406/606 or consent of instructor.
- 480-782 Seminar-Survey of Research Literature in Mild Disabilities** **3 credits**
A graduate level seminar exploring current research literature, issues, and trends in the area of mild disabilities will be offered. Special attention upon cooperative projects, proposal development and other research techniques will be emphasized.
- 489-790 Practicum** **1-6 credits**
The practicum provides graduate students with opportunities to participate in directed teaching/clinical experiences in practical situations under the guidance of carefully selected, qualified professional staff and University supervisors. Prereq: Graduate status, application and interview, completion of 9 credits at UW-Whitewater, and designated curriculum check sheet requirements. (Not to be used for first-time certification.)
- 480-798 Workshop** **1-6 credits**
Current topics, trends, or issues will be explored in small and large group participatory activities. Materials, procedures, programs, or activities for exceptional educational needs individuals generated within the workshop setting will be applied in a classroom and/or instructional setting. The results will be shared with participants. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to workshops.
- 480-799 Thesis Research** **1-6 credits**
Guided investigation of an approved thesis topic. Students may receive credit for research activities planned in conjunction with their adviser and leading to the completion of a master's degree. See the Thesis section under Academic Requirements and Policies for credit limitations pertaining to thesis research. Prereq: Consent of instructor.

COLLEGE OF LETTERS AND SCIENCES

GENERAL DIVISION (600)

- 600-690 Workshop** **1-3 credits**
This course is offered from time to time for the purpose of providing special study opportunities in a particular field not necessarily related to any department. Repeatable.

- 600-696 Special Studies** **1-3 credits**
A course of general interest to liberal arts majors which is not included regularly in the curriculum but which is offered from time to time on the basis of need, interest and timeliness. Repeatable.

AFRO-AMERICAN STUDIES (614)

- 614-690 Workshop** **1-3 credits**
A study group of less formal organization than the usual course, in which students share in the identification of problems and issues to be studied.

ANTHROPOLOGY (613)

SPECIALIZED COURSES

- 613-612 Archaeology of Meso- and South America** **3 credits**
A comparative approach to the rise and fall of civilizations in the New World. Prehistoric social developments in Mexico, Central, and South America, from the earliest human occupations to the decline of the Maya, Aztec, and Inca civilizations.

- 613-624 Peoples and Cultures of the Pacific** **3 credits**
Intensive survey of the prehistory and contemporary cultural anthropology of Pacific Island societies: Polynesia, Micronesia, Melanesia, Island South East Asia, and Australia.

- 613-625 Peoples and Cultures of South Asia** **3 credits**
Survey of South Asia, with emphasis on the contemporary social and cultural anthropology of India and Nepal.

- 613-634 Women in Cross-Cultural Perspective** **3 credits**
Sex and gender relations in economic, political, and family institutions in non-Western societies. Topics include women's roles in marriage and family life, women in politics, women and law, women in myth and ritual.

- 613-620 Culture and Personality** **3 credits**
An interdisciplinary course dealing with questions of mutual interest to psychologists and anthropologists. Cross-cultural approaches to personality formation, measurement, description of personality characteristics of groups. Character attributes of peoples from selected societies throughout the world. Stress and mental disorders. Relationship of personality, culture, and social change.

- 613-694 Anthropology Seminar** **3 credits**
Intensive study of selected theoretical or substantive issues that supplement the curriculum. Original research papers may be expected as partial fulfillment of the course requirements. May be retaken. Graduate students must complete a term paper based on library research under instructor's supervision.

- 613-696 Special Studies in Anthropology** **3 credits**
A variety of topics in anthropology are offered under this heading. Course titles are announced in the Timetable each semester. This course number may be repeated for credit. Repeatable. Prereq: 6 credits in anthropology or consent of instructor.

- 613-700 Individual Studies** **1-3 credits**
An opportunity for a student to explore in more detail a specific field of study. Student and adviser decide the study, with consent of the professor in charge of the study. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to individual studies. Repeatable.

BIOLOGY (630)

LIBERAL ARTS FOUNDATION COURSE

- 630-703 Environment and Man** **3 credits**
A study of basic ecological concepts and their applications to the identification, understanding and abatement of contemporary environmental problems. Special emphasis is given to those problems resulting from man and his activities.

SPECIALIZED COURSES

- 630-506 Medical Terminology** **1-2 credits**
A study of the language of medicine including word construction, definitions and the use of terms related to all areas of medical science, hospital service and allied health specialties. Two credits may be taken by students who have had no Biology classes.
- 630-510 Biology of Aging** **3 credits**
A study of the biological phenomena associated with aging, including theories and characteristics of aging, reversibility and irreversibility of bodily functions and behavioral alterations as they are affected by neurological, myological and endocrinological changes. This course is not for those in the biology emphasis. Prereq: 630-120 or 630-142 or consent of instructor.
- 630-527 Plant Pathology** **3 credits**
A study of the nature and classification of plant pathogens, the ecologic and physiologic relationships between host and pathogen and the principles of plant disease control. Two lectures and two hours of laboratory per week. Prereq: 630-141.
- 630-540 Comparative Vertebrate Anatomy** **4 credits**
Dissection and study of vertebrate types emphasizing characteristic structures, general relationships, comparative anatomy, and the significance of adaptation and evolution. Laboratory work, lectures and quizzes. Prereq: 630-141 and 630-142.
- 630-541 Vertebrate Embryology** **4 credits**
A study of reproductive cycles, gametogenesis and fertilization; the establishment of tissues, organs and systems. Introduction to embryological experimental techniques and procedures for study of frog, chick, and pig. Laboratory, lecture and quizzes. Prereq: 630-141 and 630-142.
- 630-543 Survey of Invertebrates, Including Insects** **3 credits**
The collection, identification, natural history and significance of invertebrate animals, including insects. Prereq: 630-142 or consent of instructor.

- 630-545 Animal Physiology** **4 credits**
A study of the functional mechanisms that underlie the life processes in animals. Six hours of laboratory and lecture per week. Prereq: 630-142, plus 640-102 and 640-104, or 640-141 and 640-142 or 800-160, 800-161, 800-162, 800-163.
- 630-551 Plant Morphology (or the Plant Kingdom)** **3-4 credits**
A study of the major groups of plants, with emphasis on structure, reproduction, classification and evolution. Prereq: 630-141.
- 630-553 Plant Taxonomy** **3 credits**
The principles of plant classification and identification, with emphasis on flowering plants of this region. Lectures, laboratories and field trips. Prereq: 630-141 and 630-142.
- 630-556 Environmental Radiation Protection** **3 credits**
A course designed to provide the participant with a series of lecture and laboratory experiences involving radiation and radionuclides both natural and man made, and their impact on the human environment. Emphasis will be on the methodology of detection and measurement of radiation and its human implications. Prereq: One semester of biology and/or one semester of chemistry and consent of instructor. Field trips.
- 630-570 Aquatic Biology** **3 credits**
The study of aquatic environment, its fauna, flora and general ecology. The laboratory will emphasize the taxonomic study of aquatic organisms. Field trips. Prereq: 630-141 and 630-142.
- 630-610 Bacteriology** **4 credits**
Fundamental principles of bacteriology: laboratory growth, metabolism, genetics, pathology and antisepsis. Two lectures and four hours of laboratory per week. Prereq: 10 hours of biological sciences, part of which must be from the general field of botany and part from zoology. In addition, chemistry through and including Organic Chemistry will be extremely valuable. (If this course is offered during the day, it carries 4 credits including laboratory work; 3 credits evening division.)
- 630-612 Immunology** **2 credits**
Immunity to infectious diseases related to changes in the constituents of the blood is explored. Transplantation of tissues, allergies, and autoimmune diseases are discussed. Prereq: 630-142, plus one year of chemistry.
- 630-613 Genetics** **4 credits**
Principles of inheritance in microorganisms, plants and animals, including man. Prereq: 630-141 and 630-142, 640-102 and 640-104 or 640-141 and 640-142.
- 630-615 Endocrinology** **3 credits**
A study of the hormonal regulation of metabolism, growth and reproduction. Three hours of lecture per week, laboratory demonstrations arranged. Prereq: 630-141, 630-142, 640-102 and 640-104 or 640-141 and 640-142.
- 630-617 Plant Physiology** **3 credits**
Organized around the growth of plants stressing the living processes. The laboratory emphasizes nutrition, growth, hormones, water relations, photosynthesis, respiration and bioassay techniques. Prereq: 630-141; 640-102 and 640-104 or 640-141 and 640-142; or 800-160-161 and 800-162-163.
- 630-620 Ichthyology** **3 credits**
A study of the taxonomy, distribution, ecology and evolution of fishes. Collection, preservation and identification of local species will be emphasized. Two one-hour lectures and one two-hour laboratory period per week. Field trips. Prereq: 630-142.

- 630-622 Introduction to Ornithology** **3 credits**
The classification, distribution, behavior, life histories and natural habitats of North American birds. Emphasis is given to the field recognition of local species. Five hours of lecture and laboratory per week. Field trips. Prereq: 630-142 or 630-120.
- 630-623 Introduction to Mammalogy** **3 credits**
Classification and natural history of mammals with special emphasis on Wisconsin species. Four hours of lecture and laboratory. Field trips. Prereq: 630-141 and 630-142; 630-340 and 630-353 recommended.
- 630-630 Animal Behavior** **3 credits**
Behavior of animals as individuals and groups, including study of causation, development, integration, evolution and adaptive value of behavior patterns. Lecture and laboratory. Prereq: 630-142.
- 630-641 Biological Techniques** **2 credits**
Designed to give the student experience in performing basic biological techniques and to develop skills essential in research and teaching. Prereq: Biology major.
- 630-644 Cell Biology** **3 credits**
Contemporary aspects of the molecular organization, structure, function, growth, reproduction, and differentiation of cells, with emphasis on eukaryotes. The course deals with cell organelles, macromolecular assemblies, extracellular matrix, cell-cell interactions, gene expression, and with modern experimental and analytical techniques. Four hours of lecture and laboratory per week. Prereq: 630-141, 630-142, 640-104.
- 630-646 Organic Evolution** **2 credits**
History of evolutionary thought, evidences of evolution, and analysis of evolutionary mechanisms and processes. Prereq: Genetics.
- 630-652 Entomology** **3 credits**
A study of the classification, identification and life cycles of insects. Insects of economic importance will be considered. A collection of insects will be required. Field trips. Prereq: 630-142 or consent of instructor.
- 630-653 Animal Histology** **3 credits**
A study of the minute structure of animal tissues by examination of materials prepared for the light microscope supplemented by micrographs showing details revealed with electron microscopy. Emphasis on human microscopic anatomy. Six hours of laboratory or lecture per week. Prereq: 630-141 and 630-142, 630-340 and/or 630-341.
- 630-654 Vertebrate Field Biology** **3 credits**
A study of the classification, distribution, ecology and life histories of the vertebrates. Special emphasis is given the vertebrates of Wisconsin. A collection of local vertebrates will be required. Prereq: 630-141-630-142 or equivalent and 630-340. Field trips.
- 630-655 Parasitology** **3 credits**
The life cycles, epidemiology and control of protozoan, trematode, cestode, roundworm and arthropod parasites of man and domestic animals will be studied. Studies of infections in laboratory animals will be carried out. Prereq: 630-141, 630-142.
- 630-656 Radiation Biology** **3 credits**
A laboratory-oriented course designed to provide formal training in the instrumentation and techniques for measuring nuclear radiation, to observe the effects of radiation on living systems and to acquaint the student with the health hazards

involved. Six hours of lecture and laboratory per week. Prereq: 630-141, 630-142, and a year of college chemistry. A year of college physics is also recommended. Field trips.

- 630-657 General Ecology** **4 credits**
A study of the relationships of plants and animals to their environments through an investigation of the physical and biological aspects of the biotic community. Six hours of laboratory and lecture per week. Field trips. Prereq: 630-141 and 630-142 plus six additional hours in biology or consent of the instructor.
- 630-660 Introductory Mycology** **3 credits**
A comprehensive study of all fungal phyla emphasizing taxonomy, morphology, phylogeny and physiology. Economic uses of fungi will be studied where feasible. Prereq: 630-141, 630-142, 630-325 or 630-351 or equivalent recommended.
- 630-663 Molecular Biology** **3 credits**
The course consists of lectures, discussion and laboratory work emphasizing cell ultra structure and the associated chemical activities that function at the cell level. Four hours of lecture, discussion and laboratory per week. Field trips. Prereq: 630-141, 630-142, a year of chemistry or a year of physics, one semester of organic chemistry recommended.
- 630-664 Basic Electron Microscopy** **2 credits**
A laboratory-oriented course designed to provide the student with "hands on" experience in preparation of support films, negative staining, tissue fixation, embedding, block trimming, knife making, thin sectioning, grid and specimen preparation, high vacuum evaporation and replication, staining, shadow casting, photographic techniques and the basic operation and use of an electron microscope. Prereq: Biology majors or minors or consent of instructor.
- 630-668 Marine Biology - Ecology of the Florida Keys** **3 credits**
A course designed to provide the participants with a series of field experiences including a basic survey of various marine and terrestrial communities and the ecological principles that govern the existence of the organisms that comprise these unique communities. Prereq: 630-141 and 630-142 or consent of instructor.
- 630-680 General Limnology** **3 credits**
A presentation of the interrelationships between the physical, chemical and biological aspects of aquatic environments. The laboratory will demonstrate methods and equipment for conducting limnological studies. The course will be taught at Pigeon Lake. Prereq: 630-141; 630-142; 640-102-104 or consent of instructor.
- 630-685 Pollution Biology** **3 credits**
A study of environmental pollution with emphasis on the sources, effects and abatement of air and water pollution. The laboratory will be devoted to methods for detecting specific pollutants and evaluating the biological effects of these pollutants. Field trips. Prereq: 630-141, 630-142 and one year of college chemistry.
- 630-690 Workshop** **1-3 credits**
Short courses offering concentrated study in some phase of biology. The types of workshops to be offered will be determined according to the desires and needs of the students and faculty. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to workshops.
- 630-694 Seminar** **1 credit**
A discussion of contemporary, significant problems in biology. The subject matter varies depending on the needs and desires of the participants. To be taken no more than twice for credit. Prereq: 16 hours of biology including botany and zoology.

- 630-696 Special Studies** **1-3 credits**
 A course which is not included in the curriculum but which is offered on topics selected for their timeliness, need, and interest. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to special studies.
- 630-700 Individual Studies** **1-3 credits**
 An opportunity for a student to explore in more detail a specific field of study. Student and adviser decide the study, with the consent of the professor in charge of the study. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to individual studies.
- 630-798 Workshop** **1-6 credits**
 A course characterized by individualized and participatory activities within a group context, the results of which activities are shared with the entire group. Announcement of specific workshops being offered are made as the workshops are developed. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to workshops.
- 630-799 Thesis Research** **1-6 credits**
 Guided investigation of an approved thesis topic. Students may receive credit for research activities planned in conjunction with their adviser and leading to the completion of a master's degree. See the Thesis section under Academic Requirements and Policies for credit limitations pertaining to thesis research.

CHEMISTRY (640)

LIBERAL ARTS FOUNDATION COURSE

- 640-702 Physical Science** **3 credits**
 An in-depth examination of certain developments in physical science principles and their impact on man's thought and way of life. Open to experienced elementary and secondary school teachers who have had an introductory course in physical science.

SPECIALIZED COURSES

- 640-655 Advanced Organic Chemistry** **3 credits**
 Lectures on advanced topics in organic chemistry. Prereq: A year's course in general organic chemistry.
- 640-690 Workshop** **1-4 credits**
 A workshop emphasizing a critical examination of current problems in chemistry. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to workshops.
- 640-696 Special Studies** **1-3 credits**
 A course designed to give students an opportunity to pursue special philosophical topics that are not regularly included in the curriculum. Course topics are selected on the basis of need, interest, or timeliness. Repeatable 2 times for maximum 6 credits.
- 640-700 Individual Studies** **1-3 credits**
 An opportunity for a student to explore in more detail a specific field of study. Student and adviser decide the study, with the consent of the professor in charge of the study. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to individual studies.

- 640-798 Workshop 1-6 credits**
A course characterized by individualized and participatory activities within a group context, the results of which activities are shared with the entire group. Announcement of specific workshops being offered are made as the workshops are developed. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to workshops.

CHICANO STUDIES (615)

- 615-510 History of Chicanos in the U.S.: 19th Century Roots and 20th Century Development 3 credits**
Interprets historical events of the U.S. and their impact on the Chicano emphasizing 19th century roots and 20th century development. Takes an in depth look at implications of the Treaty of Guadalupe Hidalgo and 20th century Mexican Immigration.
- 615-520 Politics of the Chicano 3 credits**
A comprehensive analysis of Chicano life as it relates to U.S. government institutions. Chicanos are presented in terms of their political, social and religious affiliations; their economic and occupational status; and their family life and language relationships to the U.S. Federal System of Government. This study views Chicanos from two separate perspectives: as a self-contained ethnic minority and as a part of the broader U.S. population.
- 615-680 Mexican Literature in Translation 3 credits**
This course offers the student an opportunity to learn the traditions and heritage of Mexico. It traces the development of the Liberal Revolution in Mexico as seen through the 20th Century Mexican novel and short story.
- 615-690 Workshop 1-3 credits**
A study group of less formal organization than the usual course, in which students share in the identification of problems and issues to be studied. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to workshops.
- 615-696 Special Studies 1-3 credits**
A course designed to give students an opportunity to pursue special topics that are not regularly included in the curriculum. Course topics are selected on the basis of need, interest, or timeliness. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to special studies.
- 615-700 Individual Studies 1-3 credits**
An opportunity for a student to explore in more detail a specific field of study. Student and adviser decide the study, with the consent of the professor in charge of the study. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to individual studies.

COMMUNICATION (662, 664, 666)

COMMUNICATIVE DISORDERS (662)

SPECIALIZED COURSES

- 662-550 Normal Language Development for Teachers of Exceptional Educational Needs Students 2 credits**
By surveying information from a variety of sources, this course provides an overview of oral language development in the areas of phonology, morphology, semantics, syntax, and pragmatics. Participation in the course enables future

teachers to interact more effectively in their classrooms and provides them with foundation for studying disordered language. Prereq: Special Education major or consent of instructor.

- 662-560 Language Disorders in Children with Exceptional Educational Needs** **2 credits**
This course surveys the particular phonological, morphological, semantic, syntactic, and pragmatic rules exhibited by students with exceptional educational needs (e.g., the learning disabled, developmentally delayed, and autistic). Participation in the course enables future teachers to apply course content in individual and group interactions with language disordered students. Prereq: 662-350/550 or consent of instructor.
- 662-570 Practicum: Communicative Disorders** **2 credits**
Clinical (supervised) practice with children and adults who have communicative disorders. A minimum of six credits are required. Prereq: 662-370.
- 662-582 Audiometry** **3 credits**
The course is designed to provide information regarding evaluation procedures of the auditory system; interpretation of the auditory test results; and training in the routine test procedures. Prereq: 662-381.
- 662-584 Aural Rehabilitation** **3 credits**
A study of habilitation and rehabilitation procedures for the hearing impaired including techniques of speechreading, auditory training, and an examination of the psycho-social aspects of hearing loss. Prereq: 662-270 or consent of instructor.
- 662-585 Fluency Disorders** **3 credits**
A study of the theoretical, clinical and experimental approaches to such fluency disorders as stuttering and cluttering. Prereq: 662-376.
- 662-644 Occupational Hearing Conservation** **3 credits**
An introductory course dealing with the many facets of an occupational hearing conservation program that includes the parameters of sound, the ear and hearing, introduction to noise problems, audiometric test procedures and practice, selection and fitting of hearing protectors, occupational safety and health administration regulations and proposed noise standards, medicolegal and compensation aspects for the employer and data management.
- 662-670 Diagnostic Methods in Communicative Disorders - Children** **2 credits**
Students will study diagnostic tests and procedures used to evaluate the communicative skills of individuals in the birth to adolescent age range. Emphasis will be placed on the assessment of language, articulation, fluency, voice, and hearing loss as well as the cognitive, psychological, physiological, and neurological correlates. Students will complete diagnostic evaluations and interviews, interpret results, and summarize their findings in written reports.
- 662-676 Instrumental Management of Communicative Disorders** **3 credits**
This course surveys a variety of techniques for instrumental management of speech production differences or disorders. Participation in the course will lead to the acquisition of skill in basic operations of selected instrumentation, and to competence in interpretation of data in a real laboratory. Students in the class will develop a general understanding of the instrumental techniques reported in the literature through applications of such during diagnosis or management with "real" clients throughout the semester. Prereq: 662-375, 662-570, and senior status or consent of instructor.

- 662-680 Speech and Language Development in the Child** **3 credits**
480-680 The study of normal speech and language development as seen through literature trends in anthropology, sociology, psychology, psycholinguistics, speech and hearing sciences, and education.
- 662-681 Language Assessment and Intervention in Communicative Disorders** **3 credits**
 Material covered includes informal assessment procedures in the areas of morphology, semantics, syntax, and pragmatics. Students use these procedures to evaluate individuals in the birth to adolescent age range. They study issues related to theories and practices in language intervention. Students develop language intervention programs and practices and explore means of evaluating their effectiveness.
- 662-683 Augmentative and Alternative Communication** **3 credits**
 This course surveys the variety of alternatives to speech for communicating as well as the methods for augmenting residual speech skills. Participation in the course will lead to a basic understanding of historical and current approaches to augmentative and alternative communication, to the development of basic skills for evaluating and providing treatment programs for nonspeakers, and to an awareness of advocacy procedures for the nonspeaking population. Prereq: Consent of instructor.
- 662-686 Disorders of Voice** **3 credits**
 A study of vocal disorders, their etiologies, procedures for their evaluation and treatment, and a review of recent research literature in these areas. Prereq: 662-374 or consent of the instructor.
- 662-687 Speech and Voice Disorders of Cleft Palate** **3 credits**
 A study of the etiology, embryology, surgical, prosthetic, and dental management of the child with cleft palate and/or cleft lip; the assessment and management of the speech and voice disorders; and a review of recent research literature. Prereq: 662-374, 662-376 or consent of the instructor.
- 662-688 Aphasia and Apraxia in Adults** **3 credits**
 The study of the neuroanatomical bases for speech and language impairment in adult aphasia and apraxia; evaluation and management of the speech and language disorders; and the review of recent research literature in these areas. Prereq: 662-374 or consent of the instructor.
- 662-689 Cerebral Palsy, Apraxia, Congenital Aphasia in Children** **3 credits**
 The study of the neuroanatomical bases for speech and language impairments in cerebral palsy; the evaluation and management of the child with cerebral palsy, childhood aphasia, and apraxia; and a review of recent research literature in these areas. Prereq: 662-374 and 662-376 or consent of instructor.
- 662-690 Workshop** **1-6 credits**
 A course characterized by individualized and participatory activities within a group context. Students share in the identification of problems and issues to be studied, principles to be discussed, or methods and resources to be used. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to workshops.
- 662-696 Special Studies** **1-3 credits**
 A course designed to give students an opportunity to pursue special philosophical topics that are not regularly included in the curriculum. Course topics are selected on the basis of need, interest, or timeliness. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to special studies. Prereq: Consent of instructor.

- 662-700 Individual Studies** **1-3 credits**
 An opportunity for a student to explore in more detail a specific field of study. Student and adviser decide the study, with the consent of the professor in charge of the study. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to individual studies.
- 662-709 Seminar in Communicative Disorders** **3 credits**
 Identification and consideration of significant issues in communicative disorders. The course is geared to the professional development of the speech and language clinician and focuses on such content areas as the acoustically handicapped, oral language problems, voice disorders, fluency disorders, neurological disorders such as aphasia and cerebral palsy, cleft palate and special therapeutic and diagnostic problems. Content areas will change each semester and the course may be repeated with a change of content. Prereq: Consent of instructor.
- 662-710 Speech and Language Therapy in the Clinical Environment** **3 credits**
 A study of professional and research literature pertinent to the various clinical environments, with emphasis on the school environment, and the special problems that confront the speech- language pathologist in these environments such as hospitals, public schools, etc. Prereq: Consent of instructor.
- 662-711 The Dysarthrias** **3 credits**
 Study of the neurophysiology underlying speech and the neuropathologies which lead to the dysarthrias. Evaluation and management of the dysarthrias are emphasized, and relevant experimental research literature is examined.
- 662-712 Research Methods in Communicative Disorders** **3 credits**
 A course in the methods of research in communicative disorders including the need for scientific research; the nature of scientific research; methods underlying the research process; the planning of a research paper; and considerations in interpreting research results.
- 662-713 Seminar in Normal and Disordered Language Behavior** **3 credits**
 Students will acquire and apply knowledge of normal language processes in several topic areas. Students will examine morphological, semantic, syntactic, and pragmatic language skills present in groups of language disordered individuals. Clinical applications are made to the diagnostic and treatment settings. Prereq: 662-480/680.
- 662-714 Supervision in Communicative Disorders** **3 credits**
 The study of the supervisory process as it relates to speech and language pathology. Emphasis is on the theories and techniques of observation, interpersonal communication, leadership, teaching, decision making and problem solving.
- 662-764 Speech and Language Disorders in Special Populations** **3 credits**
 This course provides students an in-depth opportunity to explore speech and language skills of communicatively impaired individuals in the birth to adolescent age range. The focus of study is on morphological, semantic, syntactic, and pragmatic aspects of language for each disorder studied. Students will apply this information in the areas of assessment and intervention.
- 662-770 Diagnostic Methods in Communicative Disorders - Adults** **3 credits**
 This course reviews a variety of tests designed to assess communicative disorders in adults. Students will examine characteristics of aphasia, apraxia, dysarthria, voice, and fluency disorders. They develop skill in conducting interviews and diagnostic evaluations, interpreting results and reporting their findings.

- 662-798 Workshop** **1-6 credits**
A course characterized by individualized and participatory activities within a group context, the results of which activities are shared with the entire group. Announcements of specific workshops being offered are made as the workshops are developed. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to workshops.

- 662-799 Thesis Research** **1-6 credits**
Guided investigation of an approved thesis topic. Students may receive credit for research activities planned in conjunction with their adviser and leading to the completion of a master's degree. See the Thesis section under Academic Requirements and Policies for credit limitations pertaining to thesis research.

MASS COMMUNICATION (JOURNALISM) (664)

SPECIALIZED COURSES

- 664-505 History of Mass Communication** **3 credits**
666-505 An overview of the origin, development, strengths and weaknesses, and achievements of mass communication in the United States, with particular attention to the interrelationship between mass communication and society.
- 664-560 Newspaper Operations** **3 credits**
An examination of the basic aspects of newspaper operations: organization and equipment, production and service, financial and legal questions, and public and employee relations.
- 664-606 Reporting Public Affairs** **3 credits**
Advanced work in reporting with emphasis on news related to crime and the courts, government and politics, business, finance, and labor. Includes study of the courts, legislative procedures and business. Prereq: 664-244.
- 664-620 Law of Mass Communication** **3 credits**
Study of law as applied to the mass media with particular emphasis on freedom of information, libel, privacy, contempt and copyright regulation.
- 664-630 Communication and Public Opinion** **3 credits**
The role of the mass media of communication in the formation of public opinion. Propaganda goals of government, political, economic, and social groups. Prereq: Consent of instructor.
- 664-631 Mass Communication in Society** **3 credits**
666-631 A course which examines the functions and effects of mass media in our society. Theoretical bases for assessing social, behavioral and cultural influences are emphasized. Prereq: 666-131 or 666-202. Unreq: 666-631.
- 664-690 Adviser's Workshop** **1-4 credits**
A course characterized by individualized and participatory activities within a group context, the results of which activities are shared with the entire group. Announcements of specific workshops being offered are made as the workshops are developed. Offered in summer school only. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to workshops.
- 664-694 Seminar** **1-4 credits**
Selected topics in journalism or mass communication will be studied in depth under the guidance of one or more faculty. Students may be expected to do an original research paper as partial fulfillment of the course requirement. May be repeated.

- 664-696 Special Studies** **1-4 credits**
 A course which is not included in the curriculum but which is offered on topics selected for their timeliness, need, and interest. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to special studies.
- 664-700 Individual Studies** **1-3 credits**
 An opportunity for a student to explore in more detail a specific field of study. Student and adviser decide the study, with the consent of the professor in charge of the study. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to individual studies.
- 664-798 Workshop** **1-6 credits**
 A course characterized by individualized and participatory activities within a group context, the results of which activities are shared with the entire group. Announcement of specific workshops being offered are made as the workshops are developed. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to workshops.
- 664-799 Thesis Research** **1-6 credits**
 Guided investigation of an approved thesis topic. Students may receive credit for research activities planned in conjunction with their adviser and leading to the completion of a master's degree. See the Thesis section under Academic Requirements and Policies for credit limitations pertaining to thesis research.

SPEECH COMMUNICATION (666)

SPECIALIZED COURSES

- 666-505 History of Mass Communication** **3 credits**
664-505 An overview of the origin, development, strengths and weaknesses, and achievements of mass communication in the United States, with particular attention to the interrelationship between mass media and society.
- 666-521 Nonverbal Communication** **3 credits**
 Nonverbal dimensions of interpersonal communication (physical behavior, facial expression, eye behavior, personal space, personal appearance - clothing, touch, voice and the use of objects) focusing upon their actual interaction with verbal or speech communication. Study of concepts and actual participation in nonverbal exercises/simulations. Prereq: 666-110 or equivalent.
- 666-527 Introduction to Organizational Communication** **3 credits**
 This course provides a broad overview of the theoretical and empirical literature relevant to organizational communication. The focus is on how communication operates in organizations, the effects of communication on organizational life, and how communication can be made efficient and effective in meeting personal as well as organizational goals. Prereq: 666-110 or equivalent.
- 666-538 Remote Television Production** **3 credits**
 This advanced course instructs students in how to produce, direct, edit, and evaluate portable and remote television productions. Approaches to producing electronic field productions, electronic news gathering, and large scale remotes are examined in depth. Previous course work in television production required. Prereq: 666-337 or 666-231 or 666-331.
- 666-539 History of Cinema** **3 credits**
 A study of the motion picture as a significant art form of the twentieth century, with an emphasis upon the historical, social, economic, technical, and artistic factors that influenced its development.

- 666-540 Speech Writing** **3 credits**
 A students develop skills necessary to write varied types of public speeches suitable for presentation by others or by themselves. Prereq: 666-110.
- 666-602 Publicity Media and Campaigns** **3 credits**
 Extension of principles of public relations through advanced readings and case studies in business, industry, service, and education, and practice in creating effective publicity campaigns. Prereq: 666-202 and 664-203.
- 666-620 Listening Behavior** **3 credits**
 Study of the current theory and research concerning the process of listening in human communication as a basis for an effective understanding of listening behavior and for an increased ability to improve one's own listening skills. Coverage of material culminates in an analysis of approaches to teaching listening in the schools and training in business-industry. Prereq: 666-110 or equivalent or consent of instructor.
- 666-622 Communication Theories** **3 credits**
 Study of theories of communication from various disciplinary viewpoints. An investigation of approaches which attempt to explain the communication process through a "meaning-centered" focus to the communication act (originating communicator, message, channel, responding communicator). Theories are discussed in terms of their assumptions, claims, and strengths-weaknesses.
- 666-624 Cross Cultural Communication** **3 credits**
 Study of cross cultural contacts and interactions when individuals are from different cultures. An analysis of verbal and nonverbal communication and related factors within and between various cultures, predictions of patterns and effects, and communication barriers.
- 666-629 Organizational Communication Audit** **3 credits**
 This course examines the critical issues associated with doing applied work in organizational communication. Theoretical and empirical questions are addressed in this regard. On the basis of this knowledge, the student then learns by conducting an audit of the communication climate for a specific organization. Prereq: 666-327/527.
- 666-631 Mass Communication in Society** **3 credits**
664-631 A course which examines the functions and effects of mass media in our society. Theoretical bases for assessing social, behavioral and cultural influences are emphasized. Prereq: 666-131 or 666-202. Unreq: 664-631.
- 666-634 Broadcast Station Operations and Procedures** **3 credits**
 An advanced-level course involving the elements of broadcast station and cable television operations, with particular emphasis on federal regulatory policies. Electronic mass media operations involving management, sales, programming, and audience responsibilities are emphasized. Formation of internal policy guidelines for day-to-day operations is a major course focus. Prereq: 666-131 and at least one semester's staff experience on either WSUW-FM or at Cable 6 or its equivalent as determined by the instructor.
- 666-643 Women Speakers in America** **3 credits**
 Students discuss and write papers evaluating the effectiveness of American women speakers from colonial to contemporary times as they address such issues as suffrage, civil and human rights, temperance, and abolition. Prereq: 666-110 or equivalent.
- 666-647 American Public Address** **3 credits**
 A critical study of those whose rhetoric represents significant public address in the United States; from colonial times to the present. Prereq: 666-110.

- 666-657 Classical Rhetoric** **3 credits**
Students will study and apply the theories of effective communication as presented by Isocrates, Plato, Aristotle, Cicero and Quintilian. Prereq: 666-110.
- 666-690 Workshop** **1-6 credits**
A course characterized by individualized and participatory activities within a group context. Students share in the identification of problems and issues, principles to be discussed, methods and resources to be used, and in results of the activities. Announcements of specific workshops being offered are made as the workshops are developed. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to workshops.
- 666-696 Special Studies** **1-3 credits**
A course which is not regularly included in the curriculum but which is offered from time to time on topics in speech communication selected on the basis of need, interest, or timeliness. Prereq: Consent of instructor.
- 666-700 Individual Studies** **1-3 credits**
A study conceived, developed, and undertaken by a student in an area of special interest in speech communication with the approval and sponsorship of an interested graduate level speech communication professor. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to individual studies.
- 666-701 Introduction to Graduate Study in Speech** **3 credits**
The student will be introduced to the nature of graduate study and the principles and methods of historical-critical, descriptive and experimental research in speech.
- 666-702 Seminar in Rhetoric and Public Address** **3 credits**
The group will investigate special topics selected on the basis of need, interest, or timeliness which may change each time the course is offered.
- 666-703 Seminar in Contemporary Communication Problems** **3 credits**
Investigation of special current communication topics from a behavioral perspective which are selected on the basis of need, interest, or timeliness and which may change each time the course is offered.
- 666-798 Workshop** **1 credit**
A course for graduate students only characterized by individualized and participatory activities within a group context. The results of which activities are shared with the entire group. Announcement of specific workshops being offered are made as the workshops are developed. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to workshops.
- 666-799 Thesis Research** **1-6 credits**
Guided investigation of an approved thesis topic. Students may receive credit for research activities planned in conjunction with their adviser and leading to the completion of a master's degree. See the Thesis section under Academic Requirements and Policies for credit limitations pertaining to thesis research.

ENGLISH (680)

LIBERAL ARTS FOUNDATION COURSE

- 680-701 Language in Society** **3 credits**
Historical growth and continuing development of the English language and its uses in society, including a study of current usage and principles for evaluating

language in use. For experienced elementary and secondary school teachers who have completed the lower division course requirements in English and who have not had similar work.

SPECIALIZED COURSES

- 680-501 Literary Criticism** 3 credits
A study of the major modes of criticism from Aristotle to the present. Prereq: 680-101 and 680-102 (or 680-161 and 680-162) or equivalent.
- 680-515 The Development of the English Novel to the Twentieth Century** 3 credits
A survey of the development of the English novel from the eighteenth century to the twentieth, with emphasis on the development of themes and techniques. Studies of selected works by Defoe, Richardson, Fielding, Sterne, Austen, Scott, Dickens, Thackeray, Eliot, Hardy, Conrad and/or others.
- 680-545 Afro-American Literature, 1800 to the Present** 3 credits
A survey of essays, prose fiction, drama, and poetry written by Afro-Americans from the colonial period to the present.
- 680-546 Survey of Modern Drama** 3 credits
Analysis of trends and developments in the modern theatre from Ibsen's realistic plays to off-off-Broadway drama with emphasis on literary history and staging problems.
- 680-547 British Literature: 1900-1950** 3 credits
A survey of the development of the British novel from 1900 to 1950, with an emphasis on the rise of modernism. Studies of selected works by Forster, Ford, Lawrence, Woolf, Joyce, Orwell, and Bowen, and others.
- 680-548 American Literature: 1900-1950** 3 credits
A survey of American literature from 1900 through 1950, concentrating on major poets and writers of prose fiction, including Frost, Eliot, Hemingway, Steinbeck and Faulkner.
- 680-549 Modern American and British Literature: 1950 to Present** 3 credits
A study of the literature of the post-World War II era. Special emphasis on the contemporary theme of the search for values.
- 680-551 Classical Myth and Legend as Sources for Literature** 3 credits
An examination of classical myths and legends and how they are used in various periods and genres of literature.
- 680-553 Modern Poetry** 3 credits
An intensive study of major twentieth century American and British poets.
- 680-556 World Literature I: Ancient Times through Renaissance** 3 credits
A rapid survey of world literatures other than English and American covering major literary periods from ancient times through the Renaissance. Prereq: 680-101 and 680-102.
- 680-557 World Literature II: Neoclassical through Modern** 3 credits
A rapid survey of literatures other than English and American covering the major literary periods from Neoclassicism (seventeenth century) to the present.
- 680-568 American Minority Women Writers** 3 credits
A survey of poetry, fiction, drama, and essays written by Afro-American, Spanish-American, and Native American women.

- 680-570 Advanced Composition** **3 credits**
A course in advanced exposition and argumentation.
- 680-572 Technical and Scientific Writing** **3 credits**
Practice in expository, descriptive, and report writing, with special application to technical and scientific subject matter.
- 680-573 Poetry Writing** **3 credits**
An intensive course in the writing of poetry, considering examples from some of the best contemporary verse, as well as criticism by students and the instructor of student work.
- 680-575 Fiction Writing** **3 credits**
Theory, techniques, and practice of the writing of fiction. Graduate students will be required to write 75 pages and to complete a critical study of creative writing publications.
- 680-576 Screenwriting** **3 credits**
Practical experience in writing scripts for cinema and/or television, with special emphasis on the creative, theoretical, and critical processes.
- 680-578 Prose Stylistics** **3 credits**
Introduction to analysis of prose style through intensive study of a broad range of contemporary styles ranging from popular to business, technical and academic styles. Application of the principles of style in student writing.
- 680-581 Survey of Linguistics** **3 credits**
A detailed survey of the techniques, issues, and controversies in theoretical linguistics.
- 680-582 History of the Language** **3 credits**
A detailed study of change and the conditions for change in the sounds, vocabulary, and grammar of English from its first records through the present.
- 680-583 Modern Grammatical Theory** **3 credits**
A study of traditional, structural and transformational-generative grammars.
- 680-585 Topics in Linguistics (variable topic)** **3 credits**
Advanced study of a branch of linguistics or of the application of a branch of linguistics to a cognate field, e.g., pedagogy or literary criticism, the particular topic to be published before registration. May be retaken.
- 680-600 Chaucer** **3 credits**
A study of the language and art of Chaucer as he reflects the culture of his time.
- 680-602 English Renaissance Poetry and Prose** **3 credits**
A study of English literature from 1500-1660 (excluding Milton) with emphasis on the works of Sidney, Spenser, Donne, Jonson, and Marvell.
- 680-603 Renaissance Drama Excluding Shakespeare** **3 credits**
A study of Tudor and early Stuart drama, exclusive of Shakespeare.
- 680-604 Shakespeare** **3 credits**
A study of the works of Shakespeare which will include representative genres and which will not duplicate works studied in 680-605.
- 680-605 Shakespeare** **3 credits**
A study of the works of Shakespeare which will include representative genres and which will not duplicate works studied in 680-604.

- 680-606 Milton** **3 credits**
A study of the principal works in poetry and prose of John Milton.
- 680-613 Restoration and Eighteenth Century Theatre and Drama** **3 credits**
A survey of English drama from 1660 to 1800, with attention divided between representative plays and conventions of the theatre.
- 680-614 Prose and Poetry of the Restoration and Eighteenth Century** **3 credits**
A survey of English prose and poetry from 1660 to 1800.
- 680-616 The Age of Romanticism** **3 credits**
A study of the prose and poetry of the major writers of the Romantic period in English literature.
- 680-620 Victorian and Edwardian Literature** **3 credits**
A survey of Anglo-Irish literature in the Victorian and Edwardian periods (c. 1830-1914), emphasizing the movement of ideas in the period from romanticism to modernism.
- 680-661 Major Writers (variable topic)** **3 credits**
Intensive study of the works of a major writer or related writers and their contributions to literature and culture, the particular topic to be published before registration. May be retaken.
- 680-662 Twentieth Century Women Writers** **3 credits**
A study of significant American and British women writers of the twentieth century.
- 680-663 19th Century Women Writers** **3 credits**
A survey of the works of American and English women writers of the 19th century that explores the literary achievements of women and their significance for us today.
- 680-671 Current Theories of Composition for Teachers** **3 credits**
A course in theories and methods of teaching composition, including practice in the evaluation of student writing. 680-370, Advanced Composition, is strongly recommended as preparation for this course.
- 680-677 The Current Writing Scene** **3 credits**
An intensive study of the range of current writing, with practice in written composition which may qualify students for professional employment.
- 680-678 Applied Prose Writing** **3 credits**
Intensive training in writing as process; application of basic stylistic skills to diverse practical writing situations, audiences, and purposes; emphasis on self-direction of the writer.
- 680-690 Writing Workshop** **1-3 credits**
Intensive study, practice and/or application of a selected aspect of writing.
- 680-693 Applied Study: Internship in Writing** **1-6 credits**
Internships, as available, in business or government for suitably prepared students wishing to make careers as writers.
- 680-694 Senior Seminar in Writing** **3 credits**
A closely guided program of instruction in writing, determined in consultation with the instructor, ranging from creative writing to scholarly analysis. May be taken for credit no more than twice.

- 680-696 Special Studies** **2-4 credits**
Designed to increase the student's understanding of the range of literature. By special request of the students or faculty, the particular area to be published before registration.
- 680-700 Individual Studies** **1-3 credits**
An opportunity for a student to explore in more detail a specific field of study. Student and adviser decide the study, with the consent of the professor in charge of the study. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to individual studies.
- 680-747 American Novelists** **3 credits**
A study of the American novel, form and content, intensive reading of selected novels.
- 680-749 Modern Literature** **3 credits**
A study of selected poems, novels, plays and short stories of significant twentieth century writers from Yeats, Joyce and Shaw through Frost, O'Neill and Hemingway.
- 680-771 Studies in Special Topics** **3 credits**
Analysis and discussion of a significant aspect of language or literature or of a theme expressed in a variety of works, the particular topic to be published before registration.
- 680-790 Research in English** **3 credits**
Designed to acquaint the student with specialized references, printed compilations and other library resources, and to familiarize the student with techniques and famous examples of literary investigation.
- 680-798 Workshop** **1 credit**
A course characterized by individualized and participatory activities within a group context, the results of which activities are shared with the entire group. Announcement of specific workshops being offered are made as the workshops are developed. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to workshops.
- 680-799 Thesis Research** **1-2 credits**
Guided investigation of an approved thesis topic. Students may receive credit for research activities planned in conjunction with their adviser and leading to the completion of a master's degree. See the Thesis section under Academic Requirements and Policies for credit limitations pertaining to thesis research.

FOREIGN LANGUAGES (702-704, 708)

FRENCH (702)

- 702-690 Workshop** **1-3 credits**
A course characterized by individualized and participatory activities within a group context, the results of which activities are shared with the entire group. Announcement of specific workshops being offered are made as the workshops are developed. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to workshops.
- 702-696 Special Studies** **1-3 credits**
A course offered from time to time on topics related to the language, literature or civilization of France on the basis of need, interest or timeliness. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to special studies.

GERMAN (704)

- 704-690 Workshop** **1-3 credits**
A course characterized by individualized and participatory activities within a group context, the results of which activities are shared with the entire group. Announcement of specific workshops being offered are made as the workshops are developed. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to workshops.
- 704-696 Special Studies** **1-3 credits**
A course which is offered from time to time on topics related to the language, literature or civilization of Germany on the basis of need, interest or timeliness. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to special studies.

SPANISH (708)

- 708-690 Workshop** **1-3 credits**
A course characterized by individualized and participatory activities within a group context, the results of which activities are shared with the entire group. Announcement of specific workshops being offered are made as the workshops are developed. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to workshops.
- 708-696 Special Studies** **1-3 credits**
A course offered from time to time on topics related to the language, literature or civilization of Spanish-speaking countries on the basis of need, interest or timeliness. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to special studies.

GEOGRAPHY (722)

LIBERAL ARTS FOUNDATION COURSE

- 722-702 World Populations and Resources** **3 credits**
An analysis of the elements of the earth's human populations and their resource bases and related problems.

SPECIALIZED COURSES

- 722-520 Meteorology and Climate** **3 credits**
A study of our atmosphere. Beginning with fundamental relationships among earth, sun and air, the mysteries and myths of weather phenomenon are replaced with understanding of the physical laws that govern atmospheric functioning expressed in everyday language. The course ends with a survey of world climate regions. Prereq: 722-111 or equivalent.
- 722-523 Water Resources** **3 credits**
Following a treatment of the character, process-involvement, and distribution of water, the significance of water as a resource in a modern society will be considered. The course will culminate in an evaluation of the development-management, use, and conservation of water within the contexts of the hydrologic cycle and watershed. Field trips are normally taken.
- 722-536 Rural Settlements** **3 credits**
Understanding of form, structures, and distribution of rural settlements in distinctive parts of the earth according to their origin, function, and development. Special emphasis is given to analyzing the rural settlements of southeastern Wisconsin. Field trips are normally taken.

- 722-537 Recreation Regions and Systems** **3 credits**
Initial segments of the course focus upon an evaluation of spatial elements of the recreation phenomenon and the development of recreation areas for the express purpose of providing a background for subsequent analysis of existing recreation plans and formulation of a conceptual framework for the development of future recreation regions. Field trips are normally taken.
- 722-550 Regional Analysis and Planning** **3 credits**
After an overview of the techniques of regional analysis, the role of state, regional, and county governments in development planning is discussed with emphasis upon short/long range planning and zoning. The decision making role of citizens, elected officials, and planners within a planning context is an integral part of the course. Field trips are normally taken.
- 722-610 Physiography of North America** **3 credits**
A study of the structure, development and interpretation of the landforms in each of the physiographic regions of the United States, Canada and Mexico. Field trips are normally taken. Prereq: 722-210 or 722-310, or consent of instructor.
- 722-644 Urban Land Use Planning** **3 credits**
A study of the historical, social and political framework of the urban land planning process with primary emphasis on the United States. Exposure to professional planning approaches and techniques and a critical analysis of plans and planners are stressed. Field trips are normally taken. Prereq: 722-344 or 880-352 or 820-446 or 230-438 or consent of instructor.
- 722-675 Air Photo Interpretation** **3 credits**
An introduction to the use of aerial photographs for measurement purposes, and the identification, classification, and mapping of agricultural, urban, industrial, and landform patterns through the use of aerial photographic techniques. Field trips are normally taken.
- 722-690 Workshop** **1-8 credits**
A course characterized by individualized and participatory activities within a group context, the results of which activities are shared with the entire group. Announcement of specific workshops being offered are made as the workshops are developed. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to workshops.
- 722-696 Special Studies** **1-3 credits**
A course which is not included in the curriculum but which is offered on topics selected for their timeliness, need, and interest. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to special studies. Repeatable once for a maximum of 6 credits.
- 722-700 Individual Studies** **1-3 credits**
An opportunity for a student to explore in more detail a specific field of study. Student and adviser decide the study, with the consent of the professor in charge of the study. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to individual studies.
- 722-761 Anglo America** **3 credits**
A study of Canada and the United States of America with an emphasis on the systematic approach. Regions will be selected from microgeographic studies.
- 722-768 Geography of Sub-Saharan Africa** **3 credits**
A thematic, geographical analysis focusing on the major regions of Africa south of the Sahara. Emphasis will be placed on the particular problems and potentials of development within the selected regions.

- 722-790 History and Nature of Geography** **3 credits**
A combination lecture and seminar course about the development of geographic thought. The course will include the compilation of biographies of noted geographers.

- 722-798 Workshop** **1-6 credits**
A course characterized by individualized and participatory activities within a group context, the results of which activities are shared with the entire group. Announcement of specific workshops being offered are made as the workshops are developed. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to workshops.

- 722-799 Thesis Research** **1-6 credits**
Guided investigation of an approved thesis topic. Students may receive credit for research activities planned in conjunction with their adviser and leading to the completion of a master's degree. See the Thesis section under Academic Requirements and Policies for credit limitations pertaining to thesis research.

GEOLOGY (516)

- 616-690 Workshop** **1-3 credits**
A study group of less formal organization than the usual course, in which students share in the identification of problems and issues to be studied. Repeatable. Prereq: Consent of instructor.

- 616-696 Special Studies** **1-3 credits**
A course designed to give students an opportunity to pursue special philosophical topics that are not regularly included in the curriculum. Course topics are selected on the basis of need, interest, or timeliness. Repeatable. Prereq: Consent of instructor.

- 616-700 Individual Studies** **1-3 credits**
An opportunity for a student to explore in more detail a specific field of study. Student and adviser decide the study, with the consent of the professor in charge of the study. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to individual studies.

- 616-701 Basic Concepts in Geology** **3 credits**
Covers the important aspects of both physical and historical geology. Laboratory studies will stress the recognition of the common rocks, minerals and fossils with an emphasis on those found in Wisconsin. Two or three field trips will be conducted for field studies. Open to all students who have not had 726-100, 762-202 or their equivalents in other institutions.

HISTORY (740)

LIBERAL ARTS FOUNDATION COURSE

- 740-702 Great Issues in Western History** **3 credits**
Discussion of selected issues in European and American history based on a study of the sources. Open to experienced elementary and secondary school teachers who have met the introductory lower division course requirements in history and social studies for their bachelor's degree program and who have not had similar work. Not to be enrolled in by those in the history emphasis.

SPECIALIZED COURSES

- 740-505 Industrial America 1877-1919** **3 credits**
A study of the United States from the Compromise of 1877 through World War I, emphasizing the origins, growth and problems of, and response to, industrialism and new trends in American foreign policy.

- 740-506 America in Prosperity, Depression and World War II: 1919-1945** **3 credits**
An analysis of the political, economic and social trends in the United States during the Roaring Twenties, the Great Depression, and American participation in World War II.
- 740-507 Recent America, 1945 to the Present** **3 credits**
A study of American society, diplomacy, economics, and politics from the end of World War II to the present.
- 740-525 Women in the Western World** **3 credits**
A study of the historical position of women in western civilization from classical antiquity through the nineteenth century in the reality of everyday experience and in the context of philosophic, moral, literary, and legal evidence and/or commentary.
- 740-526 History of Contemporary Women from 1800** **3 credits**
A comparative historical study of the role of women in representative societies of the modern world - the United States, Scandinavia, Soviet Russia, China, Britain and the Commonwealth - in the reality of everyday experience and in the context of philosophic, economic, social, aesthetic, legal, and political structures and commentary.
- 740-571 History of Russia to 1815** **3 credits**
A survey of Russian history to 1815, emphasizing its relationship to major problems in European history.
- 740-572 History of Russia since 1815** **3 credits**
A survey of Russian history in the nineteenth and twentieth centuries, emphasizing relationships to major European and world problems.
- 740-580 The Holy Roman Empire** **3 credits**
A survey from the beginnings to the Congress of Vienna, emphasizing the development of German political and cultural traditions.
- 740-581 Modern Germany** **3 credits**
A survey from the Congress of Vienna to the present, emphasizing the successive solutions to the question of German political organization.
- 740-600 Diplomatic History of the United States to 1898** **3 credits**
A survey of American diplomatic history to 1898, stressing principles and practice, economic and political aspects and expansion.
- 740-601 Diplomatic History of the United States since 1898** **3 credits**
A survey of American diplomatic history since 1898, emphasizing the United States as a great power, changing economic and political realities, American intervention in two world wars, and contemporary trends.
- 740-603 History of the American West** **3 credits**
A study of the exploration, and settlement of the trans-Mississippi West with special emphasis on the fur-trading era, Plains Indians, and the mythology of the West. Slides are used extensively to illustrate the lecture topics.
- 740-610 History of Modern Middle East** **3 credits**
A survey of modern and contemporary history of the Middle East, emphasizing its internal structures institutions and interests.

- 740-620 The History of Black America** **3 credits**
A study of the Afro-American from African beginnings to the present, emphasizing the development of white and black racial attitudes, the development of slavery, the growth of Afro-American institutions and race organizations, Blacks in American politics, Afro-American intellectual life, economic life and Black culture.
- 740-624 American Indian History** **3 credits**
A study of the role of the American Indian in United States history with special emphasis on red-white relations, United States government policies, Plains Indian culture and the problems of Indians in American society.
- 740-632 Banditry, Rebellion and Revolution in Modern China** **3 credits**
An examination of violent socio-political upheavals in China beginning with the White Lotus Rebellion and culminating with the Communist Revolution.
- 740-633 Twentieth Century Japan** **3 credits**
A discussion of Japan's emergence into the modern world centering on the Japanese transformation from a secluded feudal nation to a powerful industrialized state.
- 740-651 Ancient Civilization** **3 credits**
A study of the civilization of the Ancient Near East, of Greece, and of Rome.
- 740-652 Medieval Civilization** **3 credits**
A survey of basic political, socioeconomic, cultural and religious trends in European history from A.D. 300 to 1500.
- 740-653 The French Revolution and Napoleon** **3 credits**
A study of the revolutionary and Napoleonic periods of French history (1788-1815), and the relation of the developments of those periods in Europe to modern political and constitutional concepts and institutions.
- 740-658 Social and Cultural History of Europe to 1800** **3 credits**
A study of the interaction of ideas and social and political institutions, with an emphasis on the Enlightenment and early romanticism.
- 740-659 Social and Cultural History of Europe since 1800** **3 credits**
A study of the interaction of ideas and social and political institutions, with an emphasis on such topics as nationalism, socialism, anarchism and existentialism.
- 740-660 History of Twentieth Century Europe** **3 credits**
A survey of the political, economic, social, and cultural history of Europe since about 1914. Prerequisite: 740-155 or equivalent.
- 740-690 Workshop** **1-6 credits**
A course characterized by individualized and participatory activities within a group context, the results of which activities are shared with the entire group. Announcement of specific workshops being offered are made as the workshops are developed. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to workshops.
- 740-696 Special Studies** **1-3 credits**
Study of a selected historical topic not covered in regular course offerings. The topic will be announced prior to registration.
- 740-700 Individual Studies** **1-3 credits**
An opportunity for a student to explore in more detail a specific field of study. Student and adviser decide the study, with the consent of the professor in charge of the study. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to individual studies.

- 740-705 Historiography and Historical Research** **3 credits**
A study of selected historical writings with treatment of the practical experience in the techniques of historical research, writing, and critique adapted to the individual preparation of the students.
- 740-707 Recent American History** **3 credits**
The economic, political and social development of the twentieth century.
- 740-790 Seminar in Twentieth Century America** **3 credits**
Concentration on specific studies within selected areas of the twentieth century. An evaluation of historical evidence will be stressed and conflicting interpretations of events will be evaluated.
- 740-798 Workshop** **1-6 credits**
A course characterized by individualized and participatory activities within a group context, the results of which activities are shared with the entire group. Announcement of specific workshops being offered are made as the workshops are developed. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to workshops.
- 740-799 Thesis Research** **1-6 credits**
Guided investigation of an approved thesis topic. Students may receive credit for research activities planned in conjunction with their adviser and leading to the completion of a master's degree. See the Thesis section under Academic Requirements and Policies for credit limitations pertaining to thesis research.

MATHEMATICS AND COMPUTER SCIENCE (760,765)

MATHEMATICS (760)

- 760-542 Applied Statistics** **3 credits**
This course will cover the basics of statistical testing, regression analysis, experimental design, analysis of variance, the use of computers to analyze statistical problems. No credit will be given for this course for students who have passed the Business Statistics course (230-245). Prereq: 760-253 or 760-250 or consent of instructor.
- 760-555 Matrices and Linear Algebra** **3 credits**
Systems of linear equations, vector spaces, linear dependence, bases, dimension, linear mappings, matrices, determinants, quadratic forms, orthogonal reduction to diagonal form, eigenvalues, geometric applications. Prereq: 760-254 or concurrent registration.
- 760-565 Linear Programming** **3 credits**
A study of the vector-matrix theory and computational techniques of the simplex method, duality theorem, degeneracy problem, transportation problems and their applications to engineering and economics. Programming and machine solution of linear programming problems. Prereq: 760-171 and 760-355/555, or consent of instructor.
- 760-575 Development of Mathematics** **3 credits**
A study of the development of mathematical notation and ideas from prehistoric times to the present, with special emphasis being placed on elementary mathematics through the calculus. The development and historic background of the new math will be included. Prereq: Consent of instructor.
- 760-580 Patterns of Problem Solving** **3 credits**
This course will expose students to a variety of techniques useful in solving mathematics problems. The experiences gained from this course can be applied

to problems arising in all fields of mathematics. The student will have the chance to see how some general techniques can be used as tools in many areas. Homework for this course will consist mostly of solving a large number of mathematics problems. Prereq: 760-280 or consent of instructor. (Consent will be given to students with substantial interest in problem solving, and adequate preparation.)

760-615 Modern Algebra and Number Theory for the Elementary Teacher 3 credits

An introduction to modern algebra with special emphasis on the number systems and algorithms which underlie the mathematics curriculum of the elementary school. Topics include sets, rings, integral domains, rational numbers, real numbers, complex numbers and polynomials. Students may not receive credit for both 760-615 and 760-652. Prereq: Consent of instructor.

760-616 Geometry for the Elementary Teacher 3 credits

A study of the intuitive, informal geometry of sets of points in space. Topics include non-metric geometry, elementary constructions, measurement, coordinates and graphs, classification of geometries and introduction to geometric proof. Prereq: Consent of instructor.

760-617 Theory of Numbers 3 credits

A study of the properties of integers, representation of integers in a given base, properties of primes, arithmetic functions, modulo arithmetic, Diophantine equations and quadratic residues. Consideration is also given to some famous problems in number theory. Prereq: 760-415/615, or 760-452/652, or consent of instructor.

760-631 Topology 3 credits

An introduction to point-set topology, including such topics as topological spaces, mappings, connectedness, compactness, separation axioms, metric spaces, complete spaces, product spaces and function spaces. Prereq: 760-255, 760-280 or consent of instructor.

760-641 Probability Theory 4 credits

Course provides probability, discrete and continuous random variables, mathematical expectation, discrete and continuous distributions, Monte Carlo examination of techniques, and stochastic processes. Prereq: 760-255 or consent of instructor.

760-642 Mathematical Statistics 3 credits

This course will cover the theory of estimation, hypothesis testing, non-parametric tests, Bayesian estimation, linear models, actuarial models, sampling theory, and time series. Prereq: 760-441/641 and 760-355 or consent of instructor.

760-652 Algebraic Structure of the Number System 3 credits

An introduction to abstract algebra with emphasis on the development and study of the number systems of integers, integers mod n , rationals, reals, and complexes. These offer examples of and motivation for the algebraic structures of ring, integral domain, field, polynomial ring, ideal and quotient ring. (Note: Students may not receive credit for both 760-415/615 and 760-452/652.) Prereq: 760-355/760-555 or 760-255.

760-653 Modern Algebra I 3 credits

Topics from linear algebra and an introduction to the theory of groups. Vector spaces, linear transformations, Jordan canonical form, definition and examples of groups, normal subgroups, quotient groups, homomorphisms, permutation groups, and Sylow's theorem. Prereq: 760-355/760-555 or consent of instructor.

- 760-654 Modern Algebra II** **3 credits**
Continuation of Modern Algebra I, 760-453/653. Rings, integral domains, fields, the examples of numbers, polynomials and matrices, homomorphisms, ideals, quotient rings, unique factorization, field extensions, further topics from groups or rings. Prereq: 760-453/653 or consent of instructor.
- 760-658 Applied Mathematical Analysis I** **3 credits**
A course in numerical and series solutions for ordinary differential equations, the Laplace transform, boundary value problems, Fourier series, vector analysis and its physical applications. Prereq: 760-255 and 760-361.
- 760-659 Applied Mathematical Analysis II** **3 credits**
A course in functions of several variables, theory of partial differential equations, partial differential equations of mathematical physics, functions of a complex variable with applications. Prereq: 760-458/658.
- 760-663 Functions of a Complex Variable** **3 credits**
A study of the algebra of complex numbers and the calculus of the functions of a complex variable. Analytic functions, complex integrals, calculus of residues, conformal mapping and applications are thoroughly studied. Prereq: 760-255.
- 760-664 Advanced Calculus I** **3 credits**
A study of the properties of functions of a real variable as exemplified by continuity, differentiation, sequences, series, the Riemann-Stieltjes integral, and sequences and series of functions. Prereq: 760-255 and either 760-355/555 or consent of instructor.
- 760-665 Advanced Calculus II** **3 credits**
A course in differential calculus of functions of several variables, multiple and line integrals, improper integrals, theorems of Green, Gauss and Stokes, Fourier series. Prereq: 760-464/664.
- 760-671 Numerical Analysis I** **3 credits**
Emphasis on numerical algebra. The problems of linear systems, matrix inversion, the complete and special eigenvalue problems, solutions by exact and iterative methods, orthogonalization, gradient methods. Consideration of stability and elementary error analysis. Extensive use of digital computing equipment. Prereq: 760-171 and 760-355/760-555.
- 760-672 Numerical Analysis II** **3 credits**
Emphasis on algorithmic approach to numerical analysis. Methods of iteration, interpolation and approximation applied to numerical differentiation and integration and to solution of nonlinear systems, difference equations, ordinary and partial differential equations. Consideration of rounding error and numerical stability. Extensive use of digital computing equipment. Prereq: 760-171 and 760-255.
- 760-690 Workshop** **1-3 credits**
Intensive study in a selected area of mathematics such as applied mathematics, computer science, geometry-topology, mathematical analysis, modern algebra, or statistics. Study of the applications of this area which are of most interest to the students involved in the workshop. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to workshops.
- 760-694 Seminar** **2 credits**
A study of selected topics supplementary to the usual curriculum and useful for further work in mathematics. Prereq: Consent of instructor.

- 760-696 Special Studies** **1-3 credits**
A course which is not regularly in the curriculum but which is offered when there is enough interest in some special topic of mathematics. Prereq: Consent of instructor.
- 760-700 Individual Studies** **1-3 credits**
An opportunity for a student to explore in more detail a specific field of study. Student and adviser decide the study, with the consent of the professor in charge of the study. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to individual studies.
- 760-731 Probability and Statistics for Mathematics Teachers** **3 credits**
This course is designed for middle school, junior high school, and high school teachers. Topics covered will be probability, discrete and continuous random variables, descriptive statistics, and some inferential statistics. Elementary calculus will be used in the course. Prereq: Graduate standing and a course in calculus that includes integration or consent of instructor.
- 760-798 Workshop** **1-6 credits**
A course characterized by individualized and participatory activities within a group context, the results of which activities are shared with the entire group. Announcement of specific workshops being offered are made as the workshops are developed. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to workshops.
- 760-799 Thesis Research** **1-6 credits**
Guided investigation of an approved thesis topic. Students may receive credit for research activities planned in conjunction with their adviser and leading to the completion of a master's degree. See the Thesis section under Academic Requirements and Policies for credit limitations pertaining to thesis research.

COMPUTER SCIENCE (765)

- 765-502 Computer Logic and Microprocessors** **3 credits**
Structure of microprocessors and microprocessor systems, programming in machine language, computer logic and logic circuits, interfacing. Prereq: 765-171.
- 765-505 Introduction to Computers for Teachers** **3 credits**
This course is designed for all teachers who are interested in learning about and using computers. After an introduction to programming in BASIC, discussion will focus on a survey of computer applications in teaching: simulation, interactive instruction, and problems of design and implementation of computer aided instruction. The course will include a survey of microcomputers as well as use of timeshare systems. No student may receive credit for both this course and 765-171, or for both this course and 250-211. A student who has taken 765-171 may not take this course, 765-305. No student may receive credit for this course and 765-705.
- 765-507 Small Computer Applications** **3 credits**
This course will treat the programming and applications of small computers, as well as their architecture, design and social impact. Graduate students will be required to submit a programming project usually related to an aspect of their employment. Prereq: 765-171 or consent of instructor.
- 765-560 PASCAL Programming in Mathematics** **3 credits**
This course teaches all the fundamentals of the programming language PASCAL and applies them to problems arising in pure mathematics. Topics will include extended precision arithmetic, applications to problems in graph theory, modern algebra, number theory, puzzles and games. Prereq: 760-250 and 950-222 or 760-254 and a programming course beyond 765-171 or consent of instructor.

- 765-572 Intermediate Programming** **3 credits**
 Sequel to 765-171. Advanced Pascal language features and programming techniques, learned through the implementation of larger programs; an introduction to algorithm analysis, program verification, recursion and data abstraction. Prereq: 765-171 and 760-280. Unreq: 950-231.
- 765-602 Computer Graphics** **3 credits**
 Theory and programming of computer graphics. Devise independent coordinates, transformations, two and three dimensional graphics, hidden lines and surfaces, animation, area filling, interpolation, and approximation. Prereq: 760-355/555, and 765-171 or 765-705.
- 765-612 Computer Organization and System Programming** **3 credits**
 A study of general computer system organization, zero, one, two and three address machines, macro generation, subroutine linkage, assembler, loader compiler and multiprogramming techniques. Assembly language is used extensively to write system programs. Prereq: 760-271 or consent of instructor.
- 765-624 Operating Systems** **3 credits**
 A survey of operating systems including hardware devices, data communications, file handling, job scheduling, resource allocation and system design. Prereq: 760-412/512 with 760-342/542 strongly recommended.
- 765-690 Workshop** **1-3 credits**
 Study of selected topics with a particular emphasis on the needs and interests of the participants. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to workshops. Repeatable. Prereq: Consent of instructor.
- 765-696 Special Studies** **1-3 credits**
 A course which is not regularly in the curriculum but which is offered when there is enough interest in some special topic of computer science. Repeatable. Prereq: Consent of instructor.
- 765-705 Introduction to Programming** **3 credits**
 This course is designed for the high school teacher who wishes to learn programming and computer science in order to apply them to the teaching of mathematics and science. The BASIC computer language is covered in detail including the use of BASIC files and elementary graphics. Application programs will be written both on terminals and on microcomputers. Prereq: Graduate standing and a working knowledge of algebra.

PHILOSOPHY (782) AND RELIGIOUS STUDIES (786)

PHILOSOPHY (782)

LIBERAL ARTS FOUNDATION COURSE

- 782-701 Great Issues in Western Philosophy** **3 credits**
 A study of major philosophical works and problems from ancient to contemporary times. These works will be used to probe basic and relevant issues such as the nature and methods of knowing, thinking, proving arguments, and deciding.

SPECIALIZED COURSES

- 782-590 Feminist Philosophy** **3 credits**
 An introduction to feminist philosophy including its relation to other philosophical traditions, its historical development, and its relevance to concerns in areas such as ethics, theory of knowledge, political philosophy, and philosophy of religion.

- 782-690 Workshop** **1-3 credits**
A study group of less formal organization than the usual course, in which students share in the identification of problems and issues to be studied.
- 782-694 Seminar** **1-3 credits**
An intensive study of one or more philosophical issues that supplement the curriculum. Original research papers may be expected as partial fulfillment of the course requirements.
- 782-696 Special Studies** **1-3 credits**
A course designed to give students an opportunity to pursue special philosophical topics that are not regularly included in the curriculum. Course topics are selected on the basis of need, interest, or timeliness.
- 782-700 Individual Studies** **1-3 credits**
An opportunity for a student to explore in more detail a specific field of study. Student and adviser decide the study, with the consent of the professor in charge of the study. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to individual studies.

RELIGIOUS STUDIES (786)

LIBERAL ARTS FOUNDATIONS COURSE

- 786-711 World Religions** **3 credits**
The origins, beliefs, practices and development of six major world religions: Hinduism, Buddhism, Confucianism, Judaism, Christianity, and Islam.

SPECIALIZED COURSES

- 786-690 Workshop** **1-3 credits**
A study group of less formal organization than the usual course, in which students share in the identification of problems and issues to be studied.
- 786-798 Workshop** **1-3 credits**
A course characterized by individualized and participatory activities within a group context, the results of which activities are shared with the entire group. Announcement of specific workshops being offered are made as the workshops are developed. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to workshops.
- 786-696 Special Studies** **1-3 credits**
A course designed to give students an opportunity to pursue religious issues and problems that are not regularly included in the curriculum. Course topics are selected on the basis of need, interest, or timeliness. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to special studies.
- 786-700 Individual Studies** **1-3 credits**
An opportunity for a student to explore in more detail a specific field of study. Student and adviser decide the study, with the consent of the professor in charge of the study. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to individual studies.

PHYSICS (800) AND ASTRONOMY (805)

PHYSICS (800)

LIBERAL ARTS FOUNDATION COURSE

- 800-702 Physical Science** **3 credits**
An in-depth examination of certain developments in physical science principles and their impact on man's thought and way of life. Open to experienced elementary and secondary school teachers who have had an introductory course in physical science.

SPECIALIZED COURSES

- 800-503 Microprocessor Laboratory** **2 credits**
Laboratory experience in microprocessor addressing, digital logic circuits, micro-computer input and output techniques; digital to analog and analog to digital interfacing and device control by microcomputers. This course will not satisfy the laboratory work requirements for the physics major; the credit will count toward the major. Prereq: 800-175 (or 800-163) and 765-171; or concurrent registration in 765-302/502; or graduate standing with computer programming experience.
- 800-610 Modern Physics I** **3 credits**
A study of twentieth century physics. Topics covered include relativity, elementary quantum physics, atomic structure, elementary nuclear physics and fundamental particles. Three one-hour lectures per week. Prereq: 800-174, 800-175 or 800-162, 800-163 and 760-254.
- 800-611 Modern Physics Laboratory I** **1 credit**
A laboratory course in modern physics. The experiments performed in this course complement the lectures of Modern Physics I. It is recommended that this course be taken concurrently with Modern Physics I. One two-hour laboratory per week. Prereq: 800-410/610 or concurrent registration or consent of instructor.
- 800-612 Modern Physics II** **3 credits**
A continuation of Modern Physics I. Topics covered include statistical mechanics, atomic and molecular spectra, x-ray spectra, physics of the solid state and nuclear physics. Three one-hour lectures per week. Prereq: 800-410/610.
- 800-690 Workshop** **1-8 credits**
A course characterized by individualized and participatory activities within a group context, the results of which activities are shared with the entire group. Announcement of specific workshops being offered are made as the workshops are developed. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to workshops.
- 800-696 Special Studies** **1-3 credits**
A course which offers study in special topics in physics which are not regularly included in the curriculum. Prereq: Consent of the instructor.
- 800-700 Individual Studies** **1-3 credits**
An opportunity for a student to explore in more detail a specific field of study. Student and adviser decide the study, with the consent of the professor in charge of the study. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to individual studies.
- 800-797I Institute** **1-3 credits**
- 800-798 Workshop** **1-6 credits**
A course characterized by individualized and participatory activities within a group context, the results of which activities are shared with the entire group. Announcement of specific workshops being offered are made as the workshops are developed. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to workshops.

ASTRONOMY (805)

- 805-550 Astrophotography for the Amateur** **3 credits**
This course is designed for people interested in combining astronomy with photography through the media of telescope and camera. Techniques for photographing astronomical objects are presented in an activity-oriented format. Darkroom procedures for processing color slides, black/white and color prints are also included. This course will not count toward a physics major or minor. One two-hour lecture and one two-hour laboratory per week. Prereq: Consent of instructor.
- 805-630 Astronomy for Teachers** **3 credits**
An individualized course intended for teachers with limited astronomy background. Subject matter covered will depend on the needs and interests of the student. Each student does an experimental or observational project which is presented at the end of the course as a paper in a seminar. May not count toward physics major or minor. Prereq: Enrollment in this course is limited to those persons teaching at the K-12 grade levels or consent of the instructor.
- 805-690 Astronomy Workshop** **1-5 credits**
A course designed to provide specialized intensive work in selected areas of astronomy, i.e., astrophotography, curriculum, etc. Such workshops will be offered as summer programs, night programs or Saturday programs.
- 805-700 Independent Study** **1-3 credits**
A study carried on in an area or on a topic of special interest in astronomy for a variable number of credits (1-3) under the sponsorship of an interested instructor. Includes tutorial work in a laboratory and self-paced sections.

POLITICAL SCIENCE (820)

- 820-501 Political Science Research Methods** **3 credits**
An introduction to basic research methods in political science. Topics will include various data collection and analysis techniques on the U.S. Presidency, the U.S. Congress, the U.S. Supreme Court, political socialization, political parties, interest groups, civil violence, rebellion, and revolution. Students will obtain "hands-on" experience with computer software designed specifically for political science and the social sciences. This is not a statistics course, and no previous knowledge of statistical methods is assumed.
- 820-516 Police and Criminal Justice Administration** **3 credits**
This course examines the administrative process within the criminal justice setting. Both administrative theories and principles as well as applications to the criminal justice system will be covered. Prereq: A political science general studies course.
- 820-517 The American Legislative Process** **3 credits**
The study of the organization and functioning of legislative bodies, with particular attention to Congress: Functions, membership, committee system, executive-legislative relations, pressure groups, lobbying, and movements for reform. Prereq: A political science general studies course.
- 820-518 The American Presidency** **3 credits**
Analysis and discussion of the various roles of the President regarding his constitutional status and powers, nomination and election, administrative responsibilities, legislative and political leadership, and his role in the conduct of foreign relations. Prereq: A political science general studies course.

- 820-520 Public Policy and Administration** **3 credits**
A course to introduce students to the concepts and problems of public policy and administration. Emphasis will be given to the role played by individuals and groups in large organizations; theories of organization will be set forth and operations of governmental administrative agencies in the political world will be examined. Prereq: A political science general studies course.
- 820-530 Public Policy Analysis** **3 credits**
A systematic introduction to the study of public policy issues through a public policy/issue analysis and problem solving approach. It will also examine and explore other analytical models and approaches in the study of public problems and policy issues. Prereq: 820-141.
- 820-544 State and Local Government** **3 credits**
A study of modern American state and local governments, their evolution from colonial beginnings, their problems, and their potential. Topics include constitutional revision, the role of governors, legislatures, and courts, forms of urban and rural government and state-local relations. Prereq: A political science general studies course.
- 820-546 Politics in Wisconsin** **3 credits**
A study of government and politics in Wisconsin. Policy formation and administration at both the state and local levels will be considered with attention to the main branches of government, political parties, interest groups, functions and services. Prereq: A political science general studies course.
- 820-557 Public Opinion and Political Behavior** **3 credits**
880-557 An examination of public opinion in the United States as it concerns political and social behavior. Major topics are the acquisition of beliefs, leadership and opinion formation, voting behavior, and propaganda. Graduate requirements: In addition to meeting the regular requirements of the course, graduate students will be expected to complete a comprehensive research project using survey research methods. Prereq: A political science general studies course.
- 820-560 Resources for Legal Research** **1 credit**
A course to acquaint students with the major resource materials for the study of law and the legal process with an emphasis on library assignments utilizing the various resources of the UW-Whitewater legal collection. Prereq: A political science general studies course.
- 820-580 Women and Politics** **3 credits**
This course is designed to acquaint the student with the roles of women in political life. Topics include effective civic participation, women's issues and the women's movement. Prereq: Normal political science prerequisite for upper division course.
- 820-611 Modern Political Thought** **3 credits**
An introduction to the principal political concepts and ideas of the modern period, including the writing of Machiavelli, Luther, Calvin, Locke, Hobbes, Rousseau, Hegel, Burke and others. Prereq: A political science general studies course.
- 820-612 Contemporary Political Thought** **3 credits**
A study in depth of certain selected topics of contemporary importance, such as the resolution of power conflicts, the theory and practice of nonviolence and the existentialist dilemma. Prereq: A political science general studies course.
- 820-613 Constitutional Law** **3 credits**
A study of judicial review, its meaning and nature. The development of constitutional relationships between the national government and the states as well as between the branches of the national government is considered. Prereq: A political science general studies course.

- 820-614 The Constitution and Civil Liberties** **3 credits**
 A course focusing on the constitutional development of equal protection and of the rights and freedoms of individuals and the limitations upon the powers of government, both state and national. Prereq: A political science general studies course.
- 820-615 Criminal Justice and the Constitution** **3 credits**
 This course examines the role of the major participants in the criminal justice system - defendants, police, prosecutions, courts, and corrections - and the development of constitutional law regulating their behavior. Prereq: A political science general studies course.
- 820-619 The Judicial Process** **3 credits**
 A study of the American judicial system as a part of the larger framework of the political, social and economic systems of the nation. Emphasis will be on topics such as the judicial role, judicial organization and jurisdiction, judicial power and the decisional process rather than legal cases. Prereq: A political science general studies course.
- 820-620 American Political Thought** **3 credits**
 A study of the fundamental political ideas of America and the political philosophers who espoused them from colonial times to the present. Prereq: 820-141 or consent of instructor.
- 820-621 Public Personnel Administration** **3 credits**
 A critical study of problems of public personnel, with particular emphasis on the process of recruiting and managing people in the public services. Prereq: A political science general studies course.
- 820-630 Formation of Public Policy** **3 credits**
 This course will examine the major public policy problems facing the United States today and the political processes seeking to resolve these problems. Special emphasis to be given to governmental cooperation in seeking to resolve these problems. An additional research paper will be required for the graduate students.
- 820-640 The Politics of Government Budgeting** **3 credits**
 A course designed to introduce the students to the study of criteria for what services or functions should be undertaken by government and in what amounts. Analyzing the effects that government spending and taxes have on the behavior of the private sector of the economy and on the political system, and evaluating the problems and solutions for allocating tax burden equitably among different groups in the society. Prereq: 820-141.
- 820-646 Politics of the Metropolis** **3 credits**
 A treatment of social, economic, and political forms, structures, processes, and behavior in metropolitan communities. Ideas concerning the power structure and decision-making process, the role of the citizen, and the complex whole of metropolitan life will be discussed. Prereq: A political science general studies course.
- 820-651 Political Parties** **3 credits**
 A study of the origin, development and contemporary functioning of political parties in the United States; the analysis of elections, and voting behavior and interest groups. Prereq: A political science general studies course.
- 820-655 British Government and Politics** **3 credits**
 An intensive examination of the political institutions, systems and process of the parliamentary democracy of Great Britain. Prereq: A political science general studies course.

- 820-657 American Foreign Policy** **3 credits**
 An analysis of the forces and institutions involved in the establishment of American foreign policies. Emphasis is placed on the effect of the growth of American power and responsibility on the development of foreign policies. Prereq: A political science general studies course.
- 820-660 Government and Politics of Asia** **3 credits**
 A comparative study of the political structures, institutions and processes of the nations of Asia. Prereq: A political science general studies course.
- 820-662 Social Welfare Policy** **3 credits**
 Provides students with the analysis and critical understanding of the policy issues surrounding historical and current social welfare program, of new social welfare issues and of policy decisions that lead to changes in programming. Community organization, as an intervention approach, will be explored. Prereq: Standard prerequisite for upper division courses in Political Science.
- 820-690 Workshop** **1-6 credits**
 A study group of less formal organization than the usual college course, in which students share in the identification of problems and issues to be studied, principles to be discussed, or methods and resources to be used. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to workshops.
- 820-692 Internship in Political Science** **1-12 credits**
 Study and work with a government unit or in some area of public affairs under the direction of a faculty supervisor. Students will have the opportunity to combine academic learning with practical experience in government and politics. Students may earn a maximum of 12 credits. Prereq: A political science general studies course.
- 820-694 Seminar in Political Science** **3 credits**
 An intensive investigation of the major ideas and problems of politics with emphasis on research methods and values in political science, discussions, reports on readings, research papers. Repeatable two times for maximum 6 credits. Prereq: A political science general studies course.
- 820-694B Seminar in Public Administration** **3 credits**
 A study of the complex aspects of administrative organization, behavior and decision-making in the area of public policy through the examination of a variety of pertinent cases. Prereq: A political science general studies course.
- 820-696 Special Studies** **1-3 credits**
 A course designed to give students an opportunity to pursue special philosophical topics that are not regularly included in the curriculum. Course topics are selected on the basis of need, interest, or timeliness. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to special studies.
- 820-700 Individual Studies** **1-3 credits**
 An opportunity for a student to explore in more detail a specific field of study. Student and adviser decide the study, with the consent of the professor in charge of the study. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to individual studies.
- 820-711 Scope and Methods of Political Science** **3 credits**
 Analysis and evaluation of research methods, techniques and material in political science. Prereq: A political science general studies course.

- 820-715 Major Concepts in Political Theory** **3 credits**
 Concentrates on the scientific approach to theory building and examines in detail such concepts as values, system, progress (development), groups, power and self-interest. The logic and genesis of these concepts will be discussed along with the applications and limitations of the models based on them. Prereq: A political science general studies course.
- 820-720 Comparative Public Administration** **3 credits**
 A study of the role of public administration in diverse cultures and national settings, with a particular emphasis on the impact of bureaucratic organization, personnel, administrative control and the decision-making process on the formulation and execution of public policy. Prereq: A political science general studies course.
- 820-751 Comparative Political Parties** **3 credits**
 A systematic and analytical study of modern political parties and party systems around the world with the purpose of gaining greater understanding of their organization, membership, leadership, functions, methods operation and bases of electoral support. Prereq: A political science general studies course.
- 820-756 International Organization** **3 credits**
 Designed to acquaint the student with the objectives of international organizations for maintaining international peace and security. Three aspects are considered: Peaceful settlement of disputes, regulation of armament and enforcement measures. Prereq: A political science general studies course.
- 820-757 Seminar in Foreign Policy** **3 credits**
 An intensive study of the machinery and conduct of foreign policies. Prereq: A political science general studies course.
- 820-760 Comparative Politics** **3 credits**
 An advanced course that examines approaches and methods in comparative analysis, types of political systems and topics of comparison. Prereq: A political science general studies course.
- 820-767 Seminar in Developing Nations** **3 credits**
 An intensive study of concepts and theories related to the problems of developing states. Prereq: A political science general studies course.
- 820-798 Workshop** **1-4 credits**
 A course characterized by individualized and participatory activities within a group context, the results of which activities are shared with the entire group. Announcement of specific workshops being offered are made as the workshops are developed. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to workshops.

PSYCHOLOGY (840)

GENERAL PSYCHOLOGY COURSES

- 840-523 Analysis of Human Behavior** **3 credits**
 Examines the relations of environmental variables to stability and change of individual human behavior by applying principles of respondent (reflexive behavior) and operant (non-reflexive behavior) analysis to such topics as personality, emotion, development, social behavior, learning, skill acquisitions, self-concept, behavior disorders and therapy, etc.; and includes a critical consideration of assumptions of behavioristic approaches in psychology.

- 840-545 Behavior Disorders** **3 credits**
An introductory survey of abnormal psychology covering the clinical syndromes included in the diagnostic classification system of the American Psychiatric Association. Current research regarding causal factors, treatment, and outcomes supplement descriptions of maladaptive patterns of behavior.
- 840-624 Human Learning** **3 credits**
A survey of findings and theoretical analyses of how people acquire, forget, and transfer verbal information. The structures (sensory, short-term, and long-term memory) and processes (attention, encoding, storage, and retrieval) of human memory will be studied and related to the current theories of human information processing. Prereq: 840-315 or 840-303 or equivalent with consent of instructor.
- 840-635 Maturity and Old Age** **3 credits**
A review and analysis of the various types of adjustment associated with changes in physical, social, and psychological conditions as a person reaches the later adult years.
- 840-646 Introduction to Clinical Psychology** **3 credits**
A survey course designed to acquaint the student with the types of behavior, personality problems with which the clinical psychologist deals, the use of diagnostic methods including projective techniques, and to provide an orientation to the various methods of psychotherapy. Prereq: 840-304 or 840-345, or consent of instructor.
- 840-651 Interpersonal Relations and Social Interactions** **3 credits**
Theory, research and exercises in interpersonal perception, communication, motivation, leadership and problem-solving within groups.
- 840-656 Interview and Psychotherapy Techniques** **3 credits**
A review of the literature on interview techniques as a method of assessment and as a method of helping. Students will observe and discuss demonstrations conducted by faculty members. In addition, students will conduct, role-play, tape and analyze interviews themselves. Prereq: 840-304 or 840-345 or consent of instructor.
- 840-690 Workshop** **1-6 credits**
A course characterized by individualized and participatory activities within a group context, the results of which activities are shared with the entire group. Announcement of specific workshops being offered are made as the workshops are developed. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to workshops.
- 840-694 Seminar in Social Behavior** **3 credits**
Designed to inquire in depth into the substance and applications of social psychology through focusing on such topics as international behavior, causes and effects of racism, the social psychology of political behavior, etc. Issues focused on will vary from semester to semester. Prereq: 840-355 or 880-355.
- 840-696 Special Studies** **1-3 credits**
A seminar in which students and faculty study and discuss a contemporary problem in psychology. May be repeated with permission of department. Prereq: 12 psychology credits or consent of the instructor.
- 840-700 Individual Studies** **1-3 credits**
An opportunity for a student to explore in more detail a specific field of study. Student and adviser decide the study, with the consent of the professor in charge of the study. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to individual studies.

- 840-776 Theories of Personality** **3 credits**
 A critical analysis of the major personality theories based upon current research. Psychoanalytic, trait, behavioristic, humanistic and cognitive theories will be covered. Prereq: 840-304 or equivalent with consent of instructor.
- 840-777 Theories of Psychotherapy** **3 credits**
 An intensive and critical analysis of the major approaches to psychotherapy. Prereq: 840-746 or 840-776 or consent of instructor.
- 840-798 Workshop** **1-6 credits**
 A course characterized by individualized and participatory activities within a group context, the results of which activities are shared with the entire group. Announcement of specific workshops being offered are made as the workshops are developed. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to workshops. Repeatable to 9 credits.

SPECIALIZED COURSES

- 840-594 Directed Research in Psychology** **2 credits**
 Students, under faculty supervision, participate in some or all phases of research projects, literature search, design, data collection and analysis, and preparation of research reports. May be repeated as desired, but no more than six credits may count toward psychology major or minor requirements. Topics vary from term to term. Prereq: 840-315 and/or permission of instructor.
- 840-615 Research Design** **3 credits**
 Several research strategies will be investigated. These will include using questionnaires, attitude and personality research, and interview research. Some of the statistical techniques covered will be: t-tests, chi-square, and various correlational techniques. A thorough discussion of numerous analysis of variance techniques will constitute a major portion of this course. Prereq: 840-215 or equivalent with consent of instructor.
- 840-637 Psychological Aspects of Death and Dying** **3 credits**
 A study of psychology of death, dying and bereavement, emphasizing stage theory, determination of death, children's view of death, terminal care, grief management, near-death experiences, euthanasia, ethical and legal issues, longevity and current research. Prereq: 3 credits in psychology or consent of instructor.
- 840-640 Psychological Tests and Measurements** **3 credits**
 Demonstrates the principles of psychological measurement. Demonstrates contents and uses of specific tests of mental ability, achievement, personality, interests, and special abilities. Field work: Group examination of regional schools' testing program - analysis of tests of this program.
- 840-644 Principles of Behavior Modification** **3 credits**
 A survey of the various methods used in behavior modification programs. The background and theory of specific techniques will be carefully considered. The variables to be reviewed in establishing a sound program will be presented and evaluated. Prereq: 840-303, 840-323, or equivalent with consent of instructor.
- 840-652 Organizational Psychology Research Seminar** **3 credits**
 A study of research in applied social psychology relevant to solving problems resulting from patterns of organization and interaction; emphasizes formal organizations such as businesses and agencies, but includes other problem interactions as well. Provides opportunities to identify, research and develop solutions to problems in real and simulated organizations. Prereq: 840-355 or 880-355.

- 840-745 Individual Intelligence Testing 3 credits**
Nature of intelligence and basic characteristics of mental ability tests. An intensive study of the Stanford-Binet and Wechsler Scales with a particular emphasis on practice in administration, scoring, subtest groupings and analysis on the Stanford-Binet, functions and interpretations of Wechsler subtests, style and content of psychological report writing, and nondiscriminatory assessment. Prereq: 840-615 and 840-640; admission to graduate study in the Psychology Department or consent of instructor.
- 840-746 Psychopathology of Childhood and Adolescence 3 credits**
A survey of the mental disorders of childhood and adolescence with an emphasis on diagnosis and treatment. Theoretical approaches and current research are also included. Prereq: 840-345/545 or equivalent with consent of instructor.
- 840-766 Interview and Psychotherapy Techniques - Child 3 credits**
A review of theory and research in the area of children in school, with major emphasis on the therapeutic intervention and remediation skills applied in a school setting. Students will be managing actual cases in a school setting. They will be assigned school cases so that they can develop individual and group procedures in child psychotherapy needed as a school psychologist. Their skills practice will be guided by the theories and models developed in class. Prereq: 840-746 or concurrent enrollment; admission to graduate study in the Psychology Department or consent of instructor.
- 840-767 Interview and Psychotherapy Techniques - Adolescent 3 credits**
A review of the theory and research in the area of adolescents in school, with the major emphasis on the therapeutic intervention and remediation skills applied in a school setting. Students will manage actual cases in a school setting. They will be assigned school cases so that they can develop the individual and group skills in adolescent psychotherapy needed as a school psychologist. Their skills practice will be guided by the theories and models developed in class. Prereq: 840-746 or concurrent enrollment; admission to graduate study in the Psychology Department or consent of instructor.
- 840-768 Clinical Applications of Behavior Therapy 3 credits**
A practicum course which requires each student to work directly with children exhibiting a variety of problem behaviors. Each student will work with a minimum of one child, dealing with academic and behavioral problems in a school setting. Programs will be developed, implemented, and completed under the close supervision of the instructor. Class enrollment limit: 10. Prereq: 840-444/544 and admission to graduate study in the Psychology Department or consent of instructor.
- 840-770 Assessment of Personality 3 credits**
Objective, projective and subjective models of personality assessment are emphasized. A systems assessment approach that considers adaptive, visual-motor, cognitive, conative, social, and emotional components of personality are stressed. The individual case approach is utilized, and students receive supervised evaluation regarding application of assessment procedures. Nondiscriminatory theory and techniques necessary for assessment are reviewed. Prereq: 840-745 or concurrent enrollment; admission to graduate study in the Psychology Department or consent of instructor.
- 840-780 Supervised Clinical Practicum I 6 credits**
A two and one-half hour weekly seminar includes school psychological services involving the role, issues, ethics, laws and regulations pertaining to school psychology. Two days per week in a public school setting are required along with a minimum of one hour of supervision of the field placement experience. Prereq: 840-745; 840-770; admission to graduate study in the Psychology Department or consent of instructor.

840-781 Supervised Clinical Practicum II **6 credits**

A two and one-half hour weekly seminar includes recent and innovative developments in school psychology, application of the consultant role in the form of an in-service program for school psychologists in the field, and other significant issues for practicing school psychologists. Supervision is also provided. Prereq: 840-797; admission to graduate study in the Psychology Department or consent of instructor.

840-782 Comparative School Psychology and Supervised Overseas Field Work **1-6 credits**

This course is designed to provide school psychology graduates and school psychologists in the field with the opportunity to study and experience comparative school psychology in an overseas placement. Prereq: Consent of instructor.

840-790 Internship in School Psychology I **6 credits**

The internship in School Psychology is a full-time placement experience (at least half of which takes place in a public school setting) providing the student with the opportunity to acquire proficiency in the area of School Psychology. Internship supervision is on campus and in work setting. Grading is on a pass/fail basis. Prereq: The M.S.Ed. - School Psychology degree, Practicum I, Practicum II, and sixty credits defined by the SDPI (Wisconsin) toward Provisional School Psychology Certification.

840-791 Internship in School Psychology II **6 credits**

The internship in School Psychology is a full-time placement experience (at least half of which takes place in a public school setting) providing the student with the opportunity to acquire proficiency in the area of School Psychology. Internship supervision is on campus and in work setting. Grading is on a pass/fail basis. Prereq: The M.S.Ed. - School Psychology degree, Practicum I, Practicum II, internship in School Psychology I, and sixty credits defined by the SDPI (Wisconsin) toward Provisional School Psychology Certification.

840-796 Graduate Field Experience and Community Mental Health **2-12 credits**

Practical experience in a community agency or institution providing community mental health services. Training and supervision of the students will be shared by members of the Psychology department and by qualified community mental health psychologists. Repeatable to a maximum of 12 credits. Prereq: one year of course work in the graduate school psychology program.

840-799 Thesis Research **1-6 credits**

Guided investigation of an approved thesis topic. Students may receive credit for research activities planned in conjunction with their adviser and leading to the completion of a master's degree. See the Thesis section under Academic Requirements and Policies for credit limitations pertaining to thesis research.

SOCIAL WELFARE (860)

860-502 Grief Management in the Helping Professions **1 credit**

This course focuses on issues such as adjustment to the death of someone close, helping someone who is terminally ill, and coping with other losses — such as cherished relationships. The grief counseling content is intended for students who are planning a career in the helping professions. Prereq: None.

860-503 Managing Stress and Burnout in the Helping Professions **1 credit**

This course focuses on recognizing signs of destructive stress and the initial stages of burnout in the helping professions. Instruction is given in using a number of techniques for coping with stress, such as meditation, relaxation training, time management, social support systems, biofeedback, and life planning, as they apply to the helping professions. Prereq: None.

- 860-510 Human Behavior and the Social Environment** **3 credits**
 This course is designed to provide the student with an understanding of the normal processes of sequential physical, emotional, and socio-cultural development through the life span. It will enable the student to better recognize and understand common stresses and crises affecting normal development and maturity and relate these to social work practice.
- 860-537 Social Service Concerns and the Older Person** **3 credits**
 This course is designed to introduce the student to existing social services for the older person in the United States. It will include information regarding social services provided to assist the older person, an analysis of gaps in current services as well as a consideration of alternative solutions and social services. Prereq: Consent of instructor.
- 860-541 Sexuality for Professional Growth** **3 credits**
 This comprehensive course is designed to add to students' knowledge and comfort in the area of human sexuality. Multi-media, lecture, and small group discussion techniques are used to explore issues as basic treatment skills, sex education, developmental sexuality, problem pregnancies, and common sexual dysfunctions. Prereq: Social Welfare major, graduate standing, or consent of chairperson.
- 860-546 Administration of Volunteer Programs** **3 credits**
 This course is designed to provide students with the skills necessary to organize, establish, and run a volunteer program in a professional setting. The instruction includes development of skills in recruiting, training, and supervising volunteers as well as management skills in accountability, budgeting, administration and volunteer recognition. Prereq: Consent of instructor.
- 860-573 Social Work Practice III** **3 credits**
 This course will cover advanced problem solving approaches for intervention with individuals, families, and communities. The class will utilize simulated practice situations. Prereq: 860-372 and 860-492 or consent of instructor.
- 860-662 Social Welfare Policy** **3 credits**
 This course is designed to provide students with knowledge about the process of social welfare policy formulation and implementation and with policy analysis skills. The effects of social welfare policies and organizations on both clients (especially the poor and minorities) and on workers will be emphasized. Prereq: 860-310 and 860-372 or consent of instructor.
- 860-682 Methods of Social Welfare Research** **3 credits**
 This course is designed to familiarize the student with basic concepts of social work research methodology, to develop competency in evaluating research literature and to develop beginning skills in evaluating social work practice. Prereq: 860-492, a course in descriptive/inferential statistics, or consent of instructor.
- 860-690 Workshop** **1-6 credits**
 Study of a selected topic, maximizing both pertinent issues involved in its consideration and the interests and backgrounds of workshop participants. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to workshops.
- 860-694 Seminar in Social Work Methods** **3 credits**
 Examination of change strategies applicable to social work covering interviewing, diagnosis, various therapy approaches, social action, research and planning. Prereq: 860-371 or consent of instructor.

- 860-696 Special Studies** **1-3 credits**
Offers study in current topics in social welfare, which are not regularly included in the curriculum. Offered at the special request of the students or faculty. The particular topic will be published prior to registration. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to special studies.

- 860-700 Individual Studies** **1-3 credits**
An opportunity for a student to explore in more detail a specific field of study. Student and adviser decide the study, with the consent of the professor in charge of the study. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to individual studies.

- 860-798 Workshop** **1-6 credits**
A course characterized by individualized and participatory activities within a group context, the results of which activities are shared with the entire group. Announcement of specific workshops being offered are made as the workshops are developed. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to workshops.

SOCIOLOGY (880)

LIBERAL ARTS FOUNDATION COURSE

- 880-711 American Social Institutions** **3 credits**
An analysis of the role, structure, and functions of American social institutions as frameworks for human interaction. Emphasis will be given to the relationship between institutional arrangements, class structure and individual action. Not to be enrolled in by students who have majored in sociology.

SPECIALIZED COURSES

Courses identified with an asterisk (*) are courses specifically recommended to students in the Elementary Education and Reading programs. However, these courses offer significant background information for all public school teachers.

- 880-520 The Sociology of Retirement, Aging, and Death** **3 credits**
This course examines the emergence of old age as a "problem" in industrial societies. Topics considered include: aging in cross-cultural and historical perspective; social security and welfare systems devised to cope with the problems of the aging; retirement as a "role-less role," old age institutions and lifestyles; death, dying, and bereavement; and the future of retirement, aging and death.

- 880-525 White-collar Crime** **3 credits**
An examination of the patterns, causes, costs, and strategies of controlling non-traditional crime committed by persons of respectability and high social status. Topics covered include: occupational crime and employee theft, the mafia and criminal syndicates, corporate crime, and governmental crime. Particular attention is given to the origin and control of criminal behavior that helps organizations achieve their operational goals. Additional requirements for 880-525: The reading of several additional books in the area of white-collar crime as well as an extensive research paper on some aspect of the course.

- 880-554 The Construction of Social Consciousness and Society** **3 credits**
An analysis of the diverse ways individuals have experienced their role in society, their attempts to understand the behavioral events around them, and the many ways social consciousness and society have been articulated.

- 880-555 Social Psychology*** **3 credits**
An examination of the process and results of human interaction with an emphasis on attitudes and attitude change, society and personality, intergroup relations and processes of socialization.
- 880-557 Public Opinion and Political Behavior** **3 credits**
820-557 An examination of public opinion in the United States as it concerns political and social behavior. Major topics are the acquisition of beliefs, leadership and opinion formation, voting behavior, and propaganda. In addition to meeting the regular requirements of the course, graduate students will be expected to complete a comprehensive research project using survey research methods.
- 880-562 Population Dynamics*** **3 credits**
A study of the development of world population and the social significance of different population sizes and growth rates; emphasis on the social determinants of fertility, mortality, and migration.
- 880-570 Juvenile Delinquency*** **3 credits**
A study of the incidence of delinquency, theories and findings regarding causation and the policies designed for treatment and prevention.
- 880-580 Organizations and Society** **3 credits**
An examination of the growth and role of organizations in society with specific attention to American society.
- 880-586 Sociology of the Third World** **3 credits**
A lecture/discussion course focusing on the social implication of change and stability in the institutional structures and processes of Third World societies. Emphasis is given to the role of population, poverty, ideology, technology, resources, planning, and other factors as they relate to the current status and future of Third World countries. Graduate students will prepare a research paper in addition to the undergraduate requirements.
- 880-610 Sociology of Health and Illness** **3 credits**
This course examines the sociocultural aspects of health and illness, the patient-practitioner relationship, the professionalization and socialization of health practitioners, the social organization of health care services, and the role of ethics in medical decision-making. It analyzes the problems and inequities in our present system of health care delivery in the United States, with particular emphasis on the sexism, racism, and classism in policy and practice. It analyzes alternative models of health care delivery, and discusses modifications in policy and practice necessary to bring about change. Graduate students will prepare a research paper in addition to the undergraduate requirements.
- 880-651 Social Stratification and Social Inequality*** **3 credits**
An analysis of the causes, consequences, and remedies of inequalities in power, income, wealth, authority, ethnic and social status.
- 880-655 Sociology of the Family*** **3 credits**
An analysis of the family as a social institution with emphasis on its development, characteristics, and condition in a rapidly changing social milieu.
- 880-659 Sociology of Minorities** **3 credits**
An examination of the circumstances under which widely diversified segments of the population may constitute a minority, and hence be subject to differential and unequal treatment in a society. Particular consideration is given to the existence of discrimination, segregation and prejudice, the various forms which each may take, and the relations among them providing the structure of minority-dominant group relations.

- 880-675 Contemporary Sociological Theory** **3 credits**
An advanced approach to the study of contemporary sociological theory, giving emphasis to the major assumptions, concepts, propositions and methodology of the main perspective.
- 880-676 Methods of Social Research** **3 credits**
To acquaint the student with research methods in sociology and social science; the foundation of sociology in science, the role of theory in research, construction of research design, sampling, data gathering techniques and analysis and interpretation of data.
- 880-677 Data Collection and Analysis** **3 credits**
Student designed group research projects will be conducted concurrently with the presentation of related class lectures and reading material. Students are expected to work in four or five person groups to formulate a research problem, collect data and perform analysis under the close supervision of the instructor.
- 880-690 Workshop** **1-6 credits**
A study of a selected topic, maximizing both pertinent issues involved in its consideration and the interests and backgrounds of workshop participants. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to workshops.
- 880-694 Seminar in Sociology** **3 credits**
A critical investigation into a selected topic related to the history, development or current state of sociology. Topic to be announced.
- 880-696 Special Studies** **1-3 credits**
Designed to increase the students' understanding of the range of contemporary sociological developments. It will be offered at the special request of the students or faculty. The particular topic will be published prior to registration. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to special studies.
- 880-700 Individual Studies** **1-3 credits**
An opportunity for a student to explore in more detail a specific field of study. Student and adviser decide the study, with the consent of the professor in charge of the study. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to individual studies.
- 880-798 Workshop** **1-6 credits**
A course characterized by individualized and participatory activities within a group context, the results of which activities are shared with the entire group. Announcement of specific workshops being offered are made as the workshops are developed. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to workshops.

WOMEN'S STUDIES (890)

LIBERAL ARTS FOUNDATION COURSES

- 890-501 Marriage, Family and Alternatives for Women** **3 credits**
An intensive survey of issues concerning women's roles in marriage and family from the perspectives of the behavioral sciences and humanities. Prereq: Consent of instructor.
- 890-503 Women's Voices/Women's Lives** **3 credits**
A study of the lives of women in different ages and cultures. Women's roles in society as revealed in diaries, autobiography and biography.

890-550 Stages and Transitions in Women's Lives **3 credits**
A study in the predictable adult stages in women's lives and specific transitions such as divorce, parenting, career decisions, widowhood, and entering or leaving employment.

890-592 Women and Violence **3 credits**
This course will analyze causes and effects of violence against women, forces and conditions that lead women to perpetrate violence, treatment of women as both victims and perpetrators by the criminal justice system, and strategies for ending violence. Prereq.: 6 credits in Women's Studies or Sociology 345 or consent of instructor.

SPECIALIZED COURSES

890-680 Internship in Women's Studies **3 credits**
Work and study with an agency or institution related to women's issues. Students working under faculty supervision will combine academic learning with practical experience. Prereq.: 12 credits in courses approved for the Women's Studies minor and approval of Women's Studies Internship Committee.

890-690 Workshop in Women's Studies **1-6 credits**
Workshop in a topic of current interest; the application of significant research on women to the needs and objectives of the participants. Prereq.: Consent of instructor.

890-696 Special Studies **1-4 credits**
Study of a special topic designed to increase the student's knowledge of significant research on women. May be repeated. Prereq.: Consent of instructor.

890-700 Individual Studies **1-3 credits**
An opportunity for a student to explore in more detail a specific field of study. Student and adviser decide the study, with the consent of the professor in charge of the study. See the Credit Restrictions section under Academic Requirements and Policies for credit limitations pertaining to individual studies.

APPROVED WOMEN'S STUDIES COURSES IN OTHER DEPARTMENTS

ANTH	613-534 Women in Cross-Cultural Perspective	3 credits
ART	115-505 History of Women in Art	3 credits
COMM	666-643 Women Speakers in America	3 credits
EDFD	421-677 Counseling Women and Girls	3 credits
ENGL	680-568 American Minority Women Writers	3 credits
ENGL	680-662 Twentieth Century Women Writers	3 credits
ENGL	680-663 Nineteenth Century Women Writers	3 credits
HIST	740-525 Women in the Western World	3 credits
HIST	740-526 History of Contemporary Women from 1800	3 credits
PHIL	782-590 Feminist Philosophy	3 credits
PSCI	820-580 Women and Politics	3 credits
SCWF	860-541 Sexuality for Professional Growth	3 credits
SOC	860-610 Sociology of Health and Illness	3 credits



Organization

Section IV Organization

ADMINISTRATION

Board of Regents of the University of Wisconsin System

Ben R. Lawton	Marshfield
Robert P. Knowles	New Richmond
Ruth C. Clusen	Green Bay
Edith N. Finlayson	Milwaukee
Ody J. Fish	Hartland
M. William Gerrard	Madison
Herbert J. Grover	Madison
Camilla R. Hanson	Mellen
Frank H. Heckrodt	Appleton
Frank L. Nikolay	Abbotsford
Paul R. Schilling, Vice President	Milwaukee
Laurence A. Weinstein, President	Madison

University of Wisconsin System Administration

President	Kenneth A. Shaw
Executive Vice President	Katharine C. Lyall
Vice President for Academic Affairs	Eugene Trani
Vice President for University Relations	Ronald C. Bornstein
Vice President for Business and Finance	Floyd B. Case
Vice President Physical Planning & Development	Paul L. Brown

University of Wisconsin-Whitewater Campus Administration

Office of the Chancellor

Chancellor	James R. Connor
Assistant to the Chancellor	Dorothy M. Tiede
Executive Director-Budget, Planning and Analysis	George H. Gray
Executive Director Telecommunications	Norman Stoner
Director of Intercollegiate Athletics-Men	William L. Myers
Director of Intercollegiate Athletics-Women	Dianne Jones

Office of the Vice Chancellor and Dean of Faculties

Vice Chancellor and Dean of Faculties	H. Gaylon Greenhill
Associate Dean of Faculties	Fannie Hicklin
Assistant Vice Chancellor for Academic Support Services	Timothy Knowles
Dean of College of The Arts	Robert Garwell
Dean of College of Business and Economics	Joseph Domitrz
Dean of College of Education	Lewis Stonking
Dean of College of Letters and Sciences	Mary Quinlivan
Dean of School of Graduate Studies	Larry W. Davis
Dean of Continuing Education and Outreach	Thomas McLeffroy
Dean of Library and Learning Resources	Hsi-ping Shao
Executive Director of Student Administrative Services	John Prentice
Registrar	G. John Bodensteiner
Coordinator of Curricular Matters	Herbert Lundin

Office of the Assistant Chancellor for Student Affairs and Dean of Student Life

Assistant Chancellor for Student Affairs and Dean of Student Life(Acting)	Irv. Madsen
Assistant to the Assistant Chancellor for Student Affairs and Director of Special Programs	Brenda Rust
Director of Admissions (Acting)	Norman Meeker
Director of Career Planning and Placement Services	Richard Bailey
Director of Counseling Center	Thomas Bolduc
Director of Disabled Student Services	John Truesdale
Director of Financial Aids	Gerald Buhrow
Director of Health Services	Jeanne Griffith, M.D.
Director of Housing	Carl Jardine
Director of Student Development	Keith Lohman
Director of University Center	Stephen Summers

Office of the Assistant Chancellor for Administrative Services

Assistant Chancellor for Administrative Services	James Colmey
Controller	Tom Klug
Director of Personnel	Betty McGlynn
Director of University Police	Jan Goder
Director, General Services	Jerry Gorbey

Office of the Assistant Chancellor for University Relations

Assistant Chancellor for University Relations	Kathleen E. Wolt
Director of Alumni and Community Relations	Mark Dorn
Director of News and Publications	Dale Reich

GRADUATE FACULTY

- GEORGE R. ADAMS (1966), Professor of English: B.A., Ph.D., University of Oklahoma
- STEVEN J. ALBRECHTSEN (1983), Assistant Professor of Health, Physical Education and Recreation: B.S., University of Minnesota; M.S., Ph.D., Colorado State University
- JANET A. ANDERSON (1969), Professor of Art: B.A., M.A., Pennsylvania State University; Ph.D., University of Michigan
- MARSHALL B. ANDERSON (1986), Assistant Professor of Theatre: B.A., Luther College; M.F.A., Illinois State University
- PEGGY E. ANDERSON (1965), Professor of Management: B.A., MacMurray College; M.S., Ph.D., University of Michigan
- STEVEN W. ANDERSON (1987), Assistant Professor of Chemistry: B.S., Carthage College; M.S., Marquette University; Ph.D., Northern Illinois University
- GEORGE R. ARIMOND (1980), Assistant Professor of Health, Physical Education and Recreation: B.S., Bemidji State University; M.S., Ph.D., University of Minnesota
- AMY E. ARNTSON (1982), Associate Professor of Art: B.F.A., Michigan State University; M.F.A., UW-Milwaukee
- MALVINA F. BAICA (1984), Associate Professor of Mathematics and Computer Science: B.S., M.S., University of Timisoara, Romania; M.S., Illinois Institute of Technology; Ph.D., University of Houston
- WILLIAM O. BALDWIN (1962), Professor of Geography: B.S., M.A., University of Georgia; Ph.D., University of Illinois
- PETER R. BARRY (1964), Professor of History: A.B., St. Anselm's College; M.A., Boston College; Ph.D., UW-Madison
- PETER C. BARTON (1988), Assistant Professor of Accounting: B.A., Syracuse University; M.B.A., UW-Madison; J.D., UW-Madison
- MARILYNN R. BAXTER (1975), Associate Professor of Theatre: B.A., State University of Iowa; M.A., Ph.D., UW-Madison
- JAMES P. BECK (1977), Associate Professor of English: B.A., Lawrence University; M.A., Columbia University; Ph.D., UW-Madison
- RONALD J. BERGER (1981), Professor of Sociology: B.A., M.A., Ph.D., University of California
- ROBERTA L. BERGLUND (1985), Assistant Professor of Curriculum and Instruction Education: B.S., Illinois State University; M.S., Ed.D., Northern Illinois University
- ASHOK BHARGAVA (1970), Professor of Economics: B.A., M.A., Delhi University; M.S., Ph.D., UW-Madison
- LLOYD A. BINAGI (1982), Assistant Professor of Afro-American Studies: M.S., M.A., Ph.D., Temple University
- ELIZABETH L. BLUMBERG (1967), Professor of Art: B.S., M.S., M.F.A., UW-Madison
- M. JANETTE BOHI (1959), Professor of History: B.A., Wheaton College; M.A., Ph.D., University of Illinois
- THOMAS E. BOLDUC (1964), Director of Student Counseling Center and Professor: B.A., University of Redlands; M.A., Boston University; Ph.D., Pennsylvania State University
- KARL F. BORGESON (1970), Professor of Art: B.A., St. Cloud College; M.F.A., University of Minnesota
- HOWARD A. BOTTS (1983), Associate Professor of Geography: B.A., M.A., California State University; Ph.D., UW-Madison
- KAREN BOUBEL (1974), Professor of Music: B.M., UW-Superior; M.M., Ph.D., UW-Madison
- CHARLES W. BRADY (1961), Professor of Biology: B.S., Purdue University; M.S., Ph.D., UW-Madison

- JERRY E. BRAMBLETT (1973), Professor of Music: B.S., Yale University; Ph.D., Columbia University; M.M., Boston University
- RICHARD S. BROOKS (1980), Assistant Professor of Philosophy and Religious Studies: B.A., University of Kansas; Ph.D., Northwestern University
- WILLIAM L. BRUNCKHORST (1967), Associate Professor of Biology: B.S., UW-Platteville; M.S., Ed.D., University of Mississippi
- ROBERT M. BRYAN (1986), Associate Professor of Mathematics and Computer Science: B.A., M.A., University of Missouri; Ph.D., University of Kansas
- ROBERT N. BURROWS (1965), Professor of English: B.A., Colorado College; Postgraduate Diploma in English Studies, University of Edinburgh; Ph.D., University of Pennsylvania
- GERTRUDE E. BUSH (1985), Assistant Professor of English: B.A., Valparaiso University; M.A., Case Western Reserve University; Ph.D., UW-Madison
- ALDO J. BUSOT (1965), Professor of Foreign Languages: B.A., Vedado Institute; M.A., UW-Madison; M.C.J., New York University; Licenciada en Derecho Diplomático, Doctor en Derecho, University of Havana; Docteur d'Université (Mention Droit), University of Paris; J.D., UW-Madison
- DAVID E. CARTWRIGHT (1962), Associate Professor of Philosophy and Religious Studies: B.S., UW-Stevens Point; M.A., University of Wyoming; M.A., Ph.D., UW-Madison
- PATRICIA L. CASEY (1972), Professor of Communication: B.S., UW-Whitewater; M.S., UW-Milwaukee; Ph.D., Indiana University
- JACK L. CASSINGHAM (1967), Professor of Music: B.M.E., Central Missouri State College; M.M., Northwestern University; D.M.A., University of Missouri
- WILLIAM CHEVRETTE (1973), Associate Professor of Communication: B.A., Northern Michigan University; M.A., Ph.D., University of Denver
- CHARLOTTE A. CHRISTNER (1965), Professor of Psychology: A.B., Miami University; M.A., Ph.D., Ohio State University
- DONNA RAE CLASEN (1983), Associate Professor of Educational Foundations and Counselor Education: B.A., Platteville State; M.A., Ph.D., UW-Madison
- LLOYD D. CLINTON (1982), Associate Professor of English: B.A., Southwestern College; M.A., Wichita State; M.F.A., Ph.D., Bowling Green State University
- ROBERT A. COLBERT (1967), Assistant Professor of Educational Foundations and Counselor Education: B.S., M.S., University of Kansas; Ph.D., UW-Madison
- THOMAS L. COLWIN (1982), Assistant Professor of Theatre/Dance: B.A., UW-Oshkosh; M.A., University of Illinois-Urbana; Ph.D., Texas Tech University
- JAMES R. CONNOR (1974), Professor of History: B.A. State University of Iowa; M.S., Ph.D., UW-Madison
- PETER D. CONOVER (1972), Associate Professor of Communication: B.A., University of Iowa; M.S., Syracuse University; Ph.D., UW-Madison
- ROGER D. COPPENBARGER (1961), Professor of Music: B.M.E., Kansas State College; M.M.E., University of Wichita; D.M.A., University of Missouri-Kansas City
- CHARLES E. COTTLE (1977), Professor of Political Science: B.A., University of the Americas; M.A., Western Illinois University; Ph.D., Kent State University
- RONALD R. CRABB (1986), Assistant Professor of Finance and Business Law: B.A., M.B.A., Ph.D., UW-Madison
- JON S. CRANE (1986), Assistant Professor of Communication: B.A., Louisiana State University; M.A., Ph.D., University of Massachusetts
- LAWRENCE J. CRONE (1962), Associate Professor of Biology: A.B., Canthage College; Ph.D., Rutgers University
- JOHN A. CUMMINGS (1961), Professor of Biology: B.S., UW-Whitewater; M.S., UW-Madison; Ed.D., University of Northern Colorado

- JACQUELINE A. DAILEY (1985), Assistant Professor of Health, Physical Education and Recreation: B.S., University of Michigan; M.S., Pennsylvania State University; Ed.D., University of North Carolina
- DENIS A. DALE (1988), Assistant Professor of Art: B.A., Western Illinois University; M.F.A., UW-Madison
- CONSTANCE O. DALKE (1984), Assistant Professor of Special Education: B.A., University of Colorado; M.A., Ph.D., University of Denver
- CARLOS W. DE ONIS (1982), Associate Professor of Chicano Studies: B.A., University of Colorado-Boulder; M.A., University of Wyoming; Ph.D., University of Colorado-Boulder
- ROXANNE DE PAUL (1988), Assistant Professor of Communication: B.A., Brooklyn College, CUNY; M.S., Columbia University, New York; Ph.D., UW-Madison
- RONALD D. DETTMERS (1965), Professor of Mathematics and Computer Science: B.E., UW-Whitewater; M.S., University of Notre Dame; Ph.D., University of Michigan
- BETTY A. DIAMOND (1985), Assistant Professor of English: B.A., Queens College, CUNY; M.A., University of Leicester, England; Ph.D., UW-Madison
- DANIEL D. DI PIAZZA (1964), Professor of Political Science: Ph.B., Marquette University; A.M., Ph.D., University of Missouri-Columbia
- MARGARET M. DONOVAN (1961), Professor of History: B.S., M.A., Ph.D., UW-Madison
- R. NEIL DORTCH (1968), Professor of Business Education and Office Administration: B.S., Austin Peay State University; M.S., Northern Illinois University; Ph.D., UW-Madison
- HOLLY A. DOWNING (1988), Assistant Professor of Biology: B.A., Smith College; M.S., Ph.D., UW-Madison
- EDWARD J. DREXLER (1964), Professor of Chemistry: B.S., M.S., Xavier University; Ph.D., Wayne State University
- CLAYTON A. DROULLARD (1955), Professor of Mathematics and Computer Science: B.S., University of Dubuque; M.S., UW-Madison; Ed.D., University of Colorado
- ROLAND E. DURETTE (1964), Professor of Foreign Languages: B.A., St. Anselm's College; M.A., Laval University; Ph.D., Florida State University
- DOUGLAS B. EAMON (1985), Professor of Psychology: B.A., M.A., University of Montana; Ph.D., University of Michigan
- JOANNA P. EDWARDS (1987), Assistant Professor of Art: B.A., University of Arkansas at Fayetteville; A.M., University of Michigan-Ann Arbor; Ph.D., Indiana University-Bloomington
- RONALD V. ELLIS (1966), Professor of English: B.A., UW-Whitewater; M.A., Cornell University; Ph.D., Union Graduate School
- MARTIN ENGERT (1969), Professor of Mathematics and Computer Science: B.A., Carleton College; M.S., Ph.D., Stanford University
- MERCEDES C. FERNANDEZ (1983), Professor of Dance: B.S., University of the Philippines; M.S., M.F.A., UW-Madison
- FRANK FERRIANO (1968), Professor of Music: Diploma, Juillard School of Music; B.S., M.A., M.F.A., Ed.D., Teachers College of Columbia University
- JAMES H. FISCHER (1969), Professor of Accounting: B.B.A., M.B.A., Ph.D., UW-Madison; C.P.A., State of Wisconsin
- BRUCE P. FLOOD (1967), Associate Professor of History: A.B., Stanford University; M.A., University of California-Berkeley; Ph.D., University of Colorado
- MERLE N. FOLLSTAD (1968), Assistant Professor of Biology: B.S., UW-Madison; M.S., Ph.D., University of Minnesota
- EDWIN L. FOOT (1966), Professor of Music: B.M., Houghton College; M.S., Kansas State College, Emporia; Ph.D., University of Kansas
- NANCY E. FOWELL (1984), Assistant Professor Curriculum and Instruction: B.S., M.A., Ph.D., UW-Madison
- KARL E. FRAEDRICH (1966), Professor of Accounting: B.B.A., M.B.A., Ph.D., UW-Madison; C.P.A., State of Wisconsin

- MARGARET L. FRIEDMAN (1987), Assistant Professor of Marketing: B.A., Smith College; M.B.A., Ph.D., UW-Madison
- STEPHEN J. FRIEDMAN (1988), Assistant Professor of Educational Foundations and Counselor Education: B.A., Locas College; M.S., Ph.D., University of Iowa
- ELIEZER GEISLER (1988), Professor of Management: B.A., M.B.A., Tel Aviv University, Israel; Ph.D., Northwestern University
- JACOB H. GERLACH (1988), Professor of Mathematics and Computer Science: B.A., M.S., Ohio University; Ph.D., UW-Madison
- MARY ANNE GERLACH (1976), Assistant Professor of Mathematics and Computer Science: B.S., Ohio University; M.S., Ph.D., UW-Madison
- JOHN M. GIBBENS (1961), Professor of Economics: B.A., Simpson College; M.S., Ph.D., Iowa State University
- PETER J. GILLET (1966), Professor of English: B.A., M.A., Oxford University; Ph.D., UW-Madison
- STUART M. GLOSSER (1985), Assistant Professor of Economics: B.A., University of Connecticut; Ph.D., University of Texas-Austin
- YEZDI H. GODIWALLA (1977), Professor of Management: B.A., Ranchi University, India; M.B.A., Indian Institute of Management, India; Ph.D., Oklahoma State University
- IZA R. GOROFF (1977), Associate Professor of Management: A.B., M.S., University of Chicago; Ph.D., University of Pennsylvania
- JERRY J. GOSENPUD (1980), Professor of Management: B.S., University of Illinois; Ph.D., Case Western Reserve University
- GEORGE H. GRAY (1968), Professor of School Business Management: B.S., Milton College; M.S., Ph.D., UW-Madison
- CHARLES S. GREEN (1978), Professor of Sociology: B.S., University of Virginia; M.S., Ph.D., Cornell University
- H. GAYLON GREENHILL (1962), Professor of Political Science: B.S., UW-River Falls; M.A., Ph.D., University of Illinois
- JEANNE GRIFFITH (1976), Director of Health Services: B.S., M.D., UW-Madison; M.Ph., John Hopkins University
- RAYMOND L. GRIFFITH (1976), Associate Professor of English: A.B., New York University; M.A., Ph.D., Loyola University
- EUGENE H. GRIGSBY (1984), Associate Professor of Afro-American Studies: B.S., Tennessee State University; M.A., Fisk University; Ph.D., Washington State University
- LORRAINE GROSS (1968), Professor of Theatre: B.S., Valparaiso University; M.S., Ph.D., Michigan State University
- WILLARD L. GROSS (1968), Professor of Biology: B.A., Valparaiso University; M.S., Ph.D., Michigan State University
- THOMAS S. GROTELUESCHEN (1965), Professor of Curriculum and Instruction: B.S., M.S., UW-Milwaukee; Ph.D., UW-Madison
- CHARLES A. GROVER (1974), Associate Professor of Theatre: B.A., B.S., Moorhead State College; M.A., California State University-Sacramento; Ph.D., University of California-Davis
- RUTH M. GRUBEL (1985), Assistant Professor of Political Science: B.A., Indiana University-Kokomo; M.A., Ph.D., University of Nebraska-Lincoln
- NOMSA GWALLA-OGISI (1988), Assistant Professor of Special Education: B.A., University of Zululand, South Africa; M.S.Ed., Southern Illinois University-Edwardsville; Ph.D., Southern Illinois University-Carbondale
- GEORGE B. HAFFER (1968), Associate Professor of Communication: B.S., M.A., Pennsylvania State University; Ph.D., University of Illinois
- HANS R. HAHN (1967), Professor of Special Education: B.S., M.S., UW-Milwaukee; Ed.D., University of Illinois

- RICHARD C. HANEY (1966), Professor of History: B.Ed., UW-Whitewater; M.S., Ph.D., UW-Madison
- FRANK E. HANSON (1983), Associate Professor of Music: B.S., University of Akron; M.M., Ph.D., Ohio State University
- BENNETTE R. HARRIS (1982), Associate Professor of Mathematics and Computer Science: B.S., Virginia Polytechnic Institute and State University; M.A., UW-Madison; Ed.D., Oklahoma State University
- LAWRENCE V. HARRISON (1966), Professor of Art: B.F.A., University of Manitoba; M.F.A., Texas Christian University
- RICHARD P. HAVEN (1972), Associate Professor of Communication: B.S., M.A., Ball State University; Ph.D., UW-Madison
- GLENN C. HAYES (1967), Assistant Professor of Music: B.M.E., Central Michigan University; M.M., Ph.D., Northwestern University
- GORDEN O. HEDHAHL (1970), Professor of Theatre: B.S., M.A., University of North Dakota; Ph.D., University of Minnesota-Minneapolis
- ROBERT D. HEIDORN (1968), Associate Professor of Political Science: B.A., Lawrence University; M.A., Ph.D., University of Illinois
- JOAN P. HEIMLICH (1979), Associate Professor of Curriculum and Instruction: B.Ed., UW-Whitewater; M.S., Ph.D., UW-Madison
- RUSSELL D. HELWIG (1965), Associate Professor of Physics: B.S., UW-River Falls; M.S., University of Nebraska; Ph.D., UW-Milwaukee
- CRAIG A. HERBERT (1967), Professor of Educational Foundations and Counselor Education: B.S., UW-Whitewater; Ph.D., UW-Madison
- MELLANIE L. HERBERT (1977), Professor of Business Education and Office Administration: B.Ed., UW-Whitewater; M.S., Ph.D., UW-Madison
- PERNELL H. HAYES HEWING (1971), Professor of Business Education and Office Administration: B.S., Allen University; Ed.M., Temple University; Ph.D., UW-Madison
- FRANCES J. HILL (1975), Associate Professor of Finance and Business Law: B.A., University of Manitoba; M.B.A., UW-Whitewater; J.D., UW-Madison
- IRENE E. NIMZ HILL (1967), Professor of Curriculum and Instruction: B.Ed., UW-Whitewater; M.S., UW-Madison; Ed.D., Northern Illinois University
- NOEL N. HJELMHAUG (1959), Associate Professor of Physics: B.S., UW-Whitewater; M.S., Vanderbilt University; Ed.D., Indiana University
- FREDERICK C. HOFFMEISTER (1967), Professor of Safety Studies: B.S., UW-Platteville; M.A., Ph.D., Michigan State University
- REBECCA S. HOGAN (1984), Assistant Professor of English: B.A., University of New Mexico; M.A., Ph.D., University of Colorado
- HAROLD J. HOLMES (1978), Associate Professor of Safety Studies: B.S., M.Ed., University of Minnesota; Ed.D., Loyola, University of Chicago
- ROBERT L. HORTON (1982), Professor of Mathematics and Computer Science: B.S., M.S., Georgia Institute of Technology; Ph.D., UW-Madison
- MARY MARGARET HOSLER (1967), Professor of Business Education and Office Administration: B.Ed., UW-Whitewater; M.S., Ph.D., UW-Madison
- JOHN D. HOWAT (1976), Associate Professor of Finance and Business Law: B.S., M.S., Ph.D., University of Illinois
- I-NING HUANG (1968), Professor of Psychology: B.S., National Taiwan University; M.A., New Mexico State University; Ph.D., University of Texas
- MARY B. HUER (1983), Associate Professor of Communication: B.A., M.A., Ph.D., Indiana University
- ERNELLA S. HUNZIKER (1963), Professor of Curriculum and Instruction: B.S., UW-Milwaukee; M.A., Ed.D., Columbia University

- HOWARD G. INGLEFIELD (1966), Professor of Music: B.M., M.A., The Eastman School of Music, University of Rochester; Ph.D., Ohio State University
- RUSSELL E. JACOBSON (1976), Professor of Management: B.S., UW-Madison; M.S., Rensselaer Polytechnic Institute; Ph.D., University of Massachusetts; P.E., State of Wisconsin
- JAMES A. JAFFE (1986), Assistant Professor of History: B.A., Antioch College; M.A., M.Phil., Ph.D., Columbia University
- MARCIA L. JAMES (1986), Assistant Professor of Business Education and Office Administration: B.S., Ferris State College; M.A., Western Michigan University; Ed.D., Northern Illinois University
- RICHARD F. JAMES (1986), Associate Professor of Business Education and Office Administration: B.S.E., M.S.E., Emporia Kansas State College; Ed.D., Northern Illinois University
- ROBERT L. JENNINGS (1966), Professor of Music: B.M.E., Augustana College; M.A., Western Michigan University; Ph.D., Michigan State University
- PHILIP T. JOHNS (1976), Assistant Professor of Chemistry: B.A., Gustavus Adolphus College; Ph.D., University of North Dakota
- WILLIAM F. JOHNSTON (1962), Associate Professor of Mathematics and Computer Science: B.S., UW-Platteville; M.S., Ph.D., UW-Madison
- JONATHAN M. KANE (1980), Associate Professor of Mathematics and Computer Science: B.A., University of Minnesota-Duluth; M.A., M.S., Ph.D., UW-Madison
- STEVEN B. KARGES (1967), Associate Professor of History: B.S., UW-Oshkosh; M.S., Ph.D., UW-Madison
- RICHARD D. KELLEY (1966), Associate Professor of Psychology: A.B., San Francisco State College; Ph.D., University of Nevada
- KIRK Y. KIM (1969), Professor of Economics: B.A., King College; Ph.D., University of Utah
- CHARLES R. KING (1950), Professor of Curriculum and Instruction: B.A., Montana State University-Missoula; M.A., Ed.D., Montana State University-Bozeman
- KAREN K. KIRST-ASHMAN (1980), Associate Professor of Women's Studies/Social Welfare: B.A., M.S.S.W., UW-Madison; Ph.D., University of Illinois
- GARY B. KLATT (1967), Professor of Mathematics and Computer Science: B.A., Case Institute of Technology; M.S., Ph.D., UW-Madison
- ARNO K. KLEIMENHAGEN (1968), Professor of Marketing: B.B.A., M.B.A., Ph.D., UW-Madison
- EDWIN M. KLEIN (1976), Associate Professor of Mathematics and Computer Science: B.A., M.S., Ph.D., Northwestern University; M.S., UW-Madison
- HADLEY G. KLUG (1970), Associate Professor of Sociology: B.S., M.S., Ph.D., South Dakota State University
- ROBERT C. KNAPP (1986), Associate Professor of Mathematics and Computer Science: B.S., State University College at Oswego; M.A., University of Kansas; Ed.D., Oklahoma State University
- JACK L. KNUSEL (1965), Professor of Economics: B.B.A., Spencerian College; B.A., M.A., University of Denver; Licentiate, Swiss Graduate School of Economics and Public Administration; Ph.D., University of Colorado
- JOHN F. KOZLOWICZ (1968), Professor of Political Science: B.S., Loyola University; M.A., Northern Illinois University; Ph.D., University of Arizona
- HARRY B. KROUSE (1962), Professor of English: B.S., M.A.T., Indiana University; Ph.D., UW-Madison
- LILLIAN I. LAHTI (1968), Professor of Curriculum and Instruction: B.A., M.A., University of Michigan; Ph.D., University of Illinois
- MICHAEL J. LAIRD (1983), Associate Professor of Finance and Business Law: B.B.A., J.D., Loyola University; M.B.A., UW-Whitewater

- LARS E. LARSON (1982), Associate Professor of Management: B.S., UW-Superior; M.A., University of Minnesota; M.L.S., UW-Milwaukee; Ph.D., Cornell University
- JEROME K. LAURENT (1955), Professor of Economics: A.B., UW-Eau Claire; A.M., Ph.D., Indiana University
- PAUL W. LAURITZEN (1954), Professor of Special Education: A.B., Augustana College; M.S., Western Illinois University; Ph.D., State University of Iowa
- JAMES M. LEAVER (1964), Associate Professor of English: A.B., Marquette University; M.A., University of Arizona; Ph.D., UW-Madison
- REGIS M. LECOANET (1981), Assistant Professor of Foreign Language: D.U.E.L., University de Nancy II, France; M.Ph., Ph.D., City University of New York
- RICHARD C. LEE (1981), Professor of Special Education: B.S., M.S., UW-Milwaukee, Ph.D., University of Illinois
- NANCY G. LEWIS (1957), Associate Professor of English: B.A., Stanford University; M.A., Ph.D., UW-Madison
- CYRIL C. LING (1985), Professor of Management: B.S., M.B.A., Wayne State University; D.B.A., Indiana University
- WILLIAM S. LINSSENMEYER (1957), Professor of History: B.S., Georgetown University; M.A., Stanford University; Ph.D., Vanderbilt University
- KEITH D. LOHMAN (1973), Professor of Safety Studies: B.S., Carroll College; M.S., UW-Milwaukee, Ed.D., University of Northern Colorado
- RICHARD C. LOMBARD (1983), Assistant Professor of Special Education: B.S., M.S.E., UW-Eau Claire; Ph.D., UW-Madison
- EVERETT L. LONG (1965), Professor of History: B.A., Ouachita Baptist University; M.A., University of Arkansas; Ph.D., University of Missouri-Columbia
- HERBERT J. LUNDIN (1964), Professor of Geography: B.S., UW-Oshkosh; M.A., University of Colorado; Ph.D., Syracuse University
- FRANK R. LUTHER (1975), Associate Professor of Geology: B.A., M.A., State University of New York; Ph.D., Lehigh University
- KEN M. MACUR (1988), Assistant Professor of Accounting: B.S., M.B.A., Ph.D., University of Illinois at Champaign-Urbana
- PHILLIP A. MAKURAT (1988), Professor of Curriculum and Instruction: B.S., UW-Oshkosh; M.S., Notre Dame; Ph.D., Walden University
- PAMELA J. MALONE (1988), Assistant Professor of Sociology: B.A., Lakeland College; M.S., Ph.D., UW-Milwaukee
- MERLIN J. MANLEY (1969), Professor of Educational Foundations and Counselor Education: B.S., M.S., Ed.D., Northern Illinois University
- DONALD W. MC CREADY (1965), Professor of Psychology: B.S., M.A., Ph.D., University of Michigan
- FRIEDA E. MEIER (1983), Assistant Professor of Special Education: B.A., Lakeland College; M.S., UW-Whitewater; Ph.D., UW-Madison
- ROBERT J. MERTENS (1984), Associate Professor of Art: B.F.A., UW-Milwaukee; M.F.A., University of Illinois
- KARL H. MERZ (1966), Associate Professor of Foreign Languages: B.A., M.A., Ph.D., University of Oklahoma
- SUSAN C. MESSER (1988), Assistant Professor of Art: B.S., UW-Madison; M.F.A., Arizona State University
- HAN K. MIN (1976), Associate Professor of Accounting: B.A., Yonsei University; B.B.A., University of Oregon; M.B.A., San Francisco State College; Ph.D., University of Oklahoma
- GEORGE S. MISCHIO (1972), Professor of Special Education: B.A., Kean University; M.S., University of Illinois; Ed.D., Yeshiva University
- ABDOL H. MOINI (1985), Assistant Professor of Finance and Business Law: B.A., Rasht Business College; M.B.A., Emporia State University; M.A., Ph.D., University of Alabama

- JAMES L. MOLLOY (1984), Assistant Professor of Finance and Business Law: B.B.A., B.S., J.D., UW-Madison
- THOMAS E. MULLEN, JR., (1987), Lecturer in Economics: B.A., San Diego State University; M.S., State University of New York at Binghamton; Ph.D., London School of Economics, England
- WILLIAM L. MYERS (1968), Professor of Coaching: B.S.E., M.S.E., Eastern Illinois; Ph.D., UW-Madison
- REGINALD G. NASH (1958), Professor of Biology: B.A., William Penn College; M.S., University of Iowa; Ph.D., Michigan State University
- RUDDOLPH M. NAJAR (1970), Associate Dean of College of Letters & Sciences and Professor of Mathematics and Computer Science: B.S., St. Mary's College; M.A., University of California; M.S., Ph.D., University of Notre Dame
- RALPH G. NAVARRE (1971), Professor of Social Welfare: B.A., UW-Milwaukee; M.S.W., University of Illinois; M.S., UW-Madison
- LANNY A. NEIDER (1968), Professor of Sociology: B.S., UW-Stevens Point; Ph.D., South Dakota State University
- GURRAMKONDA M. NAIDU (1969), Professor of Marketing: B.A., S.V., University India; M.S., Indian Statistical Institute; Ph.D., Michigan State University
- AGATE NESAULE (1963), Professor of English, Women's Studies: A.B., M.A., Indiana University; Ph.D., UW-Madison
- W. LAWRENCE NEUMAN (1983), Associate Professor of Sociology: A.B., Indiana University; M.S., Ph.D., UW-Madison
- JOHN E. NICHOLS (1978), Assistant Professor of Communication: B.S., Purdue University; M.S., Boston University; Ph.D., UW-Madison
- CHARLES A. NORTH (1966), Professor of Biology: B.A., University of Missouri; M.S., Ph.D., Oklahoma State University
- ANDREA C. NYE (1978), Associate Professor of Philosophy and Religious Studies: B.A., Radcliffe College; Ph.D., University of Oregon
- CLIFFORD W. O'BEIRNE (1966), Associate Professor of Psychology: B.S., UW-Superior; M.A., George Peabody College for Teachers; Ph.D., UW-Madison
- JUDY J. OEHLER-STINNETT (1988), Assistant Professor of Psychology: B.S., M.A., Ph.D., University of Southern Mississippi
- JOHN C. OH (1967), Professor of Political Science: B.A., Florida Southern College; M.A., Southern Illinois University; Ph.D., New York University
- ANENEOSA A. OKOCHA (1988), Assistant Professor of Educational Foundations and Counselor Education: B.S. University of Nigeria; M.L.S., University of South Carolina; M.S., Ph.D., UW-Madison
- CHARLES M. OLSON (1977), Professor of Art: B.F.A., Mankato State College; M.F.A., University of Colorado
- HOWARD G. OLSON (1977), Associate Professor of Finance and Business Law: B.B.A., M.B.A., Ph.D., UW-Madison
- TERRY H. OSTERMEIER (1967), Professor of Communication: B.S., UW-Oshkosh; M.A., Marquette University; Ph.D., Michigan State University
- KENNETH A. OTTING (1964), Professor of Curriculum and Instruction: B.A., Cornell College; M.S., Ph.D., State University of Iowa
- JOE CHARLES PARK (1968), Professor of Educational Foundations and Counselor Education: B.A., Michigan State University; M.A., Ph.D., Northwestern University
- GORDON E. PARKS (1965), Professor of History: A.B., A.M., University of Missouri-Columbia; Ph.D., UW-Madison
- SUSAN J. PARKS (1980), Associate Professor of Economics: B.A., M.A., Ph.D., Purdue University

- JOHN G. PATTERSON (1975), Professor of Geography: A.B., De Paul University; M.A., University of Maryland; Ph.D., University of Florida
- ANGELA J. PECKENPAUGH (1982), Associate Professor of English: B.A., Denison University; M.A., Ohio University; M.F.A., University of Massachusetts
- ROBERT Y. PERINCHIEF (1966), Professor of Music: B.S., Trenton State College; M.A., Ed.D., Columbia University
- MARGOT M. PETERS (1969), Professor of English, Women's Studies: B.S., M.A., Ph.D., UW-Madison
- LYNTON M. PIATT (1967), Professor of Psychology: B.S., Purdue University; M.S., Syracuse University; Advanced Certificate in Counseling, University of Illinois; Ed.D., Northern Illinois University
- MARY A. PINKERTON (1983), Associate Professor of English: B.A., Marquette University; M.A., UW-Madison; Ph.D., UW-Milwaukee
- MARCIA A. PULICH (1978), Associate Professor of Management: B.S., Texas Woman's University; M.S., Ph.D., North Texas State University
- MARY E. QUINLVAN (1986), Professor of History: B.A., College of St. Scholastica; M.A., Loyola University; Ph.D., UW-Madison
- E. JOHN RABE (1961), Professor of Health, Physical Education and Recreation: B.S., M.S., UW-La Crosse; Ed.D., University of Northern Colorado
- JAMES P. RAFFINI (1967), Professor of Educational Foundations and Counselor Education: B.Ed., UW-Whitewater; M.Ed., University of Florida; Ed.D., Northern Illinois University
- CHILUKURI V. RAO (1983), Assistant Professor of Mathematics and Computer Science: B.S., Andhra University, India; Ph.D., Bombay University, India
- OLLIE M. RAY (1977), Associate Professor of Health, Physical Education and Recreation: B.S., Langston University; M.Ed., Colorado State University; Ph.D., University of Utah
- DAN W. REA (1986), Assistant Professor of Educational Foundations and Counselor Education: B.A., University of Missouri; M.A., Howard University; Ed.D., University of Massachusetts
- ELMER G. REDFORD (1966), Associate Professor of Physics: B.S., UW-Whitewater; M.S., UW-Milwaukee; Ph.D., Union Graduate School
- BARBARA J. REID (1987), Assistant Professor of Special Education: A.B., M.Ed., University of Georgia; Ph.D., University of Illinois, Champaign-Urbana
- DAVID A. REMMELE (1981), Assistant Professor of Accounting: B.S., M.S., Ph.D., UW-Madison
- VERNON L. REXROAT (1964), Associate Professor of Special Education: B.S., M.S., Northern Illinois University; Ed.D., Indiana University
- BENJAMIN D. RHODES (1965), Professor of History: B.A., M.A., Ph.D., University of Colorado
- STUART M. RICH (1959), Professor of Economics: B.S., Ohio University; M.B.A., Ohio State University; D.B.A., Indiana University
- DENNIS M. RICHTER (1965), Professor of Geography: B.S., University of Minnesota; M.S., Montana State College; Ph.D., University of Georgia
- ROY P. ROBERSON (1967), Professor of Finance and Business Law: B.S., Troy State College; M.A., University of Alabama; Ed.D., University of Missouri
- AUDREY J. ROBERTS (1977), Associate Professor of English, Women's Studies: B.A., Brooklyn College; M.A., Ph.D., UW-Madison
- VAY A. ROOMAN (1984), Associate Professor of Safety Studies: B.S., Black Hills State College; M.P.H., Ph.D., University of Oklahoma; M.S.E.H., East Tennessee University
- DENNIS K. ROHRS (1983), Professor of Music: B.M.E., M.M., University of Nebraska; Ph.D., University of Iowa
- J. KIRK ROMARY (1968), Professor of Chemistry: B.S., Washburn University; Ph.D., Kansas State University

- DON S. ROSS (1970), Professor of Philosophy and Religious Studies: B.A., M.A., Colorado State College; Ph.D., University of Iowa
- MARY L. ROSSINI (1976), Professor of Curriculum and Instruction: B.A., University of Minnesota; B.S., M.S., Marikato State College; Ph.D., University of Iowa
- ROBERT L. ROTHWEILER (1966), Professor of Political Science: B.S., Northwestern University; A.M., Ph.D., Washington University
- JOHN J. RUFFALO, JR. (1985), Professor of Biology: B.S., Loyola University; M.S., Ph.D., University of Iowa
- PAUL M. RYBSKI (1967), Assistant Professor of Physics: B.A., Cornell College; M.S., Ph.D., Northwestern University
- W. DANIEL SABLE (1966), Associate Professor of Biology: B.S., Northern Illinois University; M.S., University of Michigan; Ph.D., Iowa State University
- CLAYTON R. SAGER (1983), Assistant Professor of Accounting: B.B.A., M.B.A., UW-Oshkosh; Ph.D., University of Iowa
- RICHARD G. SALEM, (1975), Professor of Sociology: B.S., M.A., Northeastern University; Ph.D., Ohio State University
- KENNETH D. SALZWEDEL (1962), Professor of Psychology: B.S., UW-Madison; M.S., University of Kentucky; Ph.D., UW-Madison
- GEORGE F. SARGENT (1987), Assistant Professor of Management: B.S., M.S., Ph.D., Michigan State University
- ROBERT L. SAUER (1965), Professor of Management: B.S., UW-Milwaukee; M.S., Ph.D., UW-Madison
- GEORGE E. SAVAGE (1984), Assistant Professor of English: B.A., Grove City College; M.A., New Mexico State University; Ph.D., UW-Madison
- DALE H. SCHARINGER (1964), Professor of Management: B.Ed., UW-Whitewater; M.B.A., D.B.A., Indiana University
- RUTH A. SCHAUER (1964), Professor of English, Women's Studies: B.A., University of New Hampshire; M.A., Mills College; Ph.D., UW-Madison
- RICHARD J. SCHLAFFER (1965), Associate Director of Student Counseling Center and Associate Professor of Psychology: B.S., M.S., Ph.D., UW-Madison
- MATTHEW S. SCHLIESMAN (1988), Assistant Professor of Theater: B.A., UW-Whitewater; M.F.A., Lindenwood College
- DOROTHY M. SCHLIMM-SAND (1967), Professor of Curriculum and Instruction: B.S.Ed., UW-Oshkosh; M.S., Ph.D., UW-Madison
- JAMES S. SCHLOUGH (1965), Professor of Biology: B.S., UW-River Falls; M.S., Ph.D., UW-Madison
- JACK F. SCHOOF (1967), Professor of Art: B.A., M.A., Michigan State University; Ph.D., Ohio University
- ROBERT M. SCHRAMM (1988), Assistant Professor of Business Education and Office Administration: B.A., Michigan State University; M.S., Ed.D., Northern Illinois University
- LAWRENCE F. SCHUETZ (1975), Assistant Professor of English: B.S., M.A., Ph.D., UW-Milwaukee
- VERNON A. SCHUMACHER (1963), Professor of Curriculum and Instruction: B.A., UW-Milwaukee; M.E., Marquette University; Ph.D., State University of Iowa
- PATRICIA L. SEARLES (1982), Professor of Sociology, Women's Studies: B.A., State University of New York; M.A., Ph.D., University of Michigan
- GEORGE H. SEEBURGER (1964), Professor of Biology: B.S., UW-Stevens Point; M.Ed., Ed.D., University of Georgia
- BOBBI L. SEXON (1988), Assistant Professor of Educational Foundations and Counselor Education: B.S., M.S., Ed.D., Oklahoma State University
- CARL W. SHINNERS (1965), Professor of Physics: Ph.B., Marquette University; M.S., Ph.D., Louisiana State University

- NANDA R. SHRESTHA (1985), Assistant Professor of Geography: B.A., Gustavus Adolphus; M.A., Temple University; Ph.D., Indiana University
- ROBERT P. SIEMANN (1981), Associate Professor of Mathematics and Computer Science: B.S., M.S., Ph.D., UW-Madison
- DONALD H. SILVA (1964), Professor of Economics: B.A., Blackburn College; M.S., South Dakota State University; Ph.D., University of Missouri-Columbia
- PENNY L. SIMMONS (1980), Assistant Professor of Special Education: B.S.E., M.S.E., UW-Whitewater; Ph.D., UW-Madison
- METE B. SIRVanci (1983), Associate Professor of Marketing: B.S., Robert College, India; Ph.D., John Hopkins University
- JULIE A. SMITH (1987), Assistant Professor of English: B.A., University of California-Berkeley; Ph.D., UW-Madison
- S. GALEN SMITH (1965), Professor of Biology: A.B., M.A., Ph.D., University of California
- SANDRA L. SNOW (1981), Associate Professor of Economics: B.S., Missouri Southern State College; M.S., Kansas State College; Ph.D., University of Missouri-Columbia
- RALPH H. SONG (1968), Professor of Psychology: B.A., Holy Ghost College; M.A., Seton Hall University; J.C.D., Catholic University of America; M.S., Ph.D., St. John's University
- DONALD E. SORESENSEN (1976), Associate Professor of Finance and Business Law: B.B.A., M.S., Ph.D., UW-Madison
- DALE F. STEHNO (1964), Professor of Educational Foundations and Counselor Education: B.S., M.S., Oklahoma State University; Ed.D., University of Wyoming
- FRANK D. STEKEL (1965), Professor of Physics: B.A., UW-La Crosse; M.S., UW-Madison; Ed.D., Indiana University
- JEFFREY T. STEPHENS (1988), Lecturer of Special Education: B.S.E., M.S.E., Southern Illinois University-Carbondale; Ph.D., UW-Madison
- NORMAN STONER (1966), Associate Professor of Physics: B.S., Ball State University; M.S., University of Michigan; Ph.D., UW-Milwaukee
- DAVID M. STONEMAN (1966), Professor of Mathematics and Computer Science: B.S., M.S., Ph.D., UW-Madison
- MAX F. TAYLOR (1962), Professor of Art: B.A., DePaul University; M.F.A., State University of Iowa
- RICHARD J. TELFER (1985), Assistant Professor of Curriculum and Instruction: B.S., M.A., Central Michigan University; Ph.D., UW-Madison
- GEORGE TESAR (1970), Professor of Marketing: B.S.M.E., Chicago Technical College; M.B.A., Michigan State University; Ph.D., UW-Madison
- ANN TETLEY (1988), Assistant Professor of Communications: B.A., M.A., William Paterson College of New Jersey; Ph.D., Ohio University
- JANET S. THATCHER (1986), Associate Professor of Finance and Business Law: B.A., M.B.A., Ph.D., UW-Madison
- LINDA H. THREADGILL (1979), Professor of Art: B.F.A., University of Georgia; M.F.A., Tyler School of Art-Temple University
- DOROTHY TIEDE (1969), Assistant to the Chancellor and Associate Professor of Special Education: B.E., UW-Whitewater; M.S., UW-Madison; Ph.D., Walden University
- SHARON W. TIFFANY (1972), Professor of Anthropology, Women's Studies: A.B., M.A., Ph.D., University of California-Los Angeles
- WALTER W. TIFFANY (1971), Professor of Anthropology: A.B., Stanford; M.A. (Psychology), M.A. (Anthropology), Ph.D., University of California-Los Angeles
- JAMES E. TOENNIES (1962), Professor of Health, Physical Education and Recreation: B.S., M.S., UW-La Crosse; H.S.D., Indiana University
- PATRICIA A. TOWNSEND (1966), Professor of Communication: B.S., M.A., Stephen F. Austin College; Ph.D., UW-Madison

- JACK W. TRAVIS (1968), Professor of Geology: B.S., M.S., West Virginia University; Ph.D., Michigan State University
- LAUREL E. TRAVIS (1987), Assistant Professor of Management: B.A., University of Michigan; M.B.A., Ph.D., UW-Madison
- HUGO C. TSCHARNACK (1965), Assistant Professor of Physics: B.S., UW-Milwaukee; M.S., UW-Madison; Docteur de Université (Mention: Sciences), Faculté des Sciences d'Orsay, Université de Paris
- JANET E. TURNER (1985), Assistant Professor of Communication: B.S., Indiana University of Pennsylvania; M.S., Syracuse University; Ph.D., Pennsylvania University
- M. HOPE UNDERWOOD (1966), Professor of Educational Foundations and Counselor Education: B.A., M.A., University of Missouri-Kansas City; Ph.D., University of Chicago
- JOHN R. VALADEZ (1987), Assistant Professor of Chicano Studies: B.A., California State University, Los Angeles, CA; M.A., Ph.D., University of Washington
- JAMES A. VAN DE BOGART (1968), Associate Professor of Finance and Business Law: B.S., J.D., UW-Madison
- DAVID C. VAN DOREN (1983), Associate Professor of Educational Foundations and Counselor Education: B.A., M.Ed., Lehigh University; Ed.D., University of Maine
- RAJA P. VELU (1984), Assistant Professor of Marketing: B.S.C., University of Madras, India; M.S., Indian Statistical Institute, India; Ph.D., UW-Madison
- BERNARD V. VERRILL (1968), Associate Professor of Psychology: A.B., Millikin University; Ph.D., University of Houston
- EDWARD D. VITALE (1968), Professor of Marketing: B.A., American University of Beirut; M.B.A., University of Southern California; Ph.D., University of Iowa
- DONALD J. VOELLER (1966), Associate Professor of Geography: A.S., North Dakota School of Forestry; B.S., University of Idaho; M.A., University of Oklahoma; Ph.D., University of Illinois
- DENNIS B. WADSWORTH (1975), Assistant Professor of Music: B.A., State College of Iowa; M.M., Ph.D., Northwestern University
- RONALD R. WANGERIN (1966), Professor of Health, Physical Education and Recreation: B.S., UW-La Crosse; M.A., Ph.D., University of Michigan
- ROBIN M. WARDEN (1977), Associate Professor of Special Education: B.S., Marquette University; M.S., UW-Milwaukee; Ph.D., UW-Madison
- ROY C. WEATHERWAX (1976), Professor of Accounting: B.B.A., Ph.D., UW-Madison
- CAROLYN E. WEDIN (1966), Professor of English: B.A., Gustavus Adolphus College; M.A., Kansas University; Ph.D., UW-Madison
- WILLIAM W. WEISS (1980), Assistant Professor of Communication: B.S., John Brown University; M.S., UW-Stout; Ph.D., UW-Madison
- SAM R. WELTY (1970), Professor of Curriculum and Instruction: B.A., Hope College; M.A., Michigan State University; Ph.D., Florida State University
- JAMES M. WENKLE (1967), Associate Professor of Art: B.F.A., Kansas City Art Institute; M.F.A., University of Kansas
- GERALD A. WESTON (1968), Professor of Economics: B.A., M.A., University of Michigan; Ph.D., Washington State University
- JOHN I. WICKENBERG (1982), Associate Professor of Art: B.S., M.F.A., UW-Madison
- JAMES P. WINSHIP (1981), Assistant Professor of Social Welfare: B.A., Davidson College; M.S.W., D.P.A., University of Georgia
- JEROME W. WITHERILL (1973), Professor of Safety Studies: B.S., M.A., Ph.D., Michigan State University
- RICHARD A. YASKO (1976), Professor of History: B.A., Dominican College; M.A., Ph.D., University of Chicago

LOWELL V. YOUNGS (1968), Professor of Music: B.M., University of Colorado; M.M., D.M.A., Catholic University of America

AURELIO YVARRA (1978), Associate Professor of Elementary Education: B.A., California State College-Los Angeles; M.A., Ph.D., Claremont Graduate School

DONALD K. ZAHN (1978), Professor of Business Education and Office Administration: B.E., UW-Whitewater; M.A.T., Northern Arizona University; Ed.D., University of Montana

KARL G. ZAHN (1965), Professor of Curriculum and Instruction: B.Ed., UW-Whitewater; M.S., UW-Madison; Ed.D., University of Colorado

ABDULLAH ZARINIA (1967), Professor of Economics: Licentiate, Tehran University; M.S., Ph.D., University of Nebraska

CHARLES H. ZASTROW (1971), Professor of Social Welfare: B.S., M.S., Ph.D., UW-Madison

CONSTITUTION OF THE GRADUATE FACULTY

ARTICLE I - Name

The name of this organization shall be the Graduate Faculty of the University of Wisconsin-Whitewater.

ARTICLE II - Purpose

The purposes of this organization are to formulate and to administer programs of graduate study as authorized by the Legislature of the State of Wisconsin and the Board of Regents of the University of Wisconsin System.

ARTICLE III - Membership

Section 1: Graduate Faculty members shall include those persons of the University of Wisconsin-Whitewater who qualify for and accept appointment as Graduate Faculty. Persons are "qualified" who have (1) an educational code of 1 as defined in the most recent version of the University Handbook, (2) a rank of at least assistant professor, (3) a demonstration of successful scholarly activity (or artistic equivalents for professors in the fine arts), and (4) graduate-level subject matter competence and a record of successful teaching.

Section 2: Acceptance of appointment to the Graduate Faculty also carries with it the willingness of the member to transact graduate affairs. Graduate affairs include, but are not limited to, graduate admissions decisions and recommendations; graduate student academic advisement; Graduate Council and/or departmental graduate committee activities; candidacy and comprehensive examination responsibilities; theses, seminar or clinical paper development and evaluation; and graduate course instruction.

Section 3: Membership is limited to the Chancellor of the University and to those members of the administrative staff and faculty who are qualified as defined in Section 1 of this article.

Section 4: Individuals not meeting the above qualifications may be considered for election to the Graduate Faculty by petition, recommendation of a department and/or college graduate studies committee, and vote of the Graduate Council.

Section 5: Departments shall determine which of their faculty members meet the qualifications of Section 1 and shall forward a list of their graduate faculty to the Dean of Graduate Studies by the end of the first week of each semester.

Section 6: Persons transacting graduate affairs within a department must be members of the Graduate Faculty as defined in this article.

Section 7: In order for a person who is not a member of the Graduate Faculty to teach a graduate-level course and/or to transact other graduate affairs during a specific term, the Graduate Faculty of the department and the Dean of Graduate Studies must approve the exception. Appropriate documentation will be forwarded from the department to the Dean of Graduate Studies for review prior to submitting the timetable listing the exception to the academic dean's office.

ARTICLE IV - Meetings

Section 1: The Chancellor of the University is the ex-officio Chairperson of the Graduate Faculty. He may appoint the Dean of Graduate Studies to preside at meetings of the Graduate Faculty and perform all other executive duties.

Section 2: The Secretary shall be appointed by the Dean of the School of Graduate Studies. The Secretary need not be a member of the Graduate Faculty.

Section 3: Meetings shall be called by the Chairperson or his/her appointee when business warrants an assembly. The Secretary shall notify each member in writing a week before the meeting.

Section 4: A quorum shall consist of 20 percent of the membership.

ARTICLE V - Graduate Council

Section 1: The Graduate Council of the Graduate Faculty shall be composed of one Graduate Faculty member from each department offering a graduate course and one graduate student representative from each of the four colleges. The faculty representative shall be chosen by ballot by the Graduate Faculty members of that department. Student representatives shall be selected by their respective colleges. In addition, the Vice Chancellor and Dean of Faculties, the Dean of Graduate Studies, and the Dean of Library and Learning Resources shall be ex-officio members. The Dean of Graduate Studies shall preside over meetings of the Graduate Council.

Section 2: The term of office for faculty members shall be three years. One-third of the membership shall be elected each year. Student representatives shall be selected each year for a one year term.

Section 3: The Graduate Council shall serve as the executive committee of the Graduate Faculty. It shall receive, consider and take final action on all graduate matters including curriculum, administration and executive action, but excluding amendments to the Constitution.

Section 4: All actions of the Graduate Council are subject to review and change by the Graduate Faculty. By petition of at least 10 Graduate Faculty members or at the request of a department, a meeting of the Graduate Faculty shall be called to review an action of the Graduate Council.

Section 5: A quorum shall consist of 51 percent of the membership.

ARTICLE VI - Committees

Section 1: The Graduate School Committee for Planning, Coordination and Audit. This committee shall be composed of one graduate student and three faculty representatives from each college. Representatives shall be chosen by rules established by the colleges. The term of office for student representatives shall be one year. Faculty representatives shall serve three year terms with one-third of the membership selected each year. The Dean of Graduate Studies shall call and preside over an organizational meeting early in each fall semester for the purpose of electing a committee chairperson. The duties of this committee include reviewing and coordinating new graduate degree program proposals, assessing immediate and changing needs, auditing programs and recommending the phasing out of programs. It may also make recommendations on the development of new graduate degree programs.

Section 2: The Committee on Exceptions to Graduate Policy. This committee shall be composed of one Graduate Faculty member from each college and one graduate student. Faculty representatives shall be chosen by rules established by the colleges. The student representative shall be elected by the Graduate Council. Faculty members shall serve three year staggered terms. The term of office for the student member shall be one year. The Dean of Graduate Studies shall call and preside over an organizational meeting early in each fall semester for the purpose of electing a committee chairperson. The duties of this committee are to receive, review and take action on all student petitions for exceptions to and waivers of graduate school policies. Actions by the committee may be appealed to the Graduate Council.

Section 3: Terms of membership on all standing committees shall commence with the beginning of the fall semester. By the end of the preceding spring semester, departments and colleges shall report their selection of faculty representatives to fill new terms beginning in the fall. Student representative selection shall be reported by the end of the first week of the fall semester.

Section 4: Special committees may be appointed from time to time as the Graduate Faculty or the Graduate Council deem necessary. Special committees may be appointed by the Dean of Graduate Studies to address a specific issue or problem and to report their recommendations to the Graduate Council.

Section 5: It is recognized that the initiation and development of curriculum rests with the several departments and colleges. Therefore, colleges may form graduate studies committees to study and act on graduate matters prior to submission to the Graduate Council. The formation of these committees and their method and scope of operation shall be determined by the respective colleges, except that these committees may not abrogate the Teacher Education Council's guidelines that recommendations concerning graduate curricular requirements in teacher education programs, concerning new and/or changed policies and/or concerning revised or new programs, must be made by the Teacher Education Council before action by the Graduate Council. These Committees and the Teacher Education Council may not deny the right of an individual department or graduate faculty member to bring matters directly to the Graduate Council.

ARTICLE VII - Rules of Order

Section 1: All business shall be conducted according to the current edition of Robert's Rules of Order unless otherwise specified in this Constitution.

Section 2: All committees of the Graduate Faculty shall report to the Graduate Council. A minority report, if one exists, must be heard.

Section 3: All committee reports requiring action by the Graduate Council shall be presented in the form of a written motion at least one week prior to its presentation in the meeting.

ARTICLE VIII - Amendments

Section 1: Any member may propose an amendment to the Constitution by presenting it in writing to the Dean of Graduate Studies, who shall promptly distribute it in writing to the Graduate Faculty. At the first meeting of the Graduate Faculty held at least two weeks after distribution of a proposed amendment, a motion to adopt the proposed amendment shall be in order, and shall be itself subject to amendment.

Section 2: An amendment is adopted by a two-thirds vote of those present and voting.

INDEX

A

Academic Progression	17
Academic Record	11
Academic Requirements and Policies	7
Accounting	26, 72
Administrative Officers	170
Admission Requirements	3
Advising	5
Afro-American Studies	125
Anthropology	125
Appeals	12
Application Process	5
Art	63
Art Exhibitions	23
Assistantships	15
Astronomy	155

B

Biology	27, 126
Business Administration	29
Business Education	32, 73
Business Law	80

C

Calendar	inside front cover
Certification	20
Changes in Registration	11
Chemistry	130
Chicano Studies	131
Children's Center	22
Coaching	89
College Work-Study	17
Communication	34, 131
Comprehensive Examination	9
Computer Center	19
Computer Science	146
Constitution of the Graduate Faculty	185
Counseling and Development Center	21
Counselor Education	41, 90
Course Currency Policy	62
Course Descriptions	62
Course Numbers	62
Course Repeats	11
Credit Requirements	7
Credit Restrictions	7
Cultural Affairs	23
Curriculum and Instruction	100

D

Dance	70
Deficiencies	4
Degree Candidacy	12
Degree Program Options	8
Degree Programs	26
Disabled Student Services	21

E

Economics	77
Educational Administration	37, 104
Educational Foundations	90
Elementary Education	38
Employment	17
English	38, 138
Examinations, Comprehensive	9

F

Facilities	18
Faculty	172
Fees	13
Finance	80
Financial Aid Refund/Repayments	17
Financial Assistance	15
Foreign Languages	142
Foreign Student Grants	16

G

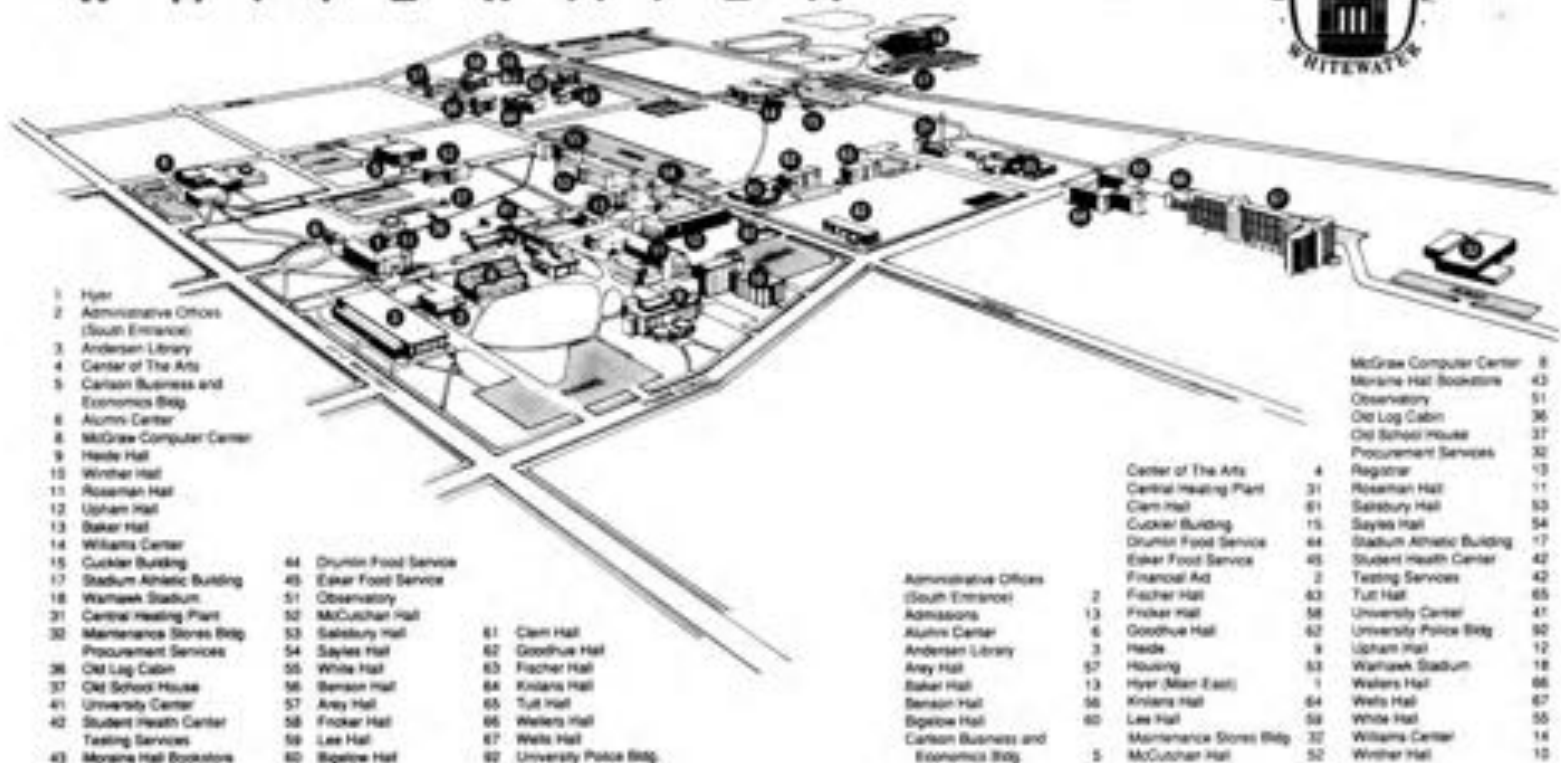
Geography	40, 143
Geology	145
Good Standing	3
Grading	10
Graduate Assistantships	15
Graduation	12
Guaranteed Student Loans	16
Guest Transfer of Credit	4
Guidance and Counseling	41

H

Health	107, 110
Health Service	20
Health Warning	21
History	43, 145
Housing (Residence Life)	20

I		R	
International Student Programs	22	Reactivation	6
Intramural Sports	22	Reading	50, 103
L		Reciprocity, Minnesota-Wisconsin	13
Library and Learning Resources	18	Records	11
Licensure	20	Recreation	22, 107
Loans	15	Registration	6
M		Religious Groups	22
Management	82	Religious Studies	152
Marketing	85	Residence Life	20
Mathematics	45, 148	Residency, State	13
Media Based Education	19	Room and Board	13
Music	46, 66	S	
Music Activities	23	Safety Studies	52, 113
N		School Business Management	54, 67
Nonresident Grants	16	School Psychology	55
Non-candidate for Degree	4	Seniors Taking Graduate Courses	4
O		Services	18
Observatory	19	Social Welfare	163
Office Administration	73	Sociology	165
P		Special Education	57, 117
Parking	20	State Residency	13
Philosophy	152	Student Counseling Center	21
Physical Education	107	T	
Physics	153	Textbooks	14
Placement Services	20	Theatre	70
Police	20	Thesis	9
Political Science	155	Time Limit	12
Probation	3, 11	Transfer of Credit	7
Professional Development	47	U	
Psychology	55, 159	University Police	20
Public Administration	50	University Theatre	23
		W	
		Women's Studies	167

UNIVERSITY OF WISCONSIN WHITEWATER



- 1 Hyer
- 2 Administrative Offices (South Entrance)
- 3 Andersen Library
- 4 Center of The Arts
- 5 Carlson Business and Economics Bldg.
- 6 Alumni Center
- 8 McGraw Computer Center
- 9 Heide Hall
- 10 Wither Hall
- 11 Roseman Hall
- 12 Upham Hall
- 13 Baker Hall
- 14 Williams Center
- 15 Cuckler Building
- 17 Stadium Athletic Building
- 18 Warhawk Stadium
- 31 Central Heating Plant
- 32 Maintenance Stores Bldg.
- 36 Old Log Cabin
- 37 Old School House
- 41 University Center
- 42 Student Health Center
- 43 Testing Services
- 43 Morone Hall Bookstore

- 44 Drummer Food Service
- 45 Esker Food Service
- 51 Observatory
- 52 McCutchan Hall
- 53 Salisbury Hall
- 54 Sayles Hall
- 55 White Hall
- 56 Benson Hall
- 57 Arey Hall
- 58 Finkler Hall
- 59 Lee Hall
- 60 Sigelwe Hall

- 61 Clem Hall
- 62 Goodhue Hall
- 63 Fischer Hall
- 64 Kinkaid Hall
- 65 Tutt Hall
- 66 Welers Hall
- 67 Wells Hall
- 68 University Police Bldg.

- Administrative Offices (South Entrance)
- Admissions
- Alumni Center
- Andersen Library
- Arey Hall
- Baker Hall
- Benson Hall
- Bigelow Hall
- Carlson Business and Economics Bldg.

- Center of The Arts
- Central Heating Plant
- Clem Hall
- Cuckler Building
- Drummer Food Service
- Esker Food Service
- Fischer Hall
- Finkler Hall
- Goodhue Hall
- Heide
- Housing
- Hyer (Main East)
- Kinkaid Hall
- Lee Hall
- Maintenance Stores Bldg.
- McCutchan Hall

- McGraw Computer Center
- Morone Hall Bookstore
- Observatory
- Old Log Cabin
- Old School House
- Procurement Services
- Registrar
- Roseman Hall
- Salisbury Hall
- Sayles Hall
- Stadium Athletic Building
- Student Health Center
- Testing Services
- Tutt Hall
- University Center
- University Police Bldg.
- Upham Hall
- Warhawk Stadium
- Welers Hall
- Wells Hall
- White Hall
- Williams Center
- Wither Hall



School of Graduate Studies
University of Wisconsin-Whitewater
800 West Main Street
Whitewater, Wisconsin 53190