School of Graduate Studies
University of Wisconsin
Whitewater
1987-89
1987–89 CALENDAR

First Semester 1987–88

Orientation/Registration ........................................ August 27–September 1, 1987
Classes Begin .................................................. September 2, 1987
Labor Day ....................................................... September 7, 1987
Thanksgiving Recess Begins 5:00 p.m. ..................... November 25, 1987
Thanksgiving Recess Ends 7:45 a.m. ......................... November 30, 1987
Commencement ............................................... December 12, 1987
Study Day — 7:45-4:00 p.m. ................................ December 15, 1987
(Incl. Saturday, December 19)
Exam Period Begins 4:00 p.m. ............................... December 15–23, 1987
Final Day of Semester ........................................ December 23, 1987

Second Semester 1987–88

Orientation/Registration ........................................ January 11–15, 1988
Martin Luther King Holiday ..................................... January 18, 1988
Classes Begin 7:45 a.m. ........................................ January 19, 1988
Spring Recess Begins 5:00 p.m. .............................. March 25, 1988
Spring Recess Ends 7:45 a.m. ................................. April 4, 1988
(Easter included in Spring Recess)
Commencement ............................................... May 7, 1988
Exam Period .................................................... May 9–18, 1988
Semester Ends .................................................. May 18, 1988

Summer Session 1988

Classes Begin .................................................. June 13, 1988
July 4, Holiday ................................................ July 4, 1988
Session Ends .................................................. August 5, 1988

First Semester 1988–89

Orientation/Registration ........................................ August 29–September 1, 1988
Classes Begin .................................................. September 2, 1988
Labor Day ....................................................... September 5, 1988
Thanksgiving Recess Begins 5:00 p.m. ..................... November 23, 1988
Thanksgiving Recess Ends 7:45 a.m. ......................... November 28, 1988
Commencement ............................................... December 10, 1988
Study Day — 7:45-4:00 p.m. ................................ December 15, 1988
(Incl. Saturday, December 17)
Exam Period Begins 4:00 p.m. ............................... December 15–23, 1988
Semester Ends .................................................. December 23, 1988

Second Semester 1988–89

Orientation/Registration ........................................ January 9–13, 1989
Martin Luther King Holiday ..................................... January 16, 1989
Classes Begin 7:45 a.m. ........................................ January 17, 1989
Spring Recess Begins 9:00 p.m. .............................. March 23, 1989
Spring Recess Ends 7:45 a.m. ................................. April 3, 1989
(Easter included in Spring Recess)
Study Day — 7:45-4:00 p.m. ................................ May 10, 1989
Commencement ............................................... May 13, 1989
Exam Period Begins 4:00 p.m. ............................... May 10–18, 1989
Semester Ends .................................................. May 18, 1989

Summer Session 1989

Classes Begin .................................................. June 12, 1989
July 4, Holiday ................................................ July 4, 1989
Session Ends .................................................. August 4, 1989
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, activities and employment policies. This is in compliance with the requirements of Title VII of the 1964 Civil Rights Act, 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.

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This edition of the Graduate Bulletin is dedicated to

Dean Emeritus Arthur G. McGraw, Jr.

Dr. McGraw served as Dean of the Graduate School from 1971 until he retired in 1984. His leadership and dedication to graduate studies and his cordial and compassionate treatment of all individuals are deeply appreciated and will be long remembered.
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SECTION I
POLICIES AND PROCEDURES

UNIVERSITY OF WISCONSIN-WHITEWATER

Background. The University of Wisconsin-Whitewater was founded in 1868 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 60 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 4500 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 6,095 master’s degrees. It has presently the fourth largest graduate school in the UW-System with 1,591 students enrolled during the fall of 1986.

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. Phone (414) 472-1006.
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 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.

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. A maximum of nine graduate level credits taken as a NCFD student prior to the term for which the student is admitted to a degree program can be used to satisfy requirements of that degree program.

Guest Transfer of Credit. Persons attending another graduate school who wish to take graduate

*All grade point averages are on a 4.00 basis.
courses at UW-Whitewater and transfer them to that institution may do so. The School of Graduate Studies 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.** 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 School Office.

For eligible UW-Whitewater seniors, graduate-level credits may not be used to satisfy requirements for the bachelor’s degree, and undergraduate fees will be charged for the graduate-level work. Eligible seniors from other institutions will be charged graduate fees if they enroll in only graduate-level courses and undergraduate fees if they enroll simultaneously in both undergraduate and graduate courses at UW-Whitewater.
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 School Office. Application forms may be obtained from the Graduate School 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 School 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 School 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 School 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 School Office.

6. Have a former professor send a letter of recommendation directly to the Graduate School 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. 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 one month 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.

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.
Students may register for classes in person during a scheduled registration period or in advance by mail. 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 School 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 program. 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 repeated 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.

Not more than one graduate level course within the major or emphasis area, nor more than two graduate level courses outside it, in which a grade of C has been earned may be counted toward the completion of a degree program. This limitation is different for both the M.E.P.D. and M.S. - Accounting programs as stated in their respective program descriptions. No course taken 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.

During a semester, students may register for at most 15 credits, while those on probation should not take more than 12 credits. 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. Graduate assistants must be registered for at least nine graduate credits, but no more than 12 credits each semester.

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. The M.E.P.D. program has different credit restrictions as stated within the program description.

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
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, and (6) the student earned a grade of at least B (3.00) for the course.

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

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. Copies of these standards and guidelines are available at the Graduate School 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 basis are so indicated in advance in the graduate timetable of courses. 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 U indicates an unsuccessful attempt of a practicum graded on a satisfactory-unsatisfactory 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 School Office.

A student may, at any time, voluntarily withdraw from a degree program by notifying the Graduate School in writing. The student may then apply for admission to any degree program, including the one from which they have just withdrawn. In such cases, the 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 School 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 com-
pleted, 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 School 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 School 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. 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 seem 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 School 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 NCFD 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.

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<thead>
<tr>
<th>Credits</th>
<th>Resident Fee</th>
<th>Nonresident Fee</th>
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</thead>
<tbody>
<tr>
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<tr>
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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 1986–87 academic year, the cost of a double occupancy room in a residence hall was $462. The cost of a 19 meal plan for 17 weeks was $415. 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% (1½% 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 the 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 1986-87 academic year was $5,474. This amount is subject to change without notice. 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 School 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. Graduate students who are U.S. citizens or permanent residents and who have a racial minority heritage or are economically disadvantaged 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 1986-87 academic year was $5,403. This amount is subject to change without notice. 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.

All AOP award recipients will 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.

A student with a racial minority background or who is economically disadvantaged who is 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. 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 as follows.
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 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 American (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 121/2 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. 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. 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.

An IBM 4341 computer is used to provide interactive and batch services in support of instructional and research activities. A VAX 11/780 computing system is used to support the academic interactive computing needs through a wide variety of terminals located throughout the campus including every academic building and the residence halls. In addition, there are several microcomputer laboratories on campus. One located in the Computer Center contains IBM microcomputers and a network of AT&T 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.

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. MEET-ME is a cousin to ETN which offers some credit programming on MEET-ME’s system linking 20 locations. Finally, the System Extension Education Network (SEEN) involves interaction between instructor and students at up to 20 locations. Two stations permit the transmission of visual information via an electric writing grid. All stations are capable of receiving the same.

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

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.

Housing. The University provides residence hall accommodations for approximately 4,400 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 Housing Office to assist married student in obtaining housing. For further information, contact the Housing 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.

Health Service. An excellent health facility with a spacious reception room, additional examination rooms, minor surgery, laboratory, and treatment rooms are available to students in the Stephen Ambrose Health Center. The Health Center aims to help students maintain optimum health, provide health education, and a healthful and safe environment as an important part of students' total educational experience. To accomplish this, the University maintains Student Health Center hours during the day, Monday through Friday, with physicians, nurse practitioners, nurses, and a medical technologist on duty. Treatment is available without cost for many common problems. An appointment system is used. The Health Center is able to assist with referrals when further care is required.

Expanded services are available for students with a physical disability or chronic illness including special health assessment and planning for individual health needs. Other services include: routine lab tests, including test for VD and pregnancy; Planned Parenthood Clinics; TB skin testing for student teachers; routine immunizations; and allergy injections for students under the care of an allergist.

Students requiring treatment outside the regular hours may use the emergency room services at Fort Atkinson Memorial Hospital or Mercy Hospital in Janesville. Any costs associated with referral or emergency care outside the Health Center are the students' responsibility. This includes transportation and any fees of the hospital or physician.

Insurance often covers these costs. Students without health insurance are encouraged to seek coverage. One option is the University endorsed group plan, which includes hospital, surgical and medical care. Information concerning this plan is sent out in August.

The University does not assume financial obligations if individuals are injured on or off campus beyond care available at the Health Center. Measles immunization is critical due to recent epidemics. A completed immunization form should be sent to the Health Center prior to enrollment.

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.
Student Counseling 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 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.

It is recommended that students with special needs make their needs known as soon as possible to permit proper planning and coordination of needed 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; or phone (414) 472-4711.

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, softball, tennis and other sports. Coed sport activities are conducted in flag football, volleyball, inner tube water polo, softball, tennis, badminton, 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. Shows of popular student appeal, as well as exhibits of statewide and even northern 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.
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  \((0-33 \text{ credits})\)
   Individuals will be required to take the following courses if the respective functional courses were not included in their undergraduate preparation.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>210701</td>
<td>Accounting Foundations</td>
<td>3</td>
</tr>
<tr>
<td>230703</td>
<td>Statistics Foundations</td>
<td>3</td>
</tr>
<tr>
<td>230704</td>
<td>Economics Foundations</td>
<td>3</td>
</tr>
<tr>
<td>250705</td>
<td>Information System Foundations</td>
<td>3</td>
</tr>
<tr>
<td>260702</td>
<td>Mathematics Foundations</td>
<td>3</td>
</tr>
<tr>
<td>240718</td>
<td>Financial Management</td>
<td>3</td>
</tr>
<tr>
<td>240341</td>
<td>Business and Commercial Law</td>
<td>3</td>
</tr>
<tr>
<td>240342</td>
<td>Advanced Business and Commercial Law</td>
<td>3</td>
</tr>
<tr>
<td>250719</td>
<td>Operations Management</td>
<td>3</td>
</tr>
<tr>
<td>250720</td>
<td>Organization Theory and Policy</td>
<td>3</td>
</tr>
<tr>
<td>260716</td>
<td>Marketing</td>
<td>3</td>
</tr>
</tbody>
</table>
2. Accounting Course Requirements (26 credits)
   210541 Intermediate Accounting I 3
   210542 Cost Accounting 2
   210543 Intermediate Accounting II 3
   210651 Income Tax Accounting 3
   210751 Financial Accounting 3
   210752 Advanced Financial Accounting 3
   210755 Managerial Accounting and Controllership 3
   210761 Accounting and Management Information Systems 3
   210765 Advanced Auditing 3

3. Three of the following five courses: (9 credits)
   210781 Advanced Accounting Theory I 3
   210782 Advanced Accounting Theory II 3
   250791 Business Policy and Environment 3
   (250791 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.)
   260731 Advanced Statistical Methods 3
   260732 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. 210652 Advanced Income Tax Accounting and 210735 Profit Planning and Control are recommended.

5. At least 16 credits of course work above the 730 level. 250791 Business Policy and Environment is not counted in the 16 credits.

6. No more than two accounting courses with a grade of C, and a total of no more than three courses with a grade of C in the total program.

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 coursework 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. James S. Schlough
   Upham 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 630XXX. 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.:

1. Professional Education (12 credits)
   424740  Techniques of Research
   Elective courses offered by the College of Education * 3
   9

2. Courses in the Teaching Major or Minor (18 credits)
   Courses numbered 630XXX
   Elective courses * 12
   6

3. Undergraduate Directed Teaching and Seminar (12 credits)
   439411  Directed Teaching: Secondary
   436470  Post Student Teaching Seminar
   10
   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 630XXX, or the Department of Economics 3–6

2. Professional Education (6–9 credits)
   424740  Techniques of Research
   Elective courses offered by the College of Education 3 3–6

3. Biology (15–21 credits)
   Elective courses numbered 630XXX 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 Island, 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:
   
   \[(GMAT \text{ score}) + [200 \times (\text{overall undergraduate grade point average})]\]

   or a composite score of at least 1050 based upon the formula:

   \[(GMAT \text{ score}) + [200 \times (\text{upper division undergraduate grade point average})]\]

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 admit-
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 (XXX700) and/or Reading and Research (XXX790) 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 coursework 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** (0–33 credits)
   (To be completed at the beginning of the program.)

<table>
<thead>
<tr>
<th>Credits</th>
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<tbody>
<tr>
<td>210701 Accounting Foundations</td>
</tr>
<tr>
<td>One of:</td>
</tr>
<tr>
<td>210735 Profit Planning and Control</td>
</tr>
</tbody>
</table>
4. **Breadth Elective Area** (18–27 credits)

(May be taken during term in which Common Body of Knowledge courses are completed.)

One of:
- 260731 Advanced Statistical Methods  
- 260732 Operations Research

One of:
- 230736 Business Conditions Analysis  
- 230737 Managerial Economics
- 250741 Managerial and Organizational Behavior
- 250791 Business Policy and Environment

(250791 must be taken in the last semester of the student’s program, or in the last 12 credits for Outreach students.)

**Electives**

(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. 250791 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. (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 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 220XXX. 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.:

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Credits</th>
</tr>
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<tbody>
<tr>
<td>1. Professional Education (12 credits)</td>
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<tr>
<td>424740 Techniques of Research</td>
<td>3</td>
</tr>
<tr>
<td>Elective courses offered by the College of Education*</td>
<td>9</td>
</tr>
<tr>
<td>2. Courses in the Teaching Major or Minor (18 credits)</td>
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<tr>
<td>220762 Current Problems in Business Education</td>
<td>3</td>
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<tr>
<td>One of:</td>
<td></td>
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<tr>
<td>220751 Improvement of Instruction in Skill Subjects</td>
<td>3</td>
</tr>
<tr>
<td>220752 Improvement of Instruction in Accounting and Basic Business Education</td>
<td>3</td>
</tr>
</tbody>
</table>
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, admis-
sion 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. Janet E. Turner  
Roseman 1024  
Phone (414) 472-5204

**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.

<table>
<thead>
<tr>
<th>Courses Required if not Taken as an Undergraduate</th>
<th>Credits</th>
</tr>
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<tr>
<td>662582 Audiology</td>
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<tr>
<td>662584 Aural Rehabilitation</td>
<td>3</td>
</tr>
<tr>
<td>662585 Fluency Disorders</td>
<td>3</td>
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<tr>
<td>662670 Diagnostic Methods in Communicative Disorders–Children</td>
<td>2</td>
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<tr>
<td>662680 Speech and Language Development in the Child</td>
<td>3</td>
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<tr>
<td>662681 Language Assessment and Intervention in Communicative Disorders</td>
<td>3</td>
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<tr>
<td>662686 Disorders of Voice</td>
<td>3</td>
</tr>
<tr>
<td>662688 Aphasia and Apraxia in Adults</td>
<td>3</td>
</tr>
<tr>
<td>662689 Cerebral Palsy, Apraxia, Congenital Aphasia in Children</td>
<td>3</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>662570 Practicum: Communicative Disorders</td>
<td>6</td>
</tr>
<tr>
<td>662709 Seminar in Communicative Disorders</td>
<td>3</td>
</tr>
<tr>
<td>662710 Speech and Language Therapy in the Clinical Environment</td>
<td>3</td>
</tr>
<tr>
<td>662711 The Dysarthrias</td>
<td>3</td>
</tr>
<tr>
<td>662712 Research Methods in Communicative Disorders or equivalent research course</td>
<td>3</td>
</tr>
<tr>
<td>662713 Seminar in Normal and Disordered Language Behavior</td>
<td>3</td>
</tr>
<tr>
<td>662764 Speech and Language Disorders in Special Populations</td>
<td>3</td>
</tr>
<tr>
<td>662770 Diagnostic Methods in Communicative Disorders–Adult</td>
<td>2</td>
</tr>
</tbody>
</table>

**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:
- 432764 Developmental Reading in the Elementary School 3
- 432768 Developmental Reading in the Secondary School 3
- An approved course in reading 3

One of:
- 423681 Human Abilities and Learning 3
- 840624 Human Learning 3
- An approved course in learning 3
- 437450 Methods: Communicative Disorders 3
- 439411g Directed Teaching: Communicative Disorders 5
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.

1. 666622 Communication Theories
   (666622 may be waived if an equivalent course was taken as an undergraduate.)
   664694 Seminar
   One of:
      666620 Listening Behavior
      666624 Cross Cultural Communication
      424740 Techniques of Research

2. One of the following:
   a. Electives numbered 664XXX and/or radio/television/film courses numbered 666XXX selected with adviser's consent
t      Electives outside the emphasis selected with the adviser's consent
   b. Electives numbered 664XXX and/or radio/television/film courses numbered 666XXX selected with adviser's consent
t      Electives in professional education
      Electives in liberal arts, excluding courses in the emphasis, selected with adviser's consent
   c. Electives numbered 664XXX and/or radio/television/film courses numbered 666XXX selected with adviser's consent
      432768 Developmental Reading in the Secondary School
      Elective in educational psychology
      439411 Directed Teaching: Secondary
      436470 Post Student Teaching Seminar
      Wisconsin Human Relations Requirement

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. Patricia A. Townsend  
Heide 461   Phone (414)472-1063

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.

1. 666622 Communication Theories  
   666657 Classical Rhetoric  
   (666622 and 666657 may be waived if equivalent courses were taken as an undergraduate.)  
   666701 Introduction to Graduate Study in Speech  
   Credits: 3

2. One of the following:

a. One of:  
   424740 Techniques of Research  
   680790 Research in English  
   Electives in speech communication  
   One of:  
   Electives in theatre  
   Electives selected with the adviser's consent  
   Credits: 9

b. 424740 Techniques of Research  
   Electives in speech communication  
   Electives in professional education  
   One of:  
   Electives in theatre  
   Electives in liberal arts courses, excluding speech communication, selected with adviser's consent  
   Credits: 3

c. 424740 Techniques of Research  
   Electives in speech communication  
   (may include at most 9 theatre credits)  
   Electives in professional education  
   432768 Developmental Reading in the Secondary School  
   One of:  
   437631 Methods of Teaching Speech  
   437434 Methods of Teaching Theatre  
   439411 Directed Teaching: Secondary  
   436470 Post Student Teaching Seminar  
   Wisconsin Human Relations Requirement  
   Credits: 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 Yvarra
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.

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>423681</td>
<td>Human Abilities and Learning</td>
<td>3</td>
</tr>
<tr>
<td>433769</td>
<td>Supervision of Instruction</td>
<td>3</td>
</tr>
<tr>
<td>433772</td>
<td>Legal Aspects of Education</td>
<td>3</td>
</tr>
<tr>
<td>433776</td>
<td>The School Principalship</td>
<td>3</td>
</tr>
<tr>
<td>One of:</td>
<td></td>
<td></td>
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<tr>
<td>430762</td>
<td>Curriculum in the Elementary Schools</td>
<td>3</td>
</tr>
<tr>
<td>437710</td>
<td>Curriculum in the Secondary Schools</td>
<td>3</td>
</tr>
</tbody>
</table>

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 examina-
tion or a thesis; or, at the discretion of the graduate faculty of the Department of Curriculum and Instruction, 36 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.

1. Courses offered by the Department of Curriculum and Instruction excluding those numbered 437XXX.  
   Credits: 18–24

2. Courses offered outside the College of Education.  
   Credits: 6

3. 424740 Techniques of Research  
   Credits: 3

4. One of:
   - 430550 Introduction to Multicultural Education  
   - 430635 Language Acquisition for the Bilingual Child  
   - 430655 Teaching Content in the Bilingual Classroom  
   - 430772 Issues in Elementary Education  
   - 434714 Current Issues in Early Childhood Education  
   Credits: 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)472-5050

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 680XXX. 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.:

1. Professional Education  (12 credits)
424740  Techniques of Research
(424740 is waived if 630790 is completed.)
Elective courses offered by the College of Education 9–12

2. Courses in the Teaching Major or Minor  (18 credits)
630790  Research in English
(630790 is waived if 424740 is completed.)
Courses numbered 680XXX 9–12
Elective courses 6

3. Undergraduate Directed Teaching and Seminar  (12 credits)
439411  Directed Teaching: Secondary 10
436470  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 680XXX, or the Department of Economics 3–6

2. Professional Education  (6–9 credits)
424740  Techniques of Research
(424740 is waived if 630790 is completed.)
Elective courses offered by the College of Education 3–9

3. English  (15–21 credits)
630790  Research in English
(630790 is waived if 424740 is completed.)
Elective courses numbered 680XXX 12–21

GENERAL SCIENCE

The Master of Science in Teaching (M.S.T.) degree program in General Science is designed to prepare individuals already certified to teach at the elementary or secondary level to become certified to teach general science at the junior high school level.

Program Coordinator:
Dr. John A. Cummings
Upham 319  Phone (414)472-1090

Additional Admission Requirements: Certification to teach in either elementary or secondary schools.

Additional Degree Requirements: Thirty credits of course work and one of the following: (1) a comprehensive examination over all the science course work, (2) a thesis and an oral defense, or (3) 6 additional graduate credits. The degree option should be selected in consultation with the student's adviser. For the thesis option, 1–6 credits of Thesis Research may be included in the 30 credits required. Specific course requirements are listed below. Individuals entering the program without a science major or elementary school certification may be required to take additional undergraduate or graduate work to meet certification requirements. Students should
consult the Director of Certification (Winther 2039, phone (414)472-4677) to determine their individual requirements for certification.

1. **Science Courses** (15 credits)
   Course electives selected from biology, chemistry, physics and earth/space science (geology, meteorology, astronomy, physiography, and oceanography). At most 3 credits may be included in the teaching of science (e.g., 437629 Methods of Teaching Science).

   Science courses should be selected from the above four science areas so that the candidate's combined undergraduate and graduate preparation includes a minimum of: (1) 14 credits each in two of the areas, (2) 10 credits each in the remaining two areas, and (3) 6 additional credits.

2. **Professional Education** (6–15 credits)
   424740  Techniques of Research
   One of the following:

   a. For those certified at the secondary level:
      421650  Introduction to Counseling
      423678  Adolescent Development
      One of:
      432764  Developmental Reading in the Elementary School
      432768  Developmental Reading in the Secondary School
      437710  Curriculum in the Secondary School

   b. For those certified at the elementary level:
      423703  Psychological Foundations of Education

3. **Course Electives** (0–9 credits)
   Courses to be selected in consultation with student's adviser and Director of Certification

**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. Donald J. Voeller
Upham 219  Phone (414)472-5126

**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.:

1. Professional Education (12 credits)
   424740 Techniques of Research
   Elective courses offered by the College of Education
   Credits
   3
   9

2. Courses in the Teaching Major or Minor (18 credits)
   Courses numbered 722XXX
   Elective courses
   Credits
   12
   6

3. Undergraduate Directed Teaching and Seminar (12 credits)
   439411 Directed Teaching: Secondary
   436470 Post Student Teaching Seminar
   Credits
   10
   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 722XXX, or the Department of Economics
   Credits
   3–6

2. Professional Education (6–9 credits)
   424740 Techniques of Research
   Elective courses offered by the College of Education
   Credits
   3
   6

3. Geography (15–21 credits)
   Elective courses numbered 722XXX
   Credits
   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. Robert Schissel
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, re-
required course sequences, and elective courses should be selected in consultation with advisers to match individual career paths.

1. **Required courses** (27 credits)
   - 421718 Principles of Counseling 3
   - 421719 Appraisal Procedures in Counseling 3
   - 421721 Group Procedures in Counseling 3
   - 421722 Theories of Counseling 3
   One of:
     - 424740 Techniques of Research 3
     - 421727 Program Development, Research and Evaluation for School Counselors 3
     - 429790 Supervised Practicum 12

2. **Emphasis** (15 credits)
   One of the following emphases:
   
   a. **School Counseling Emphasis**
      - 421720 Career Development and Information Services 3
      - 421738 Perspectives in School Counseling 3
      One of:
        - 421723 Counseling in Elementary and Junior High Schools 3
        - 421724 Career Counseling of Adolescent and Adult 3
      Elective courses 6
   
   b. **Vocational/General Emphasis**
      One of the following sequences:
      
      1. 421720 Career Development and Information Services 3
      421724 Career Counseling of Adolescent and Adult 3
      
      2. 421731 Introduction to Marriage and Family Counseling 3
      One of:
        - 421732 Practices of Marriage and Family Counseling 3
        - 421733 Theory and Techniques of Marriage and Family Counseling 3
        - 421737 Counseling and Human Services in the Community 3
        - 421746 Counseling and the Chemical Dependency Process 3
      
      3. 421731 Introduction to Marriage and Family Counseling 3
      421737 Counseling and Human Services in the Community 3
      421746 Counseling and the Chemical Dependency Process 3
      
      4. 421731 Introduction to Marriage and Family Counseling 3
      421737 Counseling and Human Services in the Community 3
      421746 Counseling and the Chemical Dependency Process 3
      421749 Chemical Dependency-Treatment and Rehabilitation 3
      Elective courses 3–9
   
   c. **Higher Education Emphasis**
      - 421720 Career Development and Information Services 3
      - 421729 Student Services in Higher Education 3
      - 421747 Consultation Models and Outreach Applications in Student Services 3
      - 421748 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 coursework 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 740XXX. 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.:

1. Professional Education (12 credits)
   Elective courses offered by the College of Education
   Credits

2. Courses in the Teaching Major or Minor (18 credits)
   740705 Historiography and Historical Research
   Courses numbered 740XXX
   Elective courses in the Social Sciences
   Credits

3. Undergraduate Directed Teaching and Seminar (12 credits)
   439411 Directed Teaching: Secondary
   436470 Post Student Teaching Seminar
   Credits

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 740XXX, or the Department of Economics

2. **Professional Education** (6-9 credits)
   Elective courses offered by the College of Education

3. **History** (15-21 credits)
   740705 Historiography and Historical Research
   Elective courses numbered 740XXX

**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. (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.**: 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 760XXX or 765XXX. 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.:

1. **Professional Education** (12 credits)
   - 424740 Techniques of Research
   - Elective courses offered by the College of Education
   - Credits: 3
   - Credits: 9

2. **Mathematics** (18 credits)
   - Graduate courses numbered 760XXX or 765XXX
   - Credits: 18

3. **Undergraduate Directed Teaching and Seminar** (12 credits)
   - 439411 Directed Teaching: Secondary
   - 436470 Post Student Teaching Seminar
   - Credits: 10
   - Credits: 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 760XXX or 765XXX, or the Department of Economics
   - Credits: 3-6

2. **Professional Education** (6-9 credits)
   - 424740 Techniques of Research
   - Elective courses offered by the College of Education
   - Credits: 3
   - Credits: 3-6

3. **Mathematics** (18-21 credits)
   - Elective courses numbered 760XXX or 765XXX
   - Credits: 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.:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Professional Education</strong> (12 credits)</td>
<td></td>
</tr>
<tr>
<td>Elective courses offered by the College of Education</td>
<td>12</td>
</tr>
<tr>
<td><strong>Courses in Music Education and Music</strong> (20 credits)</td>
<td></td>
</tr>
<tr>
<td>150740 Seminar in Music Education Research Techniques</td>
<td>3</td>
</tr>
<tr>
<td>Electives in Music Education</td>
<td>7</td>
</tr>
<tr>
<td>Electives in music divided among areas of applied music, music theory, and music history</td>
<td>10</td>
</tr>
<tr>
<td><strong>Undergraduate Directed Teaching and Seminar</strong> (12 credits)</td>
<td></td>
</tr>
<tr>
<td>439411 Directed Teaching: Secondary</td>
<td>10</td>
</tr>
<tr>
<td>436470 Post Student Teaching Seminar</td>
<td>2</td>
</tr>
</tbody>
</table>

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.:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Liberal Arts</strong> (3 credits)</td>
<td></td>
</tr>
<tr>
<td>Elective courses offered by the College of the Arts, the College of Letters and Sciences excluding courses numbered 150XXX, or the Department of Economics</td>
<td>3</td>
</tr>
<tr>
<td><strong>Professional Education</strong> (6 credits)</td>
<td></td>
</tr>
<tr>
<td>Elective courses offered by the College of Education</td>
<td>6</td>
</tr>
<tr>
<td><strong>Music</strong> (21 credits)</td>
<td></td>
</tr>
<tr>
<td>150740 Seminar in Music Education Research Techniques</td>
<td>3</td>
</tr>
<tr>
<td>150764 Foundations of Music Education</td>
<td>3</td>
</tr>
<tr>
<td>One of the following:</td>
<td></td>
</tr>
<tr>
<td>a. <strong>Kodaly Emphasis:</strong></td>
<td></td>
</tr>
<tr>
<td>150759 Beginning Training in Kodaly Music Skills</td>
<td>3</td>
</tr>
<tr>
<td>150760 Advanced Training in Kodaly Music Skills</td>
<td>3</td>
</tr>
<tr>
<td>150762 Folk Music in the Kodaly Curriculum</td>
<td>3</td>
</tr>
<tr>
<td>150763 Principles of Kodaly for Choral Directors</td>
<td>3</td>
</tr>
<tr>
<td>150765 Methodology in the Kodaly Curriculum</td>
<td>3</td>
</tr>
<tr>
<td>b. <strong>General Emphasis:</strong></td>
<td></td>
</tr>
<tr>
<td>150791 Seminar in Music Education</td>
<td>3</td>
</tr>
<tr>
<td>Elective(s) in music education</td>
<td>3</td>
</tr>
</tbody>
</table>
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. Bennette R. Harris
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:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>424740</td>
<td>Techniques of Research (most students take this course)</td>
<td>3</td>
</tr>
<tr>
<td>110607</td>
<td>Drawing VII: Research</td>
<td>3</td>
</tr>
<tr>
<td>110625</td>
<td>Painting V: Research</td>
<td>3</td>
</tr>
<tr>
<td>110637</td>
<td>Printmaking V: Research</td>
<td>3</td>
</tr>
<tr>
<td>110645</td>
<td>Sculpture V: Research</td>
<td>3</td>
</tr>
<tr>
<td>110655</td>
<td>Ceramics V: Research</td>
<td>3</td>
</tr>
<tr>
<td>110675</td>
<td>Metal and Jewelry V: Research</td>
<td>3</td>
</tr>
<tr>
<td>110685</td>
<td>Graphics Design V: Research</td>
<td>3</td>
</tr>
<tr>
<td>150740</td>
<td>Seminar in Music Education Research Techniques</td>
<td>3</td>
</tr>
<tr>
<td>662712</td>
<td>Research Methods in Communicative Disorders</td>
<td>3</td>
</tr>
<tr>
<td>680790</td>
<td>Research in English</td>
<td>3</td>
</tr>
<tr>
<td>740705</td>
<td>Historiography and Historical Research</td>
<td>3</td>
</tr>
</tbody>
</table>

   The above courses numbered 110XXX 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:

      | Course Number | Course Title                                                      | Credits |
      |---------------|-------------------------------------------------------------------|---------|
      | 422634        | Instructional Technology                                           | 3       |
      | 423683        | Teaching Strategies                                               | 3       |
      | 428675        | Understanding and Dealing with Disruptive Classroom Behavior      | 3       |
      | 428679        | Discipline at Home and School                                      | 3       |
480564 Introduction to Learning Disabilities
480721 The Exceptional Child

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

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>430720</td>
<td>Advanced Techniques in the Teaching of Language Arts and English</td>
<td>3</td>
</tr>
<tr>
<td>430721</td>
<td>Trends in Art Education</td>
<td>3</td>
</tr>
<tr>
<td>430761</td>
<td>Advanced Techniques in the Teaching of Mathematics</td>
<td>2-3</td>
</tr>
<tr>
<td>430763</td>
<td>Advanced Techniques in the Teaching of Social Studies</td>
<td>2-3</td>
</tr>
<tr>
<td>430765</td>
<td>Advanced Techniques in the Teaching of Science</td>
<td>2-3</td>
</tr>
<tr>
<td>432764</td>
<td>Developmental Reading in the Elementary School</td>
<td>3</td>
</tr>
<tr>
<td>434714</td>
<td>Current Issues in Early Childhood Education</td>
<td>3</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>432768</td>
<td>Developmental Reading in the Secondary Schools</td>
<td>3</td>
</tr>
<tr>
<td>437626</td>
<td>Methods of Teaching English and Language Arts</td>
<td>3</td>
</tr>
<tr>
<td>437628</td>
<td>Methods of Teaching Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>437629</td>
<td>Methods of Teaching Science</td>
<td>3</td>
</tr>
<tr>
<td>437630</td>
<td>Methods of Teaching Social Studies</td>
<td>3</td>
</tr>
<tr>
<td>437631</td>
<td>Methods of Teaching Speech</td>
<td>3</td>
</tr>
<tr>
<td>437632</td>
<td>Methods of Teaching Journalism</td>
<td>3</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>442675</td>
<td>Adapted Physical Education</td>
<td>3</td>
</tr>
<tr>
<td>442710</td>
<td>Trends in Physical Education</td>
<td>3</td>
</tr>
<tr>
<td>444645</td>
<td>Teaching Health Education</td>
<td>3</td>
</tr>
<tr>
<td>444745</td>
<td>Exercise and Health</td>
<td>3</td>
</tr>
<tr>
<td>446691</td>
<td>Recreation Administration</td>
<td>3</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>411660</td>
<td>Organization and Administration of Interscholastic Sports</td>
<td>3</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>220762</td>
<td>Current Problems in Business Education</td>
<td>1-3</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>150764</td>
<td>Foundations of Music Education</td>
<td>3</td>
</tr>
<tr>
<td>150791</td>
<td>Seminar in Music Education</td>
<td>3</td>
</tr>
</tbody>
</table>

3. Humanistic and Behavioral Studies Requirement (2-3 credits)
To be selected in consultation with the student's adviser from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>220660</td>
<td>Principles of Vocational Education</td>
<td>2</td>
</tr>
<tr>
<td>420645</td>
<td>History and Philosophy of Education</td>
<td>3</td>
</tr>
</tbody>
</table>
420702 Philosophical Foundations of Education 3
420704 Sociological Foundations of Education 3
420706 John Dewey’s Educational Philosophy 3
420707 Significant Issues in Education 3
423681 Human Abilities and Learning 3
423703 Psychological Foundations of Education 3
426673 Human Intergroup Relations for Educators 3
428687 Principles of Human Resource Development 3
428765 Group Dynamics in the Classroom 3
430550 Introduction to Multicultural Education 3
430722 Issues in Elementary Education 3
430762 Curriculum in the Elementary School 3
434711 Early Childhood Education 3
437710 Curriculum in the Secondary School 3
442712 Curriculum in Physical Education 3
480625 Introduction to Gifted Education 3
480628 General Instructional Models for Gifted Education 3

PUBLIC ADMINISTRATION

A cooperative program between UW-Whitewater and UW-Oshkosh enables students in southeastern 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. Kozlowicz
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 (316) and/or as reading specialists (317).

Program Coordinator:

Dr. Joan Heimlich
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.

1. Reading Sequence (25 credits)
   432764  Developmental Reading in the Elementary School  3
   432768  Developmental Reading in the Secondary School  3
   432766  Diagnosis and Treatment of Reading Disabilities (K-8)  3
   432767  Diagnosis and Treatment of Reading Disabilities (7-12)  3
   432772  Reading in the Content Areas  3
   439790  Practicum (Elementary)  2
          (Secondary)  2
   (Prereq: 432764, 432766, 432767, 432768)
   432771  Planning and Implementing Reading Programs  3
   432773  Research Related to the Teaching of Reading  2
   439774  Field Experience in Reading Programs  1
          (432773 and 439774 are to be taken concurrently.)

2. Research Course  (3 credits)
   424740  Techniques of Research  3

3. Related Reading Requirement  (3 credits)
   To be determined in consultation with the student’s adviser from the following:
   433769  Supervision of Instruction  3
   460564  Introduction to Learning Disabilities  3
   480778  Remediation of Learning Disabilities—Elementary  3
   480779  Remediation of Learning Disabilities—Secondary  3
   430720  Advanced Techniques in the Teaching of Language Arts and English  3
   430740  Techniques for Improving Elementary and Middle School Children’s Writing  3
   430716  Integrating Software and Technology into the Reading and Early Childhood Curriculum  3
   432796  Reading Process: Vocabulary and Comprehension Development  3
   434561  Children’s Literature  2
   436799  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:
   430635  Language Acquisition for the Bilingual Child  3
   430722  Issues in Elementary Education  3
   434714  Current Issues in Early Childhood Education  3
   423681  Human Abilities and Learning  3
   423703  Psychological Foundations of Education  3
   420702  Philosophical Foundations of Education  3
   420704  Sociological Foundations of Education  3
   430762  Curriculum in the Elementary Schools  3
   434715  Children in Crisis  3
   437710  Curriculum in the Secondary Schools  3
   480625  Introduction to Gifted Education  3
Cooperative Program with UW-Parkside: To accommodate students in the Racine-Kenosha areas, there is a consortial arrangement between UW-Whitewater and UW-Parkside to offer all the coursework 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 Millar 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 coursework 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) 460799 Thesis Research (1–6 credits) or 460700 Individual Studies (3 credits); (4) a thesis and oral defense in conjunction with 460799, or a designated original research paper and oral defense in conjunction with 460700, and (5) an oral or written proficiency examination. Emphases, required course sequences, and elective courses should be selected in consultation with advisors to match individual career paths.

Occupational Safety Emphasis

Prerequisites: Industrial Accident Prevention (462380), Chemistry (540101 or the equivalent), and Probability and Statistics (760231 or the equivalent).

Required Courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>469790</td>
<td>3–6</td>
</tr>
</tbody>
</table>

(469790 is waived for those with appropriate work experience.)

One of the following sequences:

1. 840615 Research Design  3
   462683 Industrial Safety Management  3
   462753 Legal Aspects in Occupational Safety  3
   462783 Corporate Safety Management  3
   460787 System Safety Analysis  3
   460650 Behavioral Aspects of Accident Prevention  3
   460888 Human Factors Engineering  3

2. 840615 Research Design  3
   462684 Industrial Hygiene  3
   462680 Industrial Hygiene Instrumentation  2
3. 840615 Research Design
   460688 Human Factors Engineering
   460587 Computer Applications in Occupational Epidemiology
   460787 System Safety Analysis
   442672 Advanced Physiology of Exercise

4. 840615 Research Design
   460787 System Safety Analysis
   462583 Introduction to Security
   462753 Legal Aspects in Occupational Safety
   460752 Safety Communications
   462783 Corporate Safety Management
   240721 The Legal Environment of Business
   One of:
   250771 Strategic Management and Planning
   250720 Organization Theory and Policy
   (250720 may not be taken by those who have taken 250301 Organizational Behavior.)

Institutional Safety Emphasis

Prerequisites: Industrial Accident Prevention (462380), Principles of Environmental Safety (463420), and Chemistry (640101 or the equivalent).

Required Courses:

424740 Techniques of Research
462657 Principles of Occupational Epidemiology
463672 Organization and Administration of School Safety
462684 Industrial Hygiene
462685 Fire Protection/Prevention
462689 Chemical Safety
463711 Principles of Institutional Safety
469790 Practicum
   (469790 is waived for those with appropriate work experience.)

Traffic Safety Emphasis

Prerequisites: Introduction to Safety (460251), Basic Traffic Safety (461260), and Techniques of Laboratory Instruction (461464). 461464 is required only of those who plan to teach driver education.

Required Courses:

461767 Traffic Engineering

One of the following sequences:

1. 424740 Techniques of Research
   460650 Behavioral Aspects of Accident Prevention
   460655 Alcohol and Other Drugs
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>460752</td>
<td>Safety Communications</td>
<td>3</td>
</tr>
<tr>
<td>461666</td>
<td>Police in Highway Traffic Enforcement</td>
<td>3</td>
</tr>
<tr>
<td>437710</td>
<td>Curriculum in Secondary Schools</td>
<td>3</td>
</tr>
<tr>
<td>2. 840615</td>
<td>Research Design</td>
<td>3</td>
</tr>
<tr>
<td>460787</td>
<td>System Safety Analysis</td>
<td>3</td>
</tr>
<tr>
<td>220645</td>
<td>Records Management</td>
<td>3</td>
</tr>
<tr>
<td>461767</td>
<td>Traffic Engineering</td>
<td>3</td>
</tr>
<tr>
<td>461765</td>
<td>Highway Traffic Administration</td>
<td>3</td>
</tr>
<tr>
<td>461666</td>
<td>Police in Highway Traffic Enforcement</td>
<td>3</td>
</tr>
<tr>
<td>820616</td>
<td>Police and Criminal Justice Administration</td>
<td>3</td>
</tr>
<tr>
<td>820615</td>
<td>Criminal Justice and the Constitution</td>
<td>3</td>
</tr>
<tr>
<td>469790</td>
<td>Practicum</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>(469790 is waived for those with appropriate work experience.)</td>
<td></td>
</tr>
</tbody>
</table>

**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)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>290770</td>
<td>School Finance and Accounting</td>
<td>3</td>
</tr>
<tr>
<td>290771</td>
<td>School Business Management Techniques</td>
<td>3</td>
</tr>
<tr>
<td>290772</td>
<td>Legal Aspects of Education</td>
<td>3</td>
</tr>
<tr>
<td>One of:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>290773</td>
<td>School Plant Planning</td>
<td>3</td>
</tr>
<tr>
<td>290777</td>
<td>School Auxiliary Services Management</td>
<td>3</td>
</tr>
<tr>
<td>260636</td>
<td>Purchasing and Materials Management</td>
<td>3</td>
</tr>
</tbody>
</table>

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.)

240646  Insurance  
6 credits from the following:  
210541  Intermediate Accounting I  

Credits: 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. Frances M. Culbertson
Winther 5042 Phone (414)472-5412

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 Cs 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 coursework 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)

   840615 Research Design
   840624 Human Learning
   840640 Psychological Tests and Measurements
   840745 Individual Intelligence Testing
   840746 Psychopathology of Childhood and Adolescence
   840766 Interview and Psychotherapy Techniques-Child
   840767 Interview and Psychotherapy Techniques-Adolescent
   840768 Clinical Applications of Behavior Therapy
   840770 Assessment of Personality
   840780 Supervised Clinical Practicum I
   840781 Supervised Clinical Practicum II

2. Professional Education (9 credits)

   480626 Educational Diagnosis and Assessment

   Courses from educational foundations and special education selected in consultation with the student's adviser to complement specific emphases and specialization

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:**
- Dr. Mary D. Bross
  - Winther 3049  Phone (414)472-4831

**Emotional Disturbance:**
- Dr. Vernon L. Rexroat
  - Winther 4052  Phone (414)472-5818

**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

**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:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>424740</td>
<td>Techniques of Research</td>
<td>3</td>
</tr>
<tr>
<td>480721</td>
<td>The Exceptional Child</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>(480721 may be waived if an equivalent course was completed as an undergraduate.)</td>
<td></td>
</tr>
<tr>
<td>480772</td>
<td>Lifespan Issues in Special Education</td>
<td>3</td>
</tr>
<tr>
<td>480XXX</td>
<td>A Special Education Department research course</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>One of the following:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1. Early Childhood: Exceptional Educational Needs Emphasis</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>480520 Introduction to the Education of Young Handicapped Children</td>
<td>3</td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Credits</td>
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</tr>
<tr>
<td>480523</td>
<td>Developmental Therapy: The Education of Preschool Disturbed Children</td>
<td>3</td>
</tr>
<tr>
<td>480555</td>
<td>Introduction to Emotional Disturbance</td>
<td>3</td>
</tr>
<tr>
<td>480556</td>
<td>Introduction to Mental Retardation</td>
<td>3</td>
</tr>
<tr>
<td>480564</td>
<td>Introduction to Learning Disabilities</td>
<td>3</td>
</tr>
<tr>
<td>480676</td>
<td>Techniques for the Multiple Handicapped</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><em>(480520, 480523, 480555, 480556, 480564, and 480676 may be waived if equivalent undergraduate courses were completed.)</em></td>
<td></td>
</tr>
<tr>
<td>480621</td>
<td>Curriculum Methods and Materials—Young Handicapped Child: Social/Motor</td>
<td>3</td>
</tr>
<tr>
<td>480622</td>
<td>Curriculum Methods and Materials—Young Handicapped Child: Language/Cognition</td>
<td>3</td>
</tr>
<tr>
<td>480623</td>
<td>Educating Infants with Special Needs</td>
<td>3</td>
</tr>
<tr>
<td>489725</td>
<td>Fieldwork with Exceptional Children</td>
<td>1-3</td>
</tr>
<tr>
<td>One of:</td>
<td>789790G Practicum: EC: EEN</td>
<td>5</td>
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<td></td>
<td>Inservice in EC: EEN under both of:</td>
<td></td>
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<tr>
<td></td>
<td>480694 Seminar—Special Education</td>
<td>2</td>
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<tr>
<td></td>
<td>489790 Practicum</td>
<td>3</td>
</tr>
<tr>
<td>Electives selected in consultation with adviser</td>
<td>0-6</td>
<td></td>
</tr>
</tbody>
</table>

2. **Emotional Disturbance Emphasis**

   **Course Code** | **Course Title**                                                                 | **Credits** |
   ---------------|------------------------------------------------------------------------------|-------------|
   480555          | Introduction to Emotional Disturbance                                         | 3           |
   One of:         |                                                                                |             |
   480678          | Curriculum and Methods in Learning Disabilities—Elementary                    | 3           |
   480679          | Curriculum and Methods in Learning Disabilities—Secondary                     | 3           |
   *(480555, 480678, and 480679 may be waived if equivalent undergraduate courses were completed.)* |             |
   480660          | Education of the Severely Emotionally Disturbed                               | 3           |
   One of:         |                                                                                |             |
   480671          | Curriculum and Methods in Emotional Disturbance—Elementary                    | 3           |
   480672          | Curriculum and Methods in Emotional Disturbance—Secondary                     | 3           |
   480725          | Fieldwork with Exceptional Children                                           | 1-3         |
   One of:         |                                                                                |             |
   489790C Practicum: Emotional Disturbance—Elementary                          | 5           |
   489790D Practicum: Emotional Disturbance—Secondary                           | 5           |
   Inservice in Emotional Disturbance under both of:                           |             |
   480694 Seminar—Special Education                                              | 2           |
   489790 Practicum                                                              | 3           |
   Electives selected in consultation with adviser                             | 0-9         |

3. **General Emphasis (without certification)**

   Three of: |                                                                 |         |
   480520    | Introduction to the Education of Young Handicapped Children                | 3       |
   480555    | Introduction to Emotional Disturbance                                      | 3       |
   480556    | Introduction to Mental Retardation                                         | 3       |
   480564    | Introduction to Learning Disabilities                                      | 3       |
   480576    | Introduction to Severely and Profoundly Handicapped                        | 3       |
   480605    | Programming for the Developmentally Disabled Adult                         | 3       |
   480625    | Introduction to Gifted Education                                           | 3       |
   Electives selected in consultation with adviser                             | 9-12     |

4. **Learning Disabilities Emphasis**

   **Course Code** | **Course Title**                                                                 | **Credits** |
   ---------------|------------------------------------------------------------------------------|-------------|
   480564          | Introduction to Learning Disabilities                                        | 3           |
480681 Remediation of Written Language Disorders
   (480564 and 480681 may be waived if equivalent undergraduate courses were completed.)
   One of:
   480678 Curriculum and Methods in Learning Disabilities—Elementary
   480679 Curriculum and Methods in Learning Disabilities—Secondary
   489725 Fieldwork with Exceptional Children
   One of:
   489790E Practicum: Learning Disabilities—Elementary
   489790F Practicum: Learning Disabilities—Secondary
   Inservice in Learning Disabilities under both of:
   480694 Seminar—Special Education
   480790 Practicum
   One of:
   432766 Diagnosis and Treatment of Reading Disabilities (K–6)
   432767 Diagnosis and Treatment of Reading Disabilities (7–12)
   Electives selected in consultation with adviser

5. Mental Retardation Emphasis
   480556 Introduction to Mental Retardation
   (480556 may be waived if an equivalent undergraduate course was completed.)
   One of:
   480657 Curriculum and Methods in Mental Retardation—Elementary
   480659 Curriculum and Methods in Mental Retardation—Secondary
   480665 Curriculum and Methods in Trainable Mentally Retarded
   489725 Fieldwork with Exceptional Children
   One of:
   489790A Practicum: Mental Retardation—Elementary
   489790B Practicum: Mental Retardation—Secondary
   Electives selected in consultation with the adviser

6. Severe and Profoundly Handicapped Emphasis
   480555 Introduction to Emotional Disturbance
   480556 Introduction to Mental Retardation
   480564 Introduction to Learning Disabilities
   480622 Curriculum Methods and Materials—Young Handicapped Child: Language/Cognition
   480676 Techniques for the Multiple Handicapped
   (480555, 480556, 480564, 480622, and 480676 may be waived if equivalent undergraduate courses were completed.)
   480576 Introduction to the Severely and Profoundly Handicapped
   489725 Fieldwork with Exceptional Children
   One of:
   489790H Practicum: Severely and Profoundly Handicapped
   Inservice in Severely/Profoundly Handicapped under both of:
   480694 Seminar—Special Education
   489790 Practicum
   662681 Language Assessment and Intervention in Communication
   662683 Augmentative and Alternative Communication
   Electives selected in consultation with adviser
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

115701 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)

110524 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.

110606 Drawing VI 3 credits
Advanced studio experience in drawing. Prereq: 9 credits in drawing.

110607 Drawing VII: Research 3 credits
A highly specialized course offering directed research in a specific problem related to drawing. Prereq: 9 credits in drawing.

110624 Painting IV 3 credits
Advanced studio experience in painting. Prereq: 9 credits in painting.

110625 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.

110636 Printmaking IV 3 credits
Advanced studio experience in printmaking. Prereq: 9 credits in printmaking.

110637 Printmaking V: Research 3 credits
A highly specialized course offering directed research in a specific area related to printmaking. Prereq: 9 credits in printmaking.

110644 Sculpture IV 3 credits
Advanced studio experience in sculpture. Prereq: 9 credits in sculpture.

110645 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.

110654 Ceramics IV 3 credits
Advanced studio experience in ceramics. Prereq: 9 credits in ceramics.

110655 Ceramics V: Research 3 credits
A highly specialized studio course offering directed studio research in a specific created problem related to ceramics. Prereq: 9 credits in ceramics.

110656 Technical Study in Ceramics 3 credits
Exploration of technical concerns within ceramics. Emphasis is on clay composition and analysis, glaze calculation and formulation, study of ceramic minerals, kiln design, construction and operation. Prereq: 6 credits in ceramics.

110674 Metal and Jewelry IV 3 credits
An advanced course oriented towards the design and creation of art objects relegated
to the body and its close proximity. Specifically aimed at the serious metals student. Prereq: 9 credits in metal and jewelry.

110675 Metal and Jewelry V: Research 3 credits
This course is designed to supply the student with information necessary to function as a professional artist/craftsman as well as further develop his personal work. Prereq: 9 credits in metal and jewelry.

110684 Graphics Design IV 3 credits
Emphasis on conceptual and visual graphic design problem solving. Students analyze, define objectives and present graphic design solutions in a comprehensive format. Prereq: 9 credits in graphic design.

110685 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.

110690 Workshop 1-3 credits
A short term studio workshop offering concentrated study of art media or technique. Prereq: Permission of the Workshop Director.

110696 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.

110700 Individual Studies 1-3 credits
An opportunity for a student to explore in more detail a specific field of study. Student and advisor 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.

110710 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.

110711 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.

110721 Trends in Art Education 3 credits
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.

430721 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.

110798 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.

110799 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)

115503 Survey of American Art 3 credits
An 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.

115504 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.

115505 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.

115511 History of Greek and Roman Art 3 credits
This course is designed to cover in depth the development of the classical "ideal" form and to cover the manifestations of this form in Greek, Etruscan and Roman arts. The student will study the development of classical architecture, sculpture, painting and pottery.

115512 History of Medieval Art 3 credits
An investigation in depth of western art from the early Christian period through the Gothic period. Equal stress will be placed on the architecture, sculpture, painting and the minor arts of the period.

115513 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.

115514 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.

115515 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.

115516 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.
115517 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.

115518 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 the implications for today's movements. Offered fall semester only.

115519 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.

115696 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.

150701 Music in Contemporary Culture 3 credits
A study of selected masterpieces representing the various cultures which are part of our musical heritage. The work will include studies toward the aesthetics and criticisms of the music, the history and background of its composer and the relationship of his music to contemporary thought.

SPECIALIZED COURSES

APPLIED MUSIC

150756 Advanced Conducting 2 credits
Advanced study and analysis of conducting techniques. Score reading and interpretation of masterpieces from standard instrumental and choral repertoire.

150767 Advanced Instrumental Techniques (Strings) 2 credits
An advanced course in string techniques.

150768 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.

150777 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.

150780 Graduate Applied Music 1-2 credits
150781
150782
150787 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

150645 Medieval and Renaissance Music 2 credits
A study of western music from chant to the advent of opera. Analysis of representative works.

150646 Music of the Baroque Period 2 credits
Detailed analysis of representative works by such composers as Monteverdi, Schutz, Corelli, D. Scarlatti, Bach and Handel. Study of performance practices in vocal and instrumental forms. Formerly 150741.

150647 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 Empfindsam Stil to Haydn, Mozart and Beethoven. Analysis of representative works. Formerly 150742.

150648 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 150743.

150649 Music of the Twentieth Century 2 credits
A study of the styles and trends of the twentieth century through study and analysis of representative works. Formerly 150744.

150694 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

150655 Form and Analysis 2 credits
A study of the basic structural components as they are applied to the binary, ternary, rondo, theme and variations, sonata-allegro, and concerto forms. Analysis of selected samples are taken from music literature of all historical periods.

150656 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.

150658 Improvisation: Jazz 1 credit
A study of the nomenclature and theoretical principles of jazz from a performance and analytical view using scat and chorale 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.

150659 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.

150753 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.

150755 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.

150792 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

150625 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.

150667 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.

150668 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.

150740 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.

150764 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.

150791 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

150759 Beginning Training in Kodaly Music Skills 3 credits
Practical application and practice in the use of hand signals, sight singing (solmiza-
tion), ear training, dictation, and analysis, through the sub-pentatomic and pentatomic 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.

150760 **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 hexatomic 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 150759 or successful achievement of a test-out exam of 150759.

150762 **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.

150763 **Principles of Kodaly for Choral Directors**  
3 credits  
Kodaly principles applied to choral rehearsal and performance.

150765 **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**

150690 **Workshop**  
1–6 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.

150696 **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.

150700 **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.

150798 **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.

150799 **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 mak-
ing 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

133704 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

133507 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.

133525 Improvisational Drama 3 credits
A study of the techniques useful for the integration of drama into the educational process. Includes lectures, demonstrations and group participation.

133543 Theatrical Costuming 3 credits
The basic principles and procedures involved in costuming for the theatre. The process of costuming a play, the fundamentals of pattern making, costume construction and costume crafts are studied. Graduate students will have differentiated assignments.

133546 Survey of Modern Drama 3 credits
Analysis of trends and developments in the modern theatre from Ibsen's realistic plays to off-Broadway drama with emphasis on literary history and staging problems. Selected courses will be presented in the classroom. Team taught by Theatre and English faculty. Prereq: 133270 or consent of instructor.

133633 Directing II 3 credits
Study and application of contemporary directing theories and an exploration of approaches to production styles. Prereq: 133332 or consent of instructor.

133643 Costume Design 3 credits
A study of the history of costume and the basic principles and techniques of costume design. Student will design costumes for selected plays. Graduate students will have differentiated assignments.

133671 History of the Theatre Through 1550 A.D. 3 credits
Traces the development of the theatre from its origins until 1550 A.D. It considers theatre and drama in ancient Greece, Rome, the Middle Ages, the Italian Renaissance and the Orient. For each period it examines the theories and practices of such theatrical elements as play writing, acting, directing, scenery, costume, and the like. It seeks to discover how outside forces may have affected the development of the theatre at various times during this era and how theatrical trends established during this era may have affected subsequent developments in the theatre. Prereq: 133270 or consent of instructor.

133672 Theatre History and Drama: 1550–1830 3 credits
Analysis of trends and developments in the theatre from 1550 to 1830, including Neoclassicism, Restoration comedy, and theatre/drama in such countries as Germany, Italy, and Spain. Selected scenes to be presented in the classroom.

133678 Contemporary Drama 3 credits
The function of the theatre as a social force in the twentieth century. Emphasis on form and content of the drama in the modern theatre with consideration of motion pictures and television. Prereq: 133270 or consent of instructor.
133690 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. Summer theatre is offered every summer. Other workshops offered on demand.

133692 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.

133696 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.

133699 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 the theatre and submission and approval of proposal by the Theatre Department.

133700 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.

133798 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)

210541 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: 210244 or 210701. It is suggested that 210542 be taken concurrently.

210542 Cost Accounting
2 credits
A study of how manufacturers determine and control product costs (job-order and process costing, actual and standard cost systems, absorption and direct costing). Variance analysis and reporting, and responsibility accounting are included in the discussion of cost control. The relevancy of accounting information in decision making and the allocation of service department and other joint costs are also probed. Prereq: 210244 or 210701.

210543 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: 210541.

210651 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: 210244 or 210701.

210652 Advanced Income Tax Accounting
2 credits
A study of United States and Wisconsin income tax laws with special emphasis on the treatment of corporations and partnerships. Additional topics may include installment sales, accounting for inventories, income averaging, income taxation of estates and trusts, or tax administration. Prereq: 210651.

210690 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.

210696 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.

210700 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.

210701 Accounting Foundations
3 credits
The course is an accelerated coverage of the equivalent of Accounting Concepts and Managerial Accounting at the undergraduate level. The content includes a study of the accounting cycle, financial statement preparation and interpretation, major cost accounting systems and cost analysis for business decision making.
210735 Profit Planning and Control
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: 210701.

210751 Financial Accounting
Advanced study of the theory underlying the principles and concepts of accounting for partnerships, 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 210541, 210543 and 210752. Prereq: 210543.

210752 Advanced Financial Accounting

210755 Managerial Accounting and Controllership
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: 210542 and 230703.

210761 Accounting and Management Information Systems
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: 250705 and 210543.

210765 Advanced Auditing
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: 210543.

210781 Advanced Accounting Theory I
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: 210543 or consent of instructor.

210782 Advanced Accounting Theory II
A continuation of 210781. 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: 210543 or consent of instructor.

210790 Readings and Research in Accounting
Study of selected contemporary areas in accounting through readings in current research and literature. Prereq: Consent of instructor.

210798 Workshop
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

220701 Consumers in Contemporary Society 1–3 credits
The study of managing personal resources. Included are three independent modules: (Mod 1) Goals, financial analysis, and decision making related to acquiring goods, services, and credit; (Mod 2) protections through health, life, property, and social insurances; and (Mod 3) enhancing financial position through savings alternatives, stocks, bonds, mutual funds, and tax shelters. One credit for each mod. Not to be enrolled in by those in the business education emphasis.

SPECIALIZED COURSES

220545 Introduction to Word Processing 3 credits
An introductory course in word processing emphasizing the purpose of adopting word processing in business organizations. Focus is on word processing concepts, the way they are integrated into a total information processing network, and the handling of paperwork in today's organizations. Problems are analyzed for input to stand-alone magnetic keyboards. Special emphasis will be placed on word originator training. Prereq: 220255 or consent of instructor.

220561 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.

220562 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 to work in retailing.

220563 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.

220643 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.

220645 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.

220647 Data Processing for Business Teachers 3 credits
A study of the concepts, methods and equipment 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.

220660 Principles of Vocational Education 2 credits
The history and development of vocational education both in the United States and Wisconsin are explored. In addition the administrative structure of vocational educa-
tion at the local, state, and national levels is outlined. The various vocational pro-
gram areas are discussed with emphasis given to issues, trends, and problems in
vocational education. The role of the vocational education occupational preparation
program teacher/coordinator is introduced. This offering meets the Department of
Public Instruction's course requirement for vocational certification. The course also
fulfills one of the certification requirements of the Wisconsin Board of Vocational,
Technical and Adult Education.

220661 Organization and Administration of Vocational Programs 3 credits
A study of vocational occupational preparation programs which utilize the pro-
ject/simulation method or the cooperative method of instruction. Included in the course
are the knowledges and procedures necessary to implement the quality components
of a vocational occupational preparation program. Current issues facing vocational
education will also be discussed such as understanding the challenges which are
facing vocational education in the emerging world of work. The cooperative method,
procedures, and techniques are stressed. This course satisfies the Department of
Public Instruction's program approval requirement for teachers in funded cooperative
education programs. Prereq: 220460 or 220660 or equivalent.

220662 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 ex-
perience and role playing. Specific topical areas covered are: how to locate job train-
ing 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: 220460
or 220660 or equivalent.

220690 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. Announce-
ment 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.

220696 Special Studies 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.

220700 Individual Studies 1-3 credits
An opportunity for a student to explore in more detail a specific field of study. Stu-
dent 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.

220738 Seminar in Business Communication 3 credits
A study of the principles upon which effective business communication is based. Levels
of language, organizational techniques, the development of ideas, and clarity of present-
tation are given major emphasis. Frequent writing exercises and extensive analyses
of actual business communication.

220751 Improvement of Instruction in Skill Subjects 3 credits
A study of current trends in the teaching of skill subjects. Current literature and research
will be utilized in discussing objectives, instructional materials and equipment, teaching
procedures and evaluation techniques.

220752 Improvement of Instruction in Accounting and Basic Business
Education 3 credits
Study of the teaching-learning system for accounting and courses involved with educa-
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tr>
<td>220754</td>
<td>Improvement of Instruction in Business Communication</td>
<td>3</td>
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<td>A course designed to provide help in the designing of creative teaching materials for the improvement of instruction in business communication. Materials developed will provide new approaches to the teaching of business communication, and in interaction and exchange sessions participants will explore a variety of situational problems which will provide insight into individual problems in the teaching of business communication.</td>
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<td>220756</td>
<td>Improvement of Instruction in Marketing and Distributive Education</td>
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<td>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.</td>
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<tr>
<td>220758</td>
<td>Trends in Business Teaching — Secretarial</td>
<td>2</td>
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<td>Designed to improve classroom instruction in the office occupations area through an evaluation of research and current literature.</td>
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<td>220762</td>
<td>Current Problems in Business Education</td>
<td>1–3</td>
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<td>A study of the problems currently confronting the supervisor, teacher, and student of business education on both secondary and post-secondary level. Includes a study of curriculum development and objectives of business education.</td>
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<td>220764</td>
<td>Administration and Supervision of Business Education</td>
<td>3</td>
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<td>Administration and supervisory problems of business education programs in secondary and post-secondary schools. Topics include local, state, and federal programs; financial support; physical layout, equipment and furniture; training, selection, assignment and evaluation of teachers; curriculum development; public relations and publicity.</td>
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<tr>
<td>220765</td>
<td>Occupational Information and Vocational Guidance</td>
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<td>A study of guidance and career selection procedures particularly appropriate for use with students enrolled in a secondary of post secondary vocational education program. A specific study of classroom activities performed by vocational instructors; such as the disseminating of occupational information, and the conducting of activities related to career exploration, job analysis, interviewing techniques, employment and training opportunities for those persons entering or returning to vocational occupations or retaing for a new vocational career.</td>
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<tr>
<td>220766</td>
<td>Word Processing and Management</td>
<td>3</td>
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<td>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.</td>
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<tr>
<td>220767</td>
<td>Office Communications, Systems, and Procedures</td>
<td>3</td>
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<td>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.</td>
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<tr>
<td>220769</td>
<td>Basic Business Concepts</td>
<td>3</td>
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<tr>
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<td>Study of the organization and operation of business including the functional and supportive dimensions, relation of economic and social issues, and world interdependence.</td>
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220771 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.

220792 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.

220796 Special Studies in Business Education 1–6 credits
A study of special topics in business education that are not regularly included in the curriculum.

220798 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.

220799 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

230545 Business Statistics II 3 credits
Development of probability theory and distributions, frequency and sampling distribution, inferential statistics including estimation, hypothesis testing and Bayesian techniques, decision theory under uncertainty, multiple correlation and regression, analysis of variance, and use of computers in statistical analysis. Applications covered are oriented to problems in business and economics. Prereq: 230245.

230604 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: 230211, 230212.

230611 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: 230212.

230612 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: 230212.

230638 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: 230211.

230641 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: 230212 or consent of instructor.

**230659 Comparative Economic Systems**  
3 credits  
A study of different types of economic organizations: Capitalistic, socialistic, communist; some of their numerous varieties. Special emphasis on Soviet type economics. Prereq: 230212.

**230690 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.

**230696 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.

**230700 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.

**230703 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.

**230704 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.

**230734 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.

**230736 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: 230704.

**230737 Managerial Economics**  
3 credits  
Applications of microeconomic theory to problems of formulating managerial decisions. Emphasis on economics as a science that facilitate 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: 230703, 230704, and 260702.

230751 Economics of Regulation 3 credits
The rationale for government regulation and intervention — natural monopoly, infant industries, consumer ignorance, cartel formation, externalities, redistribution of income. Antitrust policy. Models of regulation — rate base regulation, entry control, taxes and subsidies, antitrust legislation. The effects of regulation on public utilities, transportation, the control of pollution, protection of the consumers. Prereq: 230704

230754 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: 230704.

230758 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: 230704.

230761 Business and Economic Forecasting 3 credits
Techniques for operational business forecasting with emphasis on time-series methods. Topics covered include single and multi-equation 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: 230703, 230704.

230767 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: 230737.

230790 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.

230798 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.

230799 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)

240620 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: 240344.

240642 Estates and Trusts 3 credits
A study of the materials necessary to the formulation, execution and disposition of properties in wills, estates and trusts; also includes real estate law and transactions. Prereq: 240341 or consent of instructor.

240646 Insurance 3 credits
A study of the economic and social services of the institution of insurance. Prereq: 240344 or consent of instructor.

240656 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: 240345.

240660 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: 240446 or consent of instructor.

240664 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: 240446 or consent of instructor.

240690 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.

240696 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.

240700 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.

240718 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, 240344, or 210701. Not open to those who have an undergraduate finance degree.

240721 The Legal Environment of Business 3 credits
Macro Law (the nature, formation, and application of law in general) stressed in the
environmental approach as contrasted with the traditional micro approach (the detailed substantive rules in areas such as contracts, agency and business organizations). The course coverage includes the study of legislation relating to consumer protection, product liability, labor law, securities regulation, and antitrust legislation. In addition, an overview of the major areas of private law.

240731 Advanced Trusts and Estates 3 credits
This course will involve an advanced, in depth, study by graduate students of the law which relates to the field of probate, including the legal responsibilities of trustees, guardians, personal representatives, conservators and other fiduciaries. The insurance, real estate, stock sale and banking industry all require career-oriented persons who have a working knowledge of this field of law. These persons are generally in managerial positions and are called upon to act in the fiduciary capacity. Prereq: 240721 or 240341. Credit for Estates and Trusts: 240442/240642 and 240731 will not be given.

240739 Financial Planning Process 3 credits
This course serves as an introduction to the Financial Services occupational area of Financial Planning. It is intended for graduate students who wish to learn more about the profession of Financial Planning as well as the process of Financial Planning. Financial Planners work with clients in the following categories of financial needs: determining financial objectives, formulating investment objectives, tax planning, insurance planning, retirement planning and estate planning. This course will serve to guide and direct those students who develop a considerable interest in Financial Planning toward the required advanced training necessary to become competently employed as a Financial Planning Consultant. Prereq: 240718.

240750 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. Special attention will be given the extent to which financial leverage and tax considerations affect risk and return. Prereq: 240718 or consent of instructor.

240755 Multinational Business Finance 3 credits
Multinational Business Finance is an advanced course of international financial principles concerning the investment and financing decisions of transnational firms and investors. It covers an area of major macroeconomic factors affecting international corporate decisions. A special emphasis is given to foreign exchange transactions, hedging strategies, international elements of capital structure decisions and capital budgeting. The course also includes a detailed analysis of international financial markets and taxation of transnational corporations. Prereq: 240344/240718 or equivalent.

240760 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: 240344 and 240345 or 240718.

240770 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: 240718 or concurrent enrollment.

240780 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: 240718 and 260731 or consent of instructor.
240790 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.

240798 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.

240799 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.

250696 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.

250700 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 and the approval of the College Graduate Studies Committee. 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 Associate Dean’s Office prior to registration.

250705 Information System Foundations 3 credits
An introductory course intended to provide future managers with a basic knowledge of information systems and computers. Includes the study of information system concepts, the use of information systems for operational and management decision making, the impact of information systems on organizations and management, and end-user programming and application development; and hands-on experience on terminals and microcomputers in elementary programming skills and the use of productivity packages.

250719 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 on non-manufacturing activities, and will draw heavily upon latest developments in the field. In the analysis of operating functions of the manager, a text is used along with problems or cases in key areas. An oral presentation and/or a written report covering a case study, research topic, or computer application are required. Prereq: 260702, 290703, and 250705.

250720 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.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>250734</td>
<td>Introduction to Computer Based Information Systems</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>This course is designed to examine the role and nature of computer based information systems in business organizations and investigate the effects of these systems on managerial decision making. Topical coverage includes: support for managerial activities, frameworks for system development, design methodologies, system implementation issues, exploitation of information resources, future information technologies, and societal implications. Emphasis is placed on the analysis of business environment and planning, organizing and controlling of CBIS effort. The students learn to design and implement business applications in a fourth generation language. Applicable to all MBA students. Prereq: 250705 or its equivalent or consent of instructor.</td>
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</tr>
<tr>
<td>250741</td>
<td>Managerial and Organizational Behavior</td>
<td>3</td>
</tr>
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<td></td>
<td>Case analysis of human problems in the business organization. Application of findings of behavioral science research to organizational problems. Development and leadership skills. Prereq: 250720 and 9 credits.</td>
<td></td>
</tr>
<tr>
<td>250742</td>
<td>Decision Support Systems</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>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: 250734 or its equivalent.</td>
<td></td>
</tr>
<tr>
<td>250743</td>
<td>Data Base Management</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>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: 250734.</td>
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</tr>
<tr>
<td>250751</td>
<td>Management of Human Resources I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>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.</td>
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<tr>
<td>250752</td>
<td>Management of Human Resources II</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>An examination of the organization and administration of varied compensation programs in profit as well as nonprofit organizations. It is concerned with a detailed study of job structures, methods of job evaluation, performance appraisal, wage surveys, basic systems and plans of compensating employees, and fringe benefits. Attention is focused upon a limited number of topics drawn from these areas so that the more crucial concepts and methods involved therein may be dealt with in some depth. Prereq: 250751.</td>
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<tr>
<td>250754</td>
<td>Expert Systems in Business</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>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: 250742 and 250743.</td>
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</tr>
<tr>
<td>250758</td>
<td>Conflict Resolution in Labor Relations</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Primary concern is with the setting and the dynamics of contract negotiation and administration. Emphasis is on the development of insight and understanding of 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 between employer and employees. Investigation of different means of conflict resolution including mediation, fact finding, and arbitration processes.</td>
<td></td>
</tr>
</tbody>
</table>
250759 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: 250720 or 240721.

250761 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: 250719.

250762 Inventory Systems 3 credits
This quantitative course is designed to expose the students to a thorough treatment of the many common and most useful inventory systems and their impact on materials management. The inventory systems covered will include purchase and production order quantity systems, fixed order size and interval systems under risk and uncertainty and single and multiproduct stochastic models. Further attention will be paid to such topics as forecasting, inventory system design characteristics, evaluation and control of inventory systems. A project involving design and implementation of a real world inventory situation of interest to the student is required. Text and reference material are used. Prereq: 250719 and 260731.

250768 Manufacturing Policy 3 credits
Focuses on the strategic implications of major manufacturing decisions facing the top manager, such as the manufacturing vice-president. Different industries are explored in depth relative to their evolving technologies, critical processes, cost structures, and competitive conditions. Industry-oriented case studies are used to encourage the critical analysis of individual firms within the industry; this includes evaluating the firm’s policies, competitive strategies, and the impact of major manufacturing decisions on corporate performance. Prereq: 250719.

250769 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: 250719.

250770 Organization Design 3 credits
Examines organizational analysis implications and develops rationale for management practice. Examines effective organizational structures through analysis of relationships of organizational variables. Investigates firm-environment matches. Develops frameworks for organizational analysis, research and design. Provides analysis of the major overall considerations relevant to the effective design of organizations. Prereq: 250720 or equivalent.

250771 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: 250720 or equivalent.

250777 International Management 3 credits
The course deals with concepts, problems, and research in the managerial aspects of international business. Prereq: 250720 or equivalent.
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.

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.

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.

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)

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: 260311.

Consumer Behavior  3 credits
A survey of the theories of consumer behavior. Contributions from the social sciences and their applications to marketing. Prereq: 260311.

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: 260311.

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. Emphasis is on analyzing an integrated physical distribution system for a business firm. Various techniques and methods for analyzing spatial arrangements of markets, plant and warehouse location, inventory systems, selection of carrier alternatives and physical movement channels are surveyed. Prereq: 260311 and 230245.

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.

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.

Mathematics Foundations  3 credits
Development of analytical concepts of mathematics needed for management applications. The course is designed to prepare students in business administration to com-
municate in mathematical language and to help them improve their understanding of quantitative and statistical applications in business administration. Covered in the course are basic algebra, set theory, matrix algebra, linear equations, polynomials and their graphs, limits and the derivatives, higher derivatives and partial derivatives, and integral calculus. Emphasis is placed on business decision making.

260716 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.

260731 Advanced Statistical Methods 3 credits
Applications of probability theory and advanced statistical methods to managerial problems of prediction, inference, and decision making under uncertainty. Topics covered include probability theory, decision theory, sampling theory, analysis of variance and fundamentals of experimental designs, multiple correlation and regression, time series analysis and forecasting and selected nonparametric methods. Emphasis is placed on the application of these tools and techniques in different areas of business administration. Prereq: Graduate standing and demonstrated proficiency in mathematics and statistics or 260702 and 230703, or 760143 and 230245.

260732 Operations Research 3 credits
Application of scientific problem solving techniques to the business decision process. The essence of this management science approach is the model-building process which includes the following: linear programming, postoptimality analysis and duality theory, game theory, transportation model, assignment model, transshipment model, integer programming, dynamic programming, goal programming, network models, queuing theory and simulation. Prereq: Graduate standing and demonstrated proficiency in mathematics and statistics or 260702 and 230703 or 760143, 760243 and 230245.

260733 Seminar in Methodology of Business Research 3 credits
Designed to acquaint the graduate student 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. Covered in the course are scientific methodology, research design and strategy, data collection and measurement, model building, selected data analysis techniques, preparation for research proposals and reports and critical evaluation of research. Emphasis is given to the study and critique of published research and to the design, development and reporting of a research project. Prereq: 260731 or consent of instructor.

260735 Applied Multivariate Data Analysis 3 credits
An examination of selected multivariate statistical techniques and their applications in the analysis of business and marketing data. Techniques covered in this course include multiple regression, discriminant analysis, multivariate analysis of variance and covariance, canonical correlation analysis, factor analysis, cluster analysis, multidimensional scaling and conjoint analysis, and other multivariate procedures for categorical variables.

260751 Buyer Behavior 3 credits
The study and explanation of the behavior of consumers, research methods and findings from the behavioral sciences. Prereq: 260716 or equivalent.

260760 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: 260716 or equivalent.

260761 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: 260716 or equivalent.

260764 Sales Planning and Market Analysis 3 credits
Focus is directed toward the construction of an operational sales model for the individual firm by the sales/marketing department. Coverage includes application of quantitative techniques for determining sales and target market potential with emphasis on operational decisions. Topics covered will include marketing applications of regression models, smoothing techniques, sales trend analysis, effect of seasonality in predicting sales, marketing applications for the Box-Jenkins approach to time series analysis, measuring sales forecasting error, and marketing decision making under uncertainty. Prereq: 230761 or 230736 or 260731 or 260716.

260770 Product and Price Management 3 credits
An in-depth examination of the theoretical frameworks, practices, and empirical findings as they relate to product and pricing decisions in the firm. These decisions include designing and modifying an optimum product-market portfolio; determining the nature, number, and timing of new products to be offered, and to what markets. Marketing tasks of screening new product ideas, concept testing, early prediction of performance, and test marketing will be examined. The difficulties of making pricing decisions, current methods of setting prices, and the relevance of internal costs for pricing will also be discussed. Prereq: 260716 or equivalent, 230737 or consent of instructor.

260774 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 the current business problem. The supportive nature of staff functions is analyzed from the viewpoint of its contribution to total marketing planning and strategy. Prereq: 260716 or equivalent.

260780 Seminar in Current Marketing Topics 3 credits
Intensive and critical examination focused on a specific substantive marketing problem area. Topics will vary. Prereq: 260716 or equivalent.

260790 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.

260798 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.

260799 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.

290700 Individual Studies 1–3 credits
An opportunity for a student to explore in more detail a specific field of study. Stu-
dent 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.

290770 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.

290771 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: 290770 or administrative experience.

290772 Legal Aspects of Education 3 credits
427772 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.

290773 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.

290775 Administration and Organization of the Public Schools 3 credits
433775 A survey of the foundation, organization and administration of the American public school system. Designed for teachers, administrators, and school business managers.

290777 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.

290778 Internship in School Business Management 1–6 credits
The internship is a clinical experience which provides the prospective school business manager with many 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 for the internship must be made one semester in advance of the desired internship period. Prereq: 290770, or two of the following: 290771, 290776, or 290772.

290782 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: 290772 or consent of instructor.

290788 The Law and Athletic Administration 2 credits
411788 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.

290798 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.
Thesis Research

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.
COACHING (41-)

411660 Organization and Administration of Interscholastic Athletics 3 credits
This course is designed for those individuals who wish to become athletic coaches and/or administrators. The place of athletics in education the organization and administration of an athletic program will be covered. A research paper dealing with an appropriate topic will be required.

411661 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.

411663 Rehabilitation of the Injured Athlete 3 credits
This course will provide for the participating student practical experience and knowledge in the application of various methods of treatment and rehabilitation of athletic injuries. Prereq: 411661 or consent of instructor.

411664 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.

411788 The Law and Athletic Administration 2 credits
290788 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.

413690 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.

413692 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.

413696 Special Studies 1-4 credits
A course designed to enable the Coaching Department to offer studies of a highly specialized nature in areas not available through other means. Not regularly included in the curriculum, the course will be offered from time to time on topics in athletics on the basis of need, interest and timeliness.

413700 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.

413798 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.

419692 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)

420643 Education in Urban Society 3 credits
Designed for students who plan to teach disadvantaged students urban schools. At-
tention 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.

420645 History and Philosophy of Education 3 credits
The development of contemporary public education from its historical background
with emphasis on the evolution of education philosophy as it relates to present-day
needs and practices of teachers.

420702 Philosophical Foundations of Education 3 credits
Identification of problems, ideas and values that western man has found to be of con-
tinuing concern as each generation has sought to educate its children.

420704 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.

420705 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.

420706 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.

420707 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.

420708 The History of Education in the American Culture 3 credits
This course is designed to give the student the historical base necessary to the recog-
nition 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.

420760 Comparative Education in Overseas Fieldwork 1–6 credits
This course is designed to provide experienced teachers and others with the oppor-
tunity 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)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>421650</td>
<td>Introduction to Counseling</td>
<td>3</td>
<td>This is a survey course intended to introduce the student to the field of counseling and guidance. The emphasis will be on basic aspects of counseling and guidance (theory bases, program building, communication techniques, use of information and measurement in all settings (schools, colleges and universities, community agencies)). Through the use of lectures, readings, discussions and experiential activities the student will develop an awareness of the present status of the profession.</td>
</tr>
<tr>
<td>421677</td>
<td>Counseling Women and Girls</td>
<td>3</td>
<td>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: 840486/686 or 860492 or 421718 or consent of instructor.</td>
</tr>
<tr>
<td>421718</td>
<td>Principles of Counseling</td>
<td>3</td>
<td>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.</td>
</tr>
<tr>
<td>421719</td>
<td>Appraisal Procedures in Counseling</td>
<td>3</td>
<td>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: 421718 or consent of instructor; concurrent enrollment permitted.</td>
</tr>
<tr>
<td>421720</td>
<td>Career Development and Information Services</td>
<td>3</td>
<td>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: 421718 or consent of instructor; concurrent enrollment permitted.</td>
</tr>
<tr>
<td>421721</td>
<td>Group Procedures in Counseling</td>
<td>3</td>
<td>A discussion and laboratory course designed to assist students to learn concepts and skills related to working with small interaction growth groups. Principles of group development and group dynamics are investigated through didactic assignments and participation in an experiential laboratory group. Consideration is given to the application of small group procedures in specific counseling settings. Prereq: 421718, and 421722 or concurrently.</td>
</tr>
<tr>
<td>421722</td>
<td>Theories of Counseling</td>
<td>3</td>
<td>Each participant will develop his/her personal theory of counseling which will serve as guideline to beginning practice. Discussion of relationships among philosophy/theory/practice, elements of theory, and examination of psychoanalytic, behavioral, and humanistic/existential counseling approaches, trends and issues in theory and application. Prereq: Successful completion of or concurrent enrollment in 421718.</td>
</tr>
<tr>
<td>421723</td>
<td>Counseling in Elementary and Junior High Schools</td>
<td>3</td>
<td>Designed primarily for students planning to become elementary or junior high school counselors. Discussions include consideration of counseling approaches with children; consulting with teachers, parents and other pupil service specialists; various procedures and activities which facilitate the counseling of the child. Prereq: 421718 or consent of instructor.</td>
</tr>
</tbody>
</table>
421724 Career Counseling of Adolescent and Adult

Career Counseling of Adolescent and Adult

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: 421718, or consent of instructor.

421725 Counseling in Secondary Schools

Counseling in Secondary Schools

3 credits

Designed for students planning to become junior or senior high school counselors. Discussions include: the role of the secondary school counselor; the school counselor in perspective (historical and organizational perspectives); individual and group counseling approaches with adolescents; and issues, trends and innovations in secondary school counseling. Prereq: 421718, 421722.

421726 Seminar in Counseling

Seminar in Counseling

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: 421718 or consent of instructor; concurrent enrollment permitted.

421727 Program Development, Research and Evaluation for School Counselors

Program Development, Research and Evaluation for School Counselors

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.

421728 Clinical Studies in Counseling

Clinical Studies in Counseling

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: 421718 or consent of instructor.

421729 Student Services in Higher Education

Student Services in Higher Education

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: 421718 or consent of instructor.

421730 Consulting Skills for Counselors

Consulting Skills for Counselors

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.

421731 Introduction to Marriage and Family Counseling

Introduction to Marriage and Family Counseling

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.

421732 Practices of Marriage and Family Counseling

Practices of Marriage and Family Counseling

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 interven-
tion. Prereq: Successful completion of an introductory course or training in marriage and family counseling or comparable experience or written consent of instructor.

421733 Theory and Techniques of Marriage and Family Counseling 3 credits
A professional course designed for individuals who are interested in marriage and family counseling as a profession. The course will be divided into two halves. The first half focus will be on the major theoretical orientations of family process. The second half will explore a framework for the selection of use of experiential techniques and an opportunity to gain experience in carrying out such techniques. Prereq: Successful completion of an introductory course or training in marriage and family counseling or consent of instructor.

421737 Counseling and Human Services in the Community 3 credits
This course will survey and analyze the goals and practice of various agencies in the community which deliver counseling or mental health services. The role of the counselor in each will be studied. Prereq: 421718 or consent of instructor.

421738 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.

421746 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.

421747 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.

421748 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.

421749 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 the chemically dependent and/or family members, as well as, exploring special treatment needs of specific populations (i.e. adolescents, women, elderly). Prereq: Counselor Education Major and 421718, 421722, 421746.

LIBRARY MEDIA (422)

422543 Adolescent Literature and Related Media 3 credits
Designed primarily to acquaint the student with books and nonprint media which ap-
peal to the adolescent interest. Emphasis will be placed in adolescent human growth and development, reading interests and principles of selection.

422544 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.

422550 Reference and Bibliography 3 credits
Basic reference theory and an introductory survey of materials and bibliographies useful in manual and automated reference service.

422551 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.

422634 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.

422635 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.

422637 Photographic Design and Production for the Teacher 3 credits
Designed to acquaint students with the basic operation of small format cameras and to produce black-and-white photographs. An adjustable 35mm camera is required.

422638 Utilization of Instructional Television Resources 3 credits
Instructional television resources are becoming increasingly available to the classroom teacher. 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. No previous knowledge of television equipment is required.

422640 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.

422641 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: 422434/634 or consent of instructor.

422651 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.

422654 Library and Media Center Administration 3 credits
Organization and administration of the school media center. Includes the study of objectives of the center and theory and practice of acquiring, processing, disseminating, and housing all types of education materials.

422715 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.

422751 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.

422753 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: 422437/637 or consent of instructor. Adjustable 35mm camera required.

422754 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: 422435/635.

EDUCATIONAL PSYCHOLOGY AND DEVELOPMENT (423)

423522 Pre-school Child Development 3 credits
Designed to present to the student insight into the development of the young child. Traces growth from conception through the pre-elementary school years. Special emphasis will be placed on early childhood education.

423523 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.

423664 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.

423674 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.

423678 Adolescent Development 3 credits
A study of the transition from childhood to adulthood with emphasis on the adjustment problems of youth to changes within himself which are physiological, mental, emotional and social in nature.
Human Abilities and Learning
A study of the fundamental principles of the teacher learning process. Focus is on the psychological basis for human abilities and behavior and its relation to classroom learning.

Educational Statistics
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.

Teaching Strategies
This course is designed to assist teachers at all levels to develop a variety of teaching strategies for use in the classroom.

Issues in Human Development
Designed to present the relative influences of biological, psychological, social and environmental factors on human development at different stages in the life cycle.

Psychological Foundations of Education
Designed to provide psychological background about human abilities and behavior, individual differences, learning and evaluation, with implications for teaching.

Instructional Design
"Instructional Design" is the theory and practice of curricular development applied to the design of individual course materials and curriculums at the school, district or state level. As a procedure it constitutes the development of algorithms and heuristics which lead to well-organized effective curriculum designs. As a philosophy it emphasizes the "systems approach" and the "systems view" towards the understanding of complex curriculum and managerial tasks. Upon completing this course the student will acquire skills in (1) the design, (2) the development, (3) the evaluation of curriculum materials at a level of competence which enables him to prepare quality curriculum designs and proposals for formal distribution.

Educational Psychology of Teaching the Gifted: Alternative Learning Approaches for the Gifted
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 more, faster and in greater width and depth. The course includes a comprehensive review of the theoretical model and the research-support base behind each model. Prereq: 480425/625 or consent of instructor.

Educational Psychology of the Gifted: The Development of Educational Programs for the Gifted
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 programing 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 programing within both school and community.

Educational Psychology: Mastery Learning
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)

424621 Educational Measurement, Research and Evaluation 3 credits
A study of student evaluation and the teaching process with emphasis on planning an efficient measurement and evaluation program. The course includes the study of the foundations of measurement, techniques of measurement, analysis of data, and application of measurement and evaluation of the teaching-learning process. In addition, the course includes basic methods of research in education and the basic type of research and design, with an emphasis on the teacher as a consumer of educational research.

424740 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.

424743 Improving Classroom Testing 3 credits
A course in the improvement of teacher-made testing. Includes the role of classroom testing; test planning; item writing; putting the test together and administering, scoring and grading; item analysis to improve validity. An in-depth study of the cognitive domain of education objectives and how to develop items to measure both minimum and developmental outcomes. Prereq: A basic course in measurement or its equivalent.

SPECIALIZED STUDIES (426)

426690 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.

426696 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.

426700 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.

426798 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.

426799 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)

427772 Legal Aspects of Education 3 credits
290772 Seeks to present in nontechnical language to educational practitioners legal
433772 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 con-
tract and professional negotiations.

HUMANISTIC STUDIES (428)

428606 Assertive Training 1 credit
A study and practice of assertive behaviors. The class activity will include role play-
ing with video feedback, assertive homework assignments and group participation.

428607 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.

428672 Models of Accelerated Classroom Learning 3 credits
Research and new “Whole Brain” learning theories are showing we can learn
academic materials faster and more thoroughly. This course is aimed at instructing
teachers how to use these theories and techniques in the classroom. The course will
deal with accelerated learning, whole brain instruction, curriculum development,
positive learning, and holographic learning.

428673 Human Intergroup Relations for Educators 3 credits
This 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. This course is required for recertification by the Wisconsin Technical
and Adult Education Board.

428675 Understanding and Dealing with Disruptive Classroom Behavior 3 credits
The course is designed to give students an opportunity to discuss the various theoretical
approaches to handling disruptive behavior in the classroom and to apply these ap-
proaches to actual problems through the development of effective classroom pro-
cedures. Recommended for all education majors.

428676 Interpersonal Helping Skills for Educators 3 credits
The course is designed (1) to help the educator develop an increased awareness of
his or her own feelings and conflicts within the classroom, and to examine a wider
variety of potentially appropriate responses to these feelings, and (2) to present the
Gazda/Garkhuff theory of interpersonal helping and to train participants in process
skills consistent with the theory. A basic goal of such training is to help educators
develop an expertise in such interpersonal helping skills as empathy, respect, ge-
nuineness, self-disclosure and confrontation in order to create a more humane en-
vironment and make problem solving easier for those in the educational setting seeking
their assistance.

428679 Discipline at Home and School 3 credits
This course will enable teachers to analyze their teaching styles and improve their
interactions in the classroom.

428687 Principles of Human Resource Development 3 credits
Identification and interpretation of policies and practices connected with the develop-
ment of human resources by means of additional education and training. Emphasis
is placed on personnel needs assessment and training programs in government agen-
cies at the federal, state, and local levels. The implication of in-service training in
business and industry, educational organizations, and the various professions will
be examined.
428765 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.

428777 Classroom Survival: Perspectives on Discipline 3 credits
This course is designed to be taught in public schools utilizing 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) disruptive behavior negotiating as an approach for dealing with discipline problems, and (4) reducing disruptive behavior through creative teaching.

FIELD PRACTICUM (429)

429790 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)

430550 Introduction to Multicultural Education 3 credits
437550 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.

430635 Language Acquisition for the Bilingual Child 3 credits
437635 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.

430655 Teaching Content in the Bilingual Classroom 3 credits
437655 An examination of various teaching 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.

430672 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 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.

430673 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.

430674 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 student will prepare materials to integrate the use of software into their prospective teaching area.

430699 Employment Strategies 1 credit
480699 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.)

430716 Integrating Software and Technology into the Reading and Early Childhood Curriculum 3 credits
This course introduces teachers of reading and early childhood education to the evaluation of software, and to the integration of software into the existing early childhood curriculum.

430720 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.

430721 Trends in Art Education 3 credits
110721 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.

430722 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.

430730 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.

430740 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.

430752 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 in computer science.

430759  Art for the Exceptional Child/Adult  3 credits
480759 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.

430760  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.

430761  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.

430762  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.

430763  Advanced Techniques in the Teaching of Social Studies  2-3 credits
A comprehensive consideration of the objectives, content, methods, including unit procedures, materials, including objectives, models and exhibits as well as textbooks, collateral reading, maps and globes and means of evaluating in the social studies.

430765  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.

430770  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.

430770a  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: an assigned UW-W student teacher or intern during the semester in which the cooperating teacher desires to take the course, previous arrangement with instructor, and admission to the Graduate School.

HOMEMAKING (431)

431540  Nutrition and Health: Early Childhood  3 credits
A course in nutrition and health pertaining to the needs of the young child of preschool 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)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>432764</td>
<td>Developmental Reading in the Elementary School</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>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.</td>
<td></td>
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<tr>
<td>432766</td>
<td>Diagnosis and Treatment of Reading Disabilities (K-6)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>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.</td>
<td></td>
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<tr>
<td>432767</td>
<td>Diagnosis and Treatment of Reading Disabilities (7-12)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>A course designed to give experience in the use and analysis of formal and informal tests used in diagnosing reading problems and related disabilities.</td>
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</tr>
<tr>
<td>432768</td>
<td>Developmental Reading in the Secondary School</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>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.</td>
<td></td>
</tr>
<tr>
<td>432769</td>
<td>Reading Process: Vocabulary and Comprehension Development</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>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.</td>
<td></td>
</tr>
<tr>
<td>432771</td>
<td>Planning and Implementing Reading Programs</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>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: 432764.</td>
<td></td>
</tr>
<tr>
<td>432772</td>
<td>Reading in the Content Areas</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Utilization of reading skills, study strategies and materials as applied to the content fields, and techniques for incorporating reading into content area instruction. Prereq: 432764.</td>
<td></td>
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<tr>
<td>432773</td>
<td>Research Related to the Teaching of Reading</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>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: 432764.</td>
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</tbody>
</table>

EDUCATIONAL ADMINISTRATION (433)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>433769</td>
<td>Supervision of Instruction</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>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.</td>
<td></td>
</tr>
<tr>
<td>433772</td>
<td>Legal Aspects of Education</td>
<td>3</td>
</tr>
<tr>
<td>290772</td>
<td>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,</td>
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</tr>
</tbody>
</table>
attendance and instruction of pupils; retirement benefits; and the employment contract and professional negotiations.

433775 Administration and Organization of the Public Schools 3 credits
A survey of the foundation, organization and administration of the American public school system. Designed for teachers, administrators and school business managers.

433776 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)

434561 Children’s Literature 2 credits
A study of literature for the young child including Mother Goose, Poetry, traditional stories, modern and multi-ethnic picture books. Evaluation and selection techniques are explored.

434650 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.

434662 Programs and Curriculum for Infants and Toddlers 3 credits
This course will enable students to plan and implement a sequential curriculum for children from birth to age three. Issues, concepts, and research findings pertaining to group care of infants and toddlers will be considered as well as teaching strategies employed with very young children. Materials and methods will be examined with respect to their value in various child care settings. Prereq: 423322 or consent of instructor.

434675 Early Childhood Education — Administration of PreSchool Programs 3 credits
The concentration of this course is preparation in the managerial and organizational skills. Areas of emphasis include staffing, licensing, financing, and public relations. Prereq: Consent of instructor.

434711 Early Childhood Education 3 credits
A study of historical and philosophical foundations, the goals and objectives, current practices, and significant research on early childhood education.

434713 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 infancy through approximately age seven.

434714 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.

434715 Children in Crisis 3 credits
This course will enable teachers to become more aware of the 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)

436690 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.

436696 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.

436700 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.

436797 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.

436798 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.

436799 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)

437550 Introduction to Multicultural Education  3 credits
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.

430550 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: 423212 or 423222.

437620 Methods of Teaching English and Language Arts  3 credits
Designed to familiarize the student with adolescent behavior, needs, and interests as they may apply to the teaching of the language arts; to acquaint the student with current trends in the curriculum; to examine the content of the language arts with specific emphasis on language, composition and literature; to illustrate methods of planning and presenting the content; and to familiarize the student with the available materials for teaching the language arts.
437628 Methods of Teaching Mathematics  

437629 Methods of Teaching Science  
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 view of their teaching profession, their science area and their responsibilities to all students.

437630 Methods of Teaching Social Studies  
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.

437631 Methods of Teaching Speech  
Designed to develop student awareness of the importance of speech education as an integral factor in the total educational enterprise; to help and encourage the students to develop a workable philosophy of speech education; to improve students' skill in preparing courses of study, units and lesson plans adapted to the needs and abilities of their student; to suggest methods of and improve skill in evaluating the students' own work as well as that of their students; to give students direction in planning and conducting extracurricular activities.

437632 Methods of Teaching Journalism  
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.

437635 Language Acquisition for the Bilingual Child  
430635 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.

437655 Teaching Content in the Bilingual Classroom  
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, both orally and in writing. Prereq: Language proficiency in Spanish.

437701 Modern School Mathematics Curriculum  
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.

437710 Curriculum in the Secondary Schools  
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.

437725 Art Education for the Secondary School  
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)

439712 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.

439774 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: 439790.

439790 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)

442514 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.

442524 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 to be used in teaching of gymnastics.

442525 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.

442526 Physical Education for the Elementary 4–8 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.

442527 Motor Programming for Early Childhood 2 credits
Designed for those who plan to work with children in any type of preschool program. Emphasis will be placed on giving them ideas for developmental motor activities that will aid children with: 1) their physical coordination, 2) their emotional reactions to various experiences, 3) their social interactions, and 4) their ability to be improved mentally. Participation in activities and teaching experiences will be interspersed with lecture presentations.
442530 Techniques of Teaching Movement Activities in Elementary School  
An activity-centered course designed to create an understanding of basic skills for the elementary school child. Emphasis is on the basic skills, lead-up activities, and progression in game activities.

442540 Team and Individual Sports  
An integration of organizational procedures, lesson and unit planning, program planning progression and teaching techniques related to team and individual sports.

442571 Kinesiology  
A scientific study of human motion. Studies of anatomical and mechanical principles as they relate to the understanding of skillful, efficient and purposeful human motion will be conducted.

442580 Perceptual Motor Activities for Young Children  
A study of motor maturation, developmental variance affecting motor efficiency, gross motor assessment instruments prescriptive techniques involving perceptual motor activities.

442615 Corporate and Community Fitness  
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.

442660 Behavioral Aspects of Sports and Physical Activity  
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.

442671 Physiology of Exercise  
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.

442672 Advanced Physiology of Exercise  
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: 442471/671.

442673 Organization and Administration of Physical Education  
Relationships and procedures involved in effective administration and organization of physical education programs.

442675 Adapted Physical Education  
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.

442678 Physical Education for the Exceptional Child  
Course emphasis is on exploring physical education programs for the classroom teacher and for recreational leaders in institutional settings and day care centers who deal with exceptional children who are handicapped in physical activities.
442690 Workshop in Physical Education 1–3 credits
The course is designed to enable the Physical Education Department to offer a workshop where there is sufficient demand. The specific area will be announced at the time the course is offered.

442692 Field Study 1–12 credits
Studies designed to increase the student's understanding of specific areas of health, physical education and recreation through involvement in off-campus experiences such as elementary schools, secondary schools, camps and community programs under the direction of department instructors. Prereq: Consent of department chairperson.

442694 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.

442696 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.

442700 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.

442710 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.

442712 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.

442715 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.

442752 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.

442770 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.

442772 Construction of Motor Performance Assessment Instruments 3 credits
442790 Practicum
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.)

442798 Workshop
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.

442799 Thesis Research
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)

444545 Secondary Health Education Topics
An investigation of secondary school health topics, their implication for sequential development and effective strategies for positive impact.

444560 High Level Wellness
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.

444562 Stress Management
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.

444582 Elementary Health Education
A course designed for elementary teachers. The relationship of well being to life style is emphasized in addition to the preparation in providing teaching/learning experiences in selected content areas.

444585 Administrative Strategies in Health Education
An investigation into the multifaceted role of the school health coordinator and/or teacher as it relates to school health education advancement.

444645 Teaching Health Education
A study of philosophy, trends and teaching-learning strategies. Emphasis will be placed on developing and utilizing models and strategies in health education.

444690 Workshop in Health
The course is designed to enable the Physical Education Department to offer a workshop where there is sufficient demand. The specific area will be announced at the time the course is offered.

444692 Field Study in Health
Studies designed to increase the student’s understanding of specific areas of health, physical education and recreation through involvement in off-campus experiences
such as elementary schools, secondary schools, camps and community programs under the direction of department instructors. Prereq: Consent of department chairperson.

444694 Seminar in Health Education  
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.

444696 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.

444700 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.

444745 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.

444790 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.)

444798 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.

444799 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)

446534 Recreation Programming and Leadership  
3 credits  
A study of the program and leadership methodology which effectively identifies the leisure participants’ needs and develops and implements specific recreational activities and services to meet those needs.

446550 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.

446591 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 in 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.

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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>446690</td>
<td>Workshop in Recreation/Leisure Studies</td>
<td>1-3</td>
</tr>
</tbody>
</table>
|             | The course is designed to enable the Physical Education Department to offer a
|             | workshop where there is sufficient demand. The specific area will be announced
|             | at the time the course is offered.                |
| 446691      | Recreation Administration                         | 3       |
|             | A study of the basic principles and philosophy of
|             | community recreation through the development of
|             | an understanding of current trends and problems,
|             | organization and administration and the development
|             | of an awareness of agencies that support community
|             | recreation programs. The graduate requirement will
|             | be an in-depth study of a significant aspect relating
|             | to material covered in the course.                |
| 446692      | Field Study in Recreation                         | 1-12    |
|             | Studies designed to increase the student's
|             | understanding of specific areas of health, physical
|             | education and recreation through involvement in
|             | off-campus experiences such as elementary schools,
|             | secondary schools, camps and community programs
|             | under the direction of department instructors.
|             | Prereq: Consent of department chairperson.        |
| 446694      | Seminar in Recreation/Leisure Studies             | 1-3     |
|             | 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.                                        |
| 446696      | Special Studies                                   | 1-3     |
|             | 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
|             | individual studies.                               |
| 446700      | Individual Studies                                | 1-3     |
|             | 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.                               |
| 446790      | Practicum                                         | 1-6     |
|             | 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.)    |
| 446798      | Workshop                                          | 1-3     |
|             | 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.    |
| 446799      | Thesis Research                                   | 1-6     |
|             | 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)

460581 Motor Fleet Safety 3 credits
The basic fleet course emphasizes areas in which supervision can improve and control employee performance. Course topics include instruction in the areas of employee selection, supervision and training, and Federal and State laws as well as compliance procedures. It also covers accident prevention and investigation and shipment of hazardous materials. The administration of an effective fleet safety program by safety directors of all sizes of fleets is also emphasized. Prereq: An industrial safety course and/or consent of instructor.

460650 Behavioral Aspects of Accident Prevention 3 credits
Selected concepts of accident causation specifically related to the human element are studied. The medical, psychological and sociological factors which influence safe behavior, and attempts which have been made to modify unsafe behavior are also analyzed. Prereq: Consent of instructor.

460653 Legal Aspects in Safety Education 3 credits
An examination of federal and state laws with judicial interpretations having application to schools, industrial, and public safety liability will be stressed. 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 the industrial, the school or the public liability. Prereq: 462380 or consent of instructor.

460655 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.

460688 Human Factors Engineering 3 credits
This course examines the design of factors such as displays, controls, and printed information in the causation of human error. The operators' information processing and anthropometric capabilities and limitations are evaluated as related to the design of person-machine systems. A major portion of the course deals with manual materials handling and the application of ergonomic principles to minimize cumulative trauma. Field trips may be required. Prereq: 462484 or consent of instructor.

460690 Workshop 1-6 credits
Workshops designed to meet the needs of safety specialists. Workshops content will vary according to contemporary conditions. Prereq: Consent of instructor.

460696 Special Studies 1-3 credits
A study of special topics in safety for students of junior, senior or graduate standing. Prereq: Consent of instructor.

460700 Individual Studies 1-3 credits
An opportunity for a student to explore more deeply a specific field of study. Prereq: Consent of instructor.

460752 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.

460787 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: 460688 or consent of instructor.

460791 Readings and Research in Safety 3 credits
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. Students will examine research and professional issues and apply the information to a problem of their choice.

460797-I Institute 1-3 credits

460798 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.

460799 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)

461661 Problems and Materials of Driver Education 3 credits
Emphasis is placed on methods and techniques of teaching driver and traffic safety in the high schools. Areas of investigation include classroom, in-car range and simulation methods of instruction. Programmed instruction, team teaching, educational television, and other modern methods will be examined for their use in driver education programs. Organization and administration of the high school program will also be covered. Prereq: 461260 or consent of instructor.

461665 Advanced Driving Techniques 3 credits
Designed to prepare teachers in the techniques and methods used in developing, coordinating, administering and implementing an advanced driving technique program. Deals with emergency driving situations, driver and vehicle limitations, program organization and administration and policies and guidelines for course implementation. Classroom activities in addition to extensive work on the multiple vehicle range will be incorporated into the class. Teaching practicums will be conducted by students. Prereq: driver education certification or equivalent and/or consent of instructor.

461666 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.

461765 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.

461767 Traffic Engineering 3 credits
An overview of the development, management and operation of highway transporta-
tion systems. Includes investigation of and experiences in utilization of traffic engineering methods and techniques. Prereq: Consent of instructor.

**OCCUPATIONAL (462)**

462582 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 code. Prereq: An industrial safety course or consent of instructor.

462583 Introduction to Security 3 credits
A study of the physical, personal, 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.

462587 Computer Applications in Occupational Epidemiology 3 credits
An introduction to simple computer programming structures in epidemiological research using the BASIC language. A review of rudimentary computing principles and procedures. An introduction to “fourth generation” (4GL) computer languages for Occupational Epidemiology. Hands-on applications using BASIC and SAS. Prereq: A probability and statistics course, an introduction to computer course, or consent of instructor.

462657 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: 230245 or 423482 or 760231.

462680 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, 462485 or concurrent enrollment or consent of instructor.

462683 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 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.

462684 Industrial Hygiene 3 credits
An introduction to the science and art of Industrial Hygiene including the chemical, physical, biological, and ergonomic 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.

462685 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 gasses. Liquids, com-
bustible solids, dusts, chemicals, and explosives. Interpretation of appropriate codes will be covered. Prereq: Organic/inorganic chemistry or consent of instructor.

462686 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, and interaction of manual-mechanical systems are emphasized.

462687 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.

462696 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.

462689 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.

462753 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.

462783 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)

463672 Organization and Administration of School Safety  3 credits
Designed as a course to better prepare prospective teachers in the techniques and methods best used in coordinating the entire school safety program. Also designed for teachers and school administrators and others responsible for directing or supervising safety programs in the school. Deals with the problems, policies, practices, and procedures involved in the organization, administration and supervision of a comprehensive accident prevention and safety education program for the school or community. Prereq: A basic safety course.

463711 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)

469790 Practicum 1-5 credits
The students will be assigned according to their preparation and interests to study in the field in a particular phase of safety, in depth, and under the supervision of an organization or other agency implementing a safety program. The student will be required to work with administrative and operational personnel at various levels. A written report of the student's experiences will be required. Prereq: Graduate status, application and interview, completion of 9 credits at UW-Whitewater, and designated curriculum check sheet requirements.

SPECIAL EDUCATION (480)

480520 Introduction to the Education of Young Handicapped Children 3 credits
Designed for persons interested in the education of young handicapped children. Curriculum and instruction strategies for young handicapped children (i.e., parents, toddlers and preschoolers) will be studied. The trainees will be required to participate in two hours of supervised field activities and two hours of lectures each week. Prereq: 480205 or 480721.

480523 Developmental Therapy: The Education of Preschool Disturbed Children 3 credits
For persons interested in the education of infants, toddlers and preschoolers who exhibit emotional disturbance. Emphasis will be on identifying causes of disturbance in young children and applying a psychoeducational approach to the process of intervention. Therapeutic strategies and techniques will be studied and practiced. Prereq: Previous background in early childhood or special education advised or consent of instructor.

480536 Managing the Classroom Behavioral Problems of Exceptional Children 3 credits
This course will introduce students to models, methods and materials for managing the classroom behavior problems of children with exceptional educational needs. The course will focus on developing skills which will permit teachers to: (1) manage oppositional behaviors that are counterproductive to learning in the classroom; (2) teach positive interpersonal behaviors that facilitate successful functioning in society; and (3) structure the classroom environment so that both academic and social interpersonal behaviors produce desirable consequences for children. Prereq: 480205.

480555 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: 480205 and consent of instructor.
of the teacher and aspects of working with parents of disturbed children will be discussed. Prereq: 480205 and consent of instructor.

480556 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.

480564 Introduction to Learning Disabilities  3 credits
Considers diagnosis and remediation of learning disorders which call for a special education approach. Prereq: 480205 or 480721 or consent of instructor.

480576 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.

480605 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.

480606 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: 480356, 480364, 480355.

480621 Curriculum Methods and Materials — Young Handicapped Child: Social/Motor  3 credits
For persons interested in the education of young handicapped children. Assessment and habilitation strategies, procedures and techniques designed to ameliorate adaptive, fine motor and gross motor handicaps in infants, toddlers, and preschoolers. Prereq: 480320/520.

480622 Curriculum Methods and Materials — Young Handicapped Child: Language/Cognition  3 credits
Assessment and habilitation strategies, procedures and techniques designed to ameliorate cognitive and language handicaps in infants, toddlers and preschoolers. The trainees will be required to participate in supervised field activities. Prereq: 480320/520.

480623 Educating Infants with Special Needs  3 credits
This course will examine a number of concepts, issues, empirical findings and instructional methods regarding the education of handicapped children, ages 0 to 3. Prereq: 480421/621 and 480422/622.

480625 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.
<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>480626</td>
<td>Introduction to Individual Diagnostic Assessment of Exceptional</td>
<td>3</td>
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<tr>
<td></td>
<td>Educational Needs</td>
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<tr>
<td></td>
<td>A core course for special education majors to provide an overview</td>
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<td>of educational assessment and diagnosis of the handicapped.</td>
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<td>Emphasis will be placed upon testing for IEP development and</td>
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<td>teaching and the implications of the educational evaluation</td>
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<td>for multidisciplinary team decision making. Prereq: 480205 or</td>
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<td>480721, 489210.</td>
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<tr>
<td>480628</td>
<td>General Instructional Models for Gifted Education</td>
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<td></td>
<td>This course goes beyond a basic understanding of the nature and</td>
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<td>needs of gifted students and concentrates on presenting several</td>
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<td>models for providing curriculum and instructional designs for</td>
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<td>such students in the school setting. Prereq: An introductory</td>
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<td>course dealing with the gifted or consent of instructor.</td>
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<tr>
<td>480632</td>
<td>Working with the Family of the Young Handicapped Child</td>
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<td></td>
<td>For persons preparing to teach young handicapped children.</td>
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<td></td>
<td>Teacher effectiveness is directly related to their ability to</td>
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<td>involve the parents in the early intervention process of</td>
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<td>infants, toddlers and preschoolers as well as motivation for</td>
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<td>involving parents in the early intervention process. The child,</td>
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<td>parent and professional triangle is critical — working with</td>
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<td>parents requires differential knowledge, skills and attitudes.</td>
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<td>Prereq: 480520 or consent of instructor.</td>
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<tr>
<td>480680</td>
<td>Speech and Language Development in the Child</td>
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<tr>
<td>662680</td>
<td>Normal and abnormal language development are presented.</td>
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<td>Various language models are examined from the standpoint of</td>
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<td>their implications for assessment and treatment in an educational</td>
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<td>setting. Prereq: 480774 or equivalent or consent of instructor.</td>
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<tr>
<td>480681</td>
<td>Remediation of Written Language Disorders</td>
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<td>The course examines writing instruction for handicapped</td>
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<td>individuals using a language interaction approach to teaching</td>
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<td>and learning. Assessment and intervention based on the</td>
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<td>conceptual and linguistic skills of the student in</td>
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<td>relationship to the conceptual and linguistic demands of</td>
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<td>specific writing tasks will be presented. Prereq: 480426/626,</td>
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<td>662350/550 and 662360/560.</td>
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<tr>
<td>480686</td>
<td>Instructional Systems for the Moderately, Severely and Profound-</td>
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<td>ly Handicapped</td>
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<td>Specifically designed for persons majoring in education for the</td>
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<td>severely and profoundly handicapped. Provides a background of</td>
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<td>knowledge to appropriately design an individual educational</td>
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<td></td>
<td>plan for the severely and profoundly multiply handicapped,</td>
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<td>utilizing programs and living environments. Emphasis is placed</td>
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<td>on assessment, implementation and evaluation of the</td>
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<td>individualized program. Prereq: 480476/676.</td>
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<td>480690</td>
<td>Workshop</td>
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<td>A course characterized by individualized and participatory</td>
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<td>activities within a group context, the results of which activities</td>
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<td>are shared with the entire group. Announcement of specific</td>
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<td>workshops being offered are made as the workshops are</td>
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<td>developed. See the Credit Restrictions section under Academic</td>
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<td>Requirements and Policies for credit limitations pertaining to</td>
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<td>workshops.</td>
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<tr>
<td>480694</td>
<td>Seminar — Special Education</td>
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<td></td>
<td>Designed to provide an opportunity for a group of students to</td>
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<td>participate in an in-depth study of a specific area of work</td>
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<td>with handicapped children. Repeatable. Prereq: Consent of</td>
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<td>instructor.</td>
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<td>480696</td>
<td>Special Studies</td>
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<tr>
<td></td>
<td>A study of special topics in the field of special education.</td>
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<td>Prereq: Consent of instructor.</td>
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<tr>
<td>480699</td>
<td>Employment Strategies</td>
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<tr>
<td>430699</td>
<td>Designed to acquaint the teacher education student with the</td>
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<td>problems and procedures of securing a teaching position.</td>
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<td>Includes consideration of professional ethics, preparation of</td>
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<td>placement credentials, teacher certification practices,</td>
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<td>interviewing techniques</td>
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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.)

480700 Individual Studies
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.

1-3 credits

480706 Vocational Assessment of Students with Special Needs
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: 480205 or 480721, 480406/606.

3 credits

489712 Residency in Teaching
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.

3-12 credits

480721 The Exceptional Child
A survey of educationally relevant problems of exceptional children and the implications of these problems for school programs.

3 credits

489725 Fieldwork with Exceptional Children
Field experiences in public or private community programs or agencies serving the handicapped person. Prereq: Consent of instructor.

1-3 credits

480755 Techniques of Teaching the Emotionally Disturbed — Elementary
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.

3 credits

480756 Techniques of Teaching the Emotionally Disturbed — Adolescent
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: 480355/555 and consent of instructor.

3 credits

480759 Art for the Exceptional Child and Adolescent
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.

3 credits

430759

480770 Social Issues in the Identification and Education of the Emotionally Disturbed
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: 480355/555, and 480755 or 480756, and consent of instructor.

480772 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.

480773 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.

480774 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: 480564 or consent of instructor.

480775 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.

480777 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.

480778 Remediation of Learning Disabilities — Elementary 3 credits
480779 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: 480564 or consent of instructor.

480780 Seminar: Research in Developmental Disorders 3 credits
Identification and consideration of current issues in the field of learning and behavioral disorders with emphasis on the role of the teacher in meeting the academic, emotional and social needs of the problem child. Department wide course for all graduate students taking comprehensive examination. Prereq: Consent of instructor.

480781 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: 480356/556, 480364/564, 480465/665, 480406/606 or consent of instructor.

489790 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.)
480798 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.

480799 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)

600690 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.

600696 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.

ANTHROPOLOGY (613)

SPECIALIZED COURSES

613512 Archaeology of Meso- and South America 3 credits
A description and analytical survey of the major prehistoric cultures of Mexico, Central and South America, from the earliest human occupations to the fall of the Maya, Aztec, and Inca civilizations.

613524 Peoples of the Pacific 3 credits
Surveys the indigenous peoples and cultures of Pacific island societies. The survey will include discussions of technological, social, and ideational patterns among the ethnic groups of the area. The origins and historical relationships of islanders will also be considered.

613529 Political Anthropology 3 credits
Political organization in preindustrialized societies of varying degrees of complexity. Law and the maintenance of order; corporate groups, ideology. The relations of political to other institutions of society. The nature of political change.

613534 Women in Cross-Cultural Perspective 3 credits
A study of sex role differences and their expressions in nonwestern societies of differing levels of socioeconomic complexity, with emphasis on women’s roles in marriage and family life, female socialization, male control over female sexual access and procreation, and women in myth and ritual.

613620 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.

613696 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.

613700 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. Repeatable.
BIOLOGY (630)

LIBERAL ARTS FOUNDATION COURSE

630703 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

630506 Medical Terminology 1-2 credits
This course is designed to provide the basis for building medical vocabulary by introducing the student to Latin and Greek roots, prefixes, and suffixes, by familiarizing the student with terms pertaining to anatomy, physiology and disease and by exposing the student to current literature in the health sciences. Two credits may be taken by students who have had no Biology classes.

630510 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: 630120 or 630142 or consent of instructor.

630527 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: 630141.

630540 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: 630141 and 630142.

630541 Vertebrate Embryology 4 credits
A study of reproductive cycles: gametogenesis and fertilization; the establishment of tissues, organs and system. Introduction to embryological experimental techniques and procedures for study of frog, chick, and pig. Laboratory, lecture and quizzes. Prereq: 630141 and 630142.

630543 Survey of Invertebrates, Including Insects 3 credits
The collection, identification, natural history and significance of invertebrate animals, including insects. Prereq: 630142 or consent of instructor.

630545 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: 630142, plus 640102 and 640104, or 640141 and 640142 or 800160, 800161, 800162, 800163.

630551 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: 630141.

630553 Plant Taxonomy 3 credits
The principles and practice of classification of plants with emphasis on seed plants and identification. Five hours of lecture and laboratory per week. Field trips. Prereq: 630141 and 630142.

630556 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.

630570 Aquatic Biology 3 credits
The study of aquatic environments, their fauna, flora and general ecology. The laboratory will emphasize the taxonomic study of aquatic organisms. Field trips. Prereq: 630141 and 630142.

630610 Bacteriology 3-4 credits
A lecture-laboratory course in the fundamental principles of bacteriology, including: laboratory growth, differentiation, genetics, metabolism and their control. 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.)

630612 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: 630142, plus one year of chemistry.

630613 Genetics 4 credits
Designed to present a well rounded view of modern genetics. Emphasizes basic principles. Materials and techniques are used that will permit application and give understanding to the present problems of genetics. Prereq: 630141 and 630142, 640102 and 640104 or 640141 and 640142.

630615 Endocrinology 3 credits
A study of the hormonal regulations of metabolism, growth and reproduction. Three hours of lecture per week, laboratory demonstrations arranged. Prereq: 630141, 630142, 640102 and 640104 or 640141 and 640142.

630617 Plant Physiology 3 credits
Protoplasm, translocation, plant metabolism, chemosynthesis, plant respiration, plant growth and reproduction growth. Prereq: 630141; 640102 and 640104 or 640141 and 640142; or 800160-161 and 800162-163.

630620 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: 630142.

630622 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: 630142 or 630120.

630623 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: 630141 and 630142; 630340 and 630355 recommended.

630630 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: 630142.

630641 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.

630644  **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: 630141, 630142, 640251.

630646  **Organic Evolution**  2 credits
History of evolutionary thought, evidences of evolution, and analysis of evolutionary mechanisms and processes. Prereq: Genetics.

630652  **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: 630142 or consent of instructor.

630653  **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: 630141 and 630142, 630340 and/or 630341.

630654  **Vertebrate Field Biology**  3 credits
A study of the classification, distribution, ecology, life history, field techniques and literature survey of the vertebrates. Special emphasis is given to the vertebrates of Wisconsin. Prereq: 630141-630142 or equivalent and 630340. Field trips.

630655  **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: 630141, 630142.

630656  **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: 630141, 630142, and a year of college chemistry. A year of college physics is also recommended. Field trips.

630657  **General Ecology**  4 credits
A study of the interrelationships of plants and animals to their environments though an investigation of the physical and biological aspects of the biotic community. Six hours of laboratory and lecture per week. Field trips. Prereq: 630141 and 630142 plus six additional hours in biology or consent of the instructor.

630660  **Introduction Mycology**  3 credits
A comprehensive study of all fungal phyla emphasizing taxonomy, morphology, phylogeny, and physiology. Economic uses of fungi in good production, fungal deterioration and industrial application. Prereq: 630141, 630142, 630325 or 630351 or equivalent recommended.

630663  **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: 630141, 630142, a year of chemistry or a year of physics, one semester of organic chemistry recommended.
630664 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.

630668 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: 630141 and 630142 or consent of instructor.

630680 General Limnology  3 credits
A study of the interrelationships between the physical, chemical, and biological aspects of aquatic environments. The laboratory will demonstrate methods/equipment for conducting limnological studies and field work. Prereq: 630141; 630142; 640102-104 or consent of instructor.

630685 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: 630141, 630142 and one year of college chemistry.

630690 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.

630694 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.

630696 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.

630700 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.

630798 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.

630799 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 com-
pletion of a master’s degree. See the Thesis section under Academic Requirements and Policies for credit limitations pertaining to thesis research.

BLACK STUDIES (614)

614690 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.

CHEMISTRY (640)

LIBERAL ARTS FOUNDATION COURSE

640702 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

640655 Advanced Organic Chemistry 3 credits
An extension of the basic course covering selected topics from the theories and chemistry of organic structures. Prereq: A year’s course in general organic chemistry.

640690 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.

640696 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.

640700 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.

640797-I Institute 1-3 credits

640798 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)

615510 History of Chicanos in the U.S.: 19th Century Roots and 20th Century Development 3 credits

615520 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.

615680 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.

615690 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.

615696 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.

615700 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

662550 Normal Language Development for Teachers of Exceptional Educational Needs Students 2 credits
This course will provide an overview of oral language development as seen through literature trends in psycholinguistics, linguistics, psychology, sociology, special education, speech and hearing sciences, anthropology, and education. Participation in the course will enable the student to apply course content in special education classrooms. Prereq: Special Education major or consent of instructor.

662560 Language Disorders in Children with Exceptional Educational Needs 2 credits
This course surveys the particular phonological, morphological, semantic, syntactic, and pragmatic rules exhibited by children with exceptional educational needs (i.e., learning disabled, developmentally delayed, and emotionally disturbed). Participation in the course will enable the student to apply course content in interdisciplinary educational programming. Prereq: 662350/550 or consent of instructor.

662570 Practicum: Communicative Disorders 2 credits
Clinical practice with children and adults who have communicative disorders. A minimum of six credits are required. Prereq: 662370.

662582 Audiometry 3 credits
Techniques utilized in evaluation of the auditory function including pediatric, geriatric, G.S.R., Bekesy, and functional testing procedures. Prereq: 662381.
662584 Aural Rehabilitation 3 credits
A study of habilitation and rehabilitation procedures for the deaf and hard-of-hearing including techniques of speechreading, auditory training, and an examination of the psycho-social aspects of hearing loss. Prereq: 662270 or consent of instructor.

662585 Fluency Disorders 3 credits
A study of the theoretical, clinical and experimental approaches to such fluency disorders as stuttering and cluttering. Prereq: 662376.

662644 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.

662670 Diagnostic Methods in Communicative Disorders — Children 2 credits
This course reviews a variety of tests designed to assess communicative skills in children. Diagnostic procedures with children are discussed as they relate to problems of language articulation, voice, fluency, hearing loss, and their cognitive, psychological, structural and neurological correlates. Emphasis is on formal test procedures. Students conduct interviews and diagnostic evaluations, interpret results, and summarize their findings in written report.

662680 Speech and Language Development in the Child 3 credits
480680 The study of normal speech and language development as seen by the anthropologists, sociologists, psychologists, psycholinguists, speech and hearing scientist and educators.

662681 Language Assessment and Intervention in Communicative Disorders 3 credits
This course examines informal assessment procedures for evaluating language-disordered pre-school and school-aged children, and the intervention strategies resulting from such assessment. Factors to consider in selecting intervention goals and procedures appropriate to the developmental language stage of such children are addressed.

662683 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.

662686 Disorders of Voice 3 credits
A study of voice disorders of psychogenic and organic origin; the procedures for their evaluation and management; and a review of recent research literature in these areas. Prereq: 662374 or consent of the instructor.

662687 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: 662374, 662376 or consent of the instructor.

662688 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: 662374 or consent of the instructor.

662690 Workshop
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.

662700 Individual Studies
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.

662709 Seminar in Communicative Disorders
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.

662710 Speech and Language Therapy in the Clinical Environment
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.

662711 The Dysarthrias
Study of the neuropathology 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.

662712 Research Methods in Communicative Disorders
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.

662713 Seminar in Normal and Disordered Language Behavior
Individual investigations of specific topic areas within normal and disordered language behavior. Students will update knowledge and fill in gaps in their knowledge of assessment and intervention techniques for use with language disordered individuals. Prereq: 662480/680.
662714  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 communica-
tion, leadership, teaching, decision making and problem solving.

662764  Speech and Language Disorders in Special Populations  3 credits
Study of language content, form (phonological, morphological,
syntactic), and their
use by children. The populations studied are the mentally retarded,
hearing impaired,
learning disabled, emotionally disturbed, and environmentally
deprived. Focus is on
describing the individual child’s language content, form, and use to select
appropriate intervention goals and procedures.

662770  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.

662798  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. Announce-
ment 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.

662799  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 comple-
tion 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

664505  History of Mass Communication  3 credits
An overview of the origin, development, and achievements of mass communication
in the United States, with particular attention to the interrelationships between mass
media and society.

666505  Newspaper Operations  3 credits
An examination of the basic aspects of newspaper operations: organization and equip-
ment, production and service, financial and legal questions, and public and employee
relations.

664606  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: 664244.

664620  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.

664630  Communication and Public Opinion  3 credits
The role of the mass media of communication in the formation of public opinion. Prop-
aganda goals of government, political, economic, and social groups. Prereq: Con-
tent of instructor.

664631  Mass Communication in Society  3 credits
666631 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: 666131 or 664131 or 666202.

664690 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. 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.

664694 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.

664696 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.

664700 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.

664798 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.

664799 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

666505 History of Mass Communication 3 credits
An overview of the origin, development, and achievements of mass communication in the United States, with particular attention to the interrelationships between mass media and society.

666521 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 interaction with verbal or speech communication. Study of concepts and actual participation in nonverbal exercises. Prereq: 666110 or equivalent.

666527 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 com-
munication can be made efficient and effective in meeting personal as well as organizational goals. Prereq: 666110 or equivalent.

666538 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: 666337 or 666231 or 666331.

666539 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.

666540 Speech Writing 3 credits
A course designed to develop those skills necessary to produce effective manuscript speeches for either personal or another's presentation. Prereq: 666110.

666602 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: 666202 and 664203.

666620 Listening Behavior 3 credits
A study of the recent theory and research focusing on the process of listening in human communication. Analysis of approaches to teaching listening in the schools and training in business-industry. Prereq: 666110 or equivalent or consent of instructor.

666622 Communication Theories 3 credits
A study of communication theories from various disciplinary viewpoints. An investigation of various models of the communication process with emphasis on “meaning-centered” approach to the communication act (source, message, channel, receiver).

666624 Cross Cultural Communication 3 credits
Study of the process of communication across cultural boundaries emphasizing a basic model of communication in the analysis of communication within and between various cultures, predictions of patterns and effects and communication barriers.

666629 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: 666327/527.

666631 Mass Communication in Society 3 credits
664631 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: 666131 or 664131 or 666202.

666634 Broadcast Station Operations and Procedures 3 credits
An advanced level course dealing with the elements of broadcast station operations including broadcasting rules and regulations, sales and management, programming, audience research, and responsibility to the audience. Individual research and participation are stressed.

666643 Women Speakers in America 3 credits
Surveying women speakers in America from colonial to contemporary times, focusing upon issues and investigating the women who spoke supporting and opposing them. Representative issues include religious freedom, abolition, women's suffrage,
temperance, populism and feminism. Speakers are evaluated concerning their messages and the relationships of the ideas to the audiences and the times. Prereq: 666110 or equivalent.

666647 American Public Address
A critical study of those whose speaking exemplifies typical effective speech in the United States, from colonial times to the present. Prereq: 666110.

666648 British Public Address
A survey of British speakers and their speeches from early history to the present. Prereq: 666110.

666657 Classical Rhetoric
A study of those theories of public speaking developed by the ancient Greek and Roman thinkers, particularly Plato, Aristotle, Cicero and Quintillian. Prereq: 666110.

666690 Workshop
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.

666696 Special Studies
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.

666700 Individual Studies
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.

666701 Introduction to Graduate Study in Speech
Nature of graduate study and the principles and methods of historical-critical, descriptive and experimental research in speech and theatre.

666702 Seminar in Rhetoric and Public Address
Investigation of special topics selected on the basis of need, interest, or timeliness which may change each time the course is offered.

666703 Seminar in Contemporary Communication Problems
Investigation of special topics selected on the basis of need, interest, or timeliness which may change each time the course is offered.

666798 Workshop
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.

666799 Thesis Research
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

680701 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

680501 Literary Criticism 3 credits
A study of the major modes of criticism from Aristotle to the present. Prereq: 680101 and 680102 (or 680161 and 680162) or equivalent.

680515 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.

680545 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.

680546 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.

680547 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.

680548 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.

680549 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.

680551 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.

680553 Modern Poetry 3 credits
An intensive study of major twentieth century American and British poets.

680556 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: 680101 and 680102.

680557 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.

680568 American Minority Women Writers 3 credits
A survey of poetry, fiction, drama, and essays written by Afro-American, Spanish-American, and Native American women.

680570 Advanced Composition 3 credits
A course in advanced exposition and argumentation.

680572 Technical and Scientific Writing 3 credits
Practice in expository, descriptive, and report writing, with special application to technical and scientific subject matter.

680573 Poetry Writing 3 credits
An intensive course in the writing of poetry requiring a minimum of 250 lines of good verse (after revision). The course will consider examples from some of the best contemporary verse, as well as criticism by students and the instructor of student work.

680575 Fiction Writing 3 credits
Theory, techniques, and practice of the writing of fiction. Requires a minimum of 50 pages of student writing, after careful revisions. Graduate students will be required to write 75 pages and to complete a critical study of creative writing publications.

680576 Screenwriting 3 credits
Practical experience in writing scripts for cinema and/or television, with special emphasis on the creative, theoretical, and critical processes.

680578 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.

680581 Survey of Linguistics 3 credits
A detailed survey of the techniques, issues, and controversies in theoretical linguistics.

680582 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.

680583 Modern Grammatical Theory 3 credits
A study of traditional, structural and transformational-generative grammars.

680585 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.

680600 Chaucer 3 credits
A study of the language and art of Chaucer as he reflects the culture of his time.

680602 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.

680603 Renaissance Drama Excluding Shakespeare 3 credits
A study of Tudor and early Stuart drama, exclusive of Shakespeare.

680604 Shakespeare 3 credits
A study of the works of Shakespeare which will include representative genres and which will not duplicate works studied in 680605.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>680605</td>
<td>Shakespeare</td>
<td>3</td>
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<tr>
<td></td>
<td>A study of the works of Shakespeare which will include representative genres and which will not duplicate works studied in 680604.</td>
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<tr>
<td>680606</td>
<td>Milton</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>A study of the principal works in poetry and prose of John Milton.</td>
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<tr>
<td>680614</td>
<td>Prose and Poetry of the Restoration and Eighteenth Century</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>A survey of English prose and poetry from 1660 to 1800.</td>
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<tr>
<td>680620</td>
<td>Victorian and Edwardian Literature</td>
<td>3</td>
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<tr>
<td></td>
<td>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.</td>
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<tr>
<td>680661</td>
<td>Major Writers (variable topic)</td>
<td>3</td>
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<tr>
<td></td>
<td>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.</td>
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<tr>
<td>680662</td>
<td>Twentieth Century Women Writers</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>A study of significant American and British women writers of the twentieth century.</td>
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<tr>
<td>680671</td>
<td>Current Theories of Composition for Teachers</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>A course in theories and methods of teaching composition, including practice in the evaluation of student writing. 680370. Advanced Composition, is strongly recommended as preparation for this course.</td>
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<tr>
<td>680677</td>
<td>The Current Writing Scene</td>
<td>3</td>
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<tr>
<td></td>
<td>An intensive study of the range of current writing, with practice in written composition which may qualify students for professional employment.</td>
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<tr>
<td>680678</td>
<td>Applied Prose Writing</td>
<td>3</td>
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<tr>
<td></td>
<td>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.</td>
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<tr>
<td>680690</td>
<td>Writing Workshop</td>
<td>1-3</td>
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<tr>
<td></td>
<td>Intensive study, practice and/or application of a selected aspect of writing.</td>
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<tr>
<td>680693</td>
<td>Applied Study: Internship in Writing</td>
<td>1-6</td>
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<tr>
<td></td>
<td>Internships, as available, in business or government for suitably prepared students wishing to make careers as writers.</td>
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<tr>
<td>680694</td>
<td>Senior Seminar in Writing</td>
<td>3</td>
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<tr>
<td></td>
<td>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.</td>
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<tr>
<td>680696</td>
<td>Special Studies</td>
<td>2-4</td>
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<tr>
<td></td>
<td>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.</td>
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<tr>
<td>680700</td>
<td>Individual Studies</td>
<td>1-3</td>
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<tr>
<td></td>
<td>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.</td>
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<tr>
<td>680747</td>
<td>American Novelists I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>A study of the American novel, form and content. Intensive reading of selected novels.</td>
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</tbody>
</table>
680749 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.

680790 Research in English 3 credits
Designed to save the student's time in other English courses by acquainting the student with specialized references, printed compilations and other library shortcuts. Each week the student is assigned a dozen or so typical questions on one literary area, along with a number of places to locate the answers. In addition, each student reads a book on literary sleuthing, famous literary forgeries and other literary gossip every English graduate student should know.

680798 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.

680799 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)

702690 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.

702696 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.

GERMAN (704)

704690 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.

704696 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.

SPANISH (708)

708690 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. 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.

**708696 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.

**GEOGRAPHY (722)**

**LIBERAL ARTS FOUNDATION COURSE**

**722702 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**

**722520 Meteorology and Climate**  
3 credits  
A study of the atmosphere with emphasis on the principles that govern the functioning of the "air machine," techniques of analysis applicable to mid-American weather, and a summary of world climate patterns. Prereq: 722111 or equivalent.

**722523 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 be culminated by 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.

**722536 Rural Settlements**  
3 credits  
Understanding of forms, structures, and distribution of rural settlements in distinctive parts of the earth according to their origin, function, and development. Special emphasis is given in analyzing the rural settlements of southeastern Wisconsin through a number of field studies. Field trips are normally taken.

**722537 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.

**722550 Regional Analysis and Planning**  
3 credits  
A geographical analysis of the physical and cultural phenomena found on the surface of the earth which give shape and structure to regions, and to present the role of regional planning as a medium of land-use determination. Field trips are normally taken.

**722610 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. Prereq: 722210 or 722310, or consent of instructor.

**722644 Urban Land Use Planning**  
3 credits  
A study of the technical, social and political framework of the urban land planning process. Emphasis will be on the acquiring of professional planning skills and on the
critical analysis of plans and planners. Field trips are normally taken. Prereq: 722344 or 880352 or 820446 or 230438 or consent of instructor.

722675  Air Photo Interpretation  3 credits
Theory and procedures in use of aerial photos for mapping, planning, identifying and classifying information obtainable from aerial photos. Actual preparation of maps on land use changes, industrial identification and topographic plotting will be stressed. Field trips are normally taken.

722690  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.

722696  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.

722700  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.

722761  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.

722766  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.

722790  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.

722798  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.

722799  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 (618)

616690  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.
616696 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.

616700 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.

616701 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 726100, 762202 or their equivalents in other institutions.

HISTORY (740)

LIBERAL ARTS FOUNDATION COURSE

740702 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

740505 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.

740506 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 prosperity and depression, and American participation in World War II.

740507 Recent America, 1945 to the Present 3 credits
A study of the continuance of Progressive domestic legislation — political, social and economic — and the response of the American people to the responsibilities of world leadership.

740525 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.

740526 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.

740571 History of Russia to 1815 3 credits
A survey of Russian history to 1815, emphasizing its relationship to major problems in European history.
<table>
<thead>
<tr>
<th>Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>740572</td>
<td>History of Russia since 1815</td>
<td>3</td>
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<tr>
<td></td>
<td>A survey of Russian history in the nineteenth and twentieth centuries, emphasizing relationships to major European and world problems.</td>
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<tr>
<td>740580</td>
<td>The Holy Roman Empire</td>
<td>3</td>
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<tr>
<td></td>
<td>A survey from the beginnings to the Congress of Vienna, emphasizing the development of German political and cultural traditions.</td>
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<tr>
<td>740581</td>
<td>Modern Germany</td>
<td>3</td>
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<tr>
<td></td>
<td>A survey from the Congress of Vienna to the present, emphasizing the successive solutions to the question of German political organization.</td>
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<tr>
<td>740600</td>
<td>Diplomatic History of the United States to 1898</td>
<td>3</td>
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<tr>
<td></td>
<td>A survey of American diplomatic history to 1898, stressing principles and practice, economic and political aspects and expansion.</td>
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<tr>
<td>740601</td>
<td>Diplomatic History of the United States since 1898</td>
<td>3</td>
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<tr>
<td></td>
<td>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.</td>
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<tr>
<td>740603</td>
<td>History of the American West</td>
<td>3</td>
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<td></td>
<td>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.</td>
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<tr>
<td>740607</td>
<td>American Social History, 1941 to the Present</td>
<td>3</td>
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<tr>
<td></td>
<td>A study of contemporary social institutions and movements and the effects of these on American life and values.</td>
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<tr>
<td>740610</td>
<td>History of Modern Middle East</td>
<td>3</td>
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<tr>
<td></td>
<td>A survey of modern and contemporary history of the Middle East, emphasizing its internal structures institutions and interests.</td>
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<tr>
<td>740620</td>
<td>The History of Black America</td>
<td>3</td>
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<td></td>
<td>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.</td>
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<tr>
<td>740624</td>
<td>American Indian History</td>
<td>3</td>
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<td></td>
<td>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.</td>
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<tr>
<td>740632</td>
<td>Banditry, Rebellion and Revolution in Modern China</td>
<td>3</td>
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<tr>
<td></td>
<td>An examination of violent socio-political upheavals in China beginning with the White Lotus Rebellion and culminating with the Communist Revolution.</td>
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<tr>
<td>740633</td>
<td>Twentieth Century Japan</td>
<td>3</td>
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<tr>
<td></td>
<td>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.</td>
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<tr>
<td>740651</td>
<td>Ancient Civilization</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>A study of the civilization of the Ancient Near East, of Greece, and of Rome.</td>
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<tr>
<td>740652</td>
<td>Medieval Civilization</td>
<td>3</td>
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<tr>
<td></td>
<td>A survey of basic political, socioeconomic, cultural and religious trends in European history from A.D. 300 to 1500.</td>
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<td>Course Code</td>
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<tr>
<td>740653</td>
<td>The French Revolution and Napoleon</td>
<td>3</td>
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<tr>
<td></td>
<td>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.</td>
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<tr>
<td>740658</td>
<td>Social and Cultural History of Europe to 1800</td>
<td>3</td>
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<tr>
<td></td>
<td>A study of the interaction of ideas and social and political institutions, with an emphasis on the Enlightenment and early romanticism.</td>
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<tr>
<td>740659</td>
<td>Social and Cultural History of Europe since 1800</td>
<td>3</td>
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<tr>
<td></td>
<td>A study of the interaction of ideas and social and political institutions, with an emphasis on such topics as nationalism, socialism, anarchism and existentialism.</td>
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<tr>
<td>740660</td>
<td>Twentieth Century Europe</td>
<td>3</td>
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<tr>
<td></td>
<td>A survey of the political, economic, social, and cultural history of Europe since about 1914. Prerequisite: 740155 or equivalent.</td>
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<tr>
<td>740667</td>
<td>Tudor and Stuart Britain 1471–1714</td>
<td>3</td>
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<tr>
<td></td>
<td>A treatment of the period (1471–1714) covering the social, political, and religious developments and England’s relationship to the rest of Europe.</td>
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<tr>
<td>740690</td>
<td>Workshop</td>
<td>1–6</td>
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<td></td>
<td>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.</td>
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<tr>
<td>740696</td>
<td>Special Studies</td>
<td>1–3</td>
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<tr>
<td></td>
<td>Study of a selected historical topic not covered in regular course offerings. The topic will be announced prior to registration.</td>
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<tr>
<td>740700</td>
<td>Individual Studies</td>
<td>1–3</td>
</tr>
<tr>
<td></td>
<td>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.</td>
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<tr>
<td>740705</td>
<td>Historiography and Historical Research</td>
<td>3</td>
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<tr>
<td></td>
<td>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.</td>
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<tr>
<td>740707</td>
<td>Recent American History</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>The economic, political and social development of the twentieth century.</td>
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<tr>
<td>740790</td>
<td>Seminar in Twentieth Century America</td>
<td>3</td>
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<td></td>
<td>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.</td>
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<tr>
<td>740798</td>
<td>Workshop</td>
<td>1–6</td>
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<tr>
<td></td>
<td>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.</td>
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<tr>
<td>740799</td>
<td>Thesis Research</td>
<td>1–6</td>
</tr>
<tr>
<td></td>
<td>Guided investigation of an approved thesis topic. Students may receive credit for</td>
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</table>
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.

MATHMATICS AND COMPUTER SCIENCE (760, 765)

MATHMATICS (760)

760542  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 (230245). Prereq: 760253 or 760250 or consent of instructor.

760555  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: 760254 or concurrent registration.

760565  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: 760171 and 760355/555, or consent of instructor.

760575  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.

760580  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 mathematic problems. Prereq: 760280 or consent of instructor. (Consent will be given to students with substantial interest in problem solving, and adequate preparation.)

760615  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, complex numbers and polynomials. Students may not receive credit for both 760615 and 760652. Prereq: Consent of instructor.

760616  Geometry for the Elementary Teacher  3 credits
A study of the intuitive, informal geometry of sets of points in space. Topics include nonmetric geometry, elementary constructions, measurement, coordinates and graphs. Prereq: Consent of instructor.

760617  Theory of Numbers  3 credits
A study of the properties of integers, properties of primes, arithmetic functions, modulo arithmetic. Diophantine equations and quadratic residues. Prereq: 760415/615, or 760452/652, or consent of instructor.

760631  Topology  3 credits
Point set topology, topological spaces, mappings, connectedness, compactness,
separation axioms, metric spaces, complete spaces, product spaces and function spaces. Prereq: 760255 or consent of instructor.

760641 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: 760255 or consent of instructor.

760642 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: 760441/641 and 760355 or consent of instructor.

760652 Algebraic Structure of the Number Systems 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 760415/615 and 760452/652.) Prereq: 760355/760555 or 760255.

760653 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: 760355/760555 or consent of instructor.

760654 Modern Algebra II 3 credits
Continuation of 760653. Rings, integral domains and fields motivated by examples of numbers, polynomials, and matrices. Homomorphisms, ideals, quotient rings, unique factorization, field extensions, and further topics from groups or rings. Prereq: 760453/653 or consent of instructor.

760658 Applied Mathematical Analysis I 3 credits

760659 Applied Mathematical Analysis II 3 credits
Functions of several variables, partial differential equations, and functions of a complex variable with applications. Prereq: 760458/658.

760663 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: 760255.

760664 Advanced Calculus I 3 credits
A study of the real number system and functions of a real variable as exemplified in continuity, differentiation, sequences, series, etc. Prereq: 760255 and either 760355/555 or consent of instructor.

760665 Advanced Calculus II 3 credits
Continuation of 760664; a course in differential calculus of functions of several variables, multiple and the integrals, theorems of Green, Gauss and Stokes. Prereq: 760464/664.

760671 Numerical Analysis I 3 credits
760672 Numerical Analysis II 3 credits
Algorithmic approach to numerical analysis, methods of iteration, interpolation and approximation applied to numerical differentiation and integration, solutions of nonlinear systems and difference equations. Extensive use of digital computer equipment. Prereq: 760171 and 760255.

760690 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.

760694 Seminar 2 credits
A study of selected topics supplementary to the usual curriculum and useful for further work in mathematics. Prereq: Consent of instructor.

760696 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.

760700 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.

760731 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.

760798 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.

760799 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)

765502 Computer Logic and Microprocessors 3 credits
Structure of microprocessors and microprocessor systems, programming in machine language, computer logic and logic circuits, interfacing. Prereq: 765171.

765505 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 application 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 stu-
dent may receive credit for both this course and 765171, or for both this course and 250211. A student who has taken 765171 may not take this course, 765305. No student may receive credit for this course and 765705.

765507 Small Computer Applications 3 credits
Applications and uses of small computers. Programming a small computer. The architecture and design of small computers. The social impact of computers. Graduate students will be required to submit a programming project usually related to an aspect of their employment. Prereq: 765171 or consent of instructor.

765560 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: 760250 and 950222 or 760254 and a programming course beyond 765171 or consent of instructor.

765602 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: 760355/555, and 765171 or 765705.

765612 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: 760271 or consent of instructor.

765624 Operating Systems 3 credits
A survey of operating systems including hardware devices, data communications, file handling, job scheduling, resource allocation and system design. Prereq: 760412/612 with 760342/542 strongly recommended.

765690 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. Repeatable. Prereq: Consent of instructor.

765696 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.

765705 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
782701 Great Issues in Western Philosophy
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

782590 Feminist Philosophy
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.

782690 Workshop
A course characterized by individualized and participatory activities within a group context, the results of which activities are shared with the entire group.

782694 Seminar
An intensive study of one or more issues that supplement the curriculum. Original research papers may be expected as partial fulfillment of the course requirements.

782696 Special Studies
A course which is not included in the curriculum but which is offered on topics selected for their timeliness, need, and interest.

782700 Individual Studies
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

786711 World Religions
The origins, beliefs, practices and development of six major world religions: Hinduism, Buddhism, Confucianism, Judaism, Christianity, and Islam.

SPECIALIZED COURSES

786690 Workshop
A course characterized by individualized and participatory activities within a group context, the results of which activities are shared with the entire group.

786798 Workshop
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.

786696 Special Studies
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.

786700 Individual Studies
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

800702 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

800503 Microprocessor Laboratory 2 credits
Laboratory experience in microprocessor addressing, digital logic circuits, microcomputer 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: 800175 (or 800163) and 765171; or concurrent registration in 765302/502; or graduate standing with computer programming experience.

800560 Solar Energy Applications 3 credits
A survey course on solar energy applications covering biomass utilization, home heating and cooling systems, hot water systems, solar cells, electric power generation, ocean thermal systems, space satellite systems and wind use. Emphasis will be on home heating systems for Wisconsin. The course will not count toward a physics major or minor. Three one-hour lectures per week. Prereq: Consent of instructor.

800610 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: 800174, 800175 or 800162, 800163 and 760254.

800611 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: 800410/610 or concurrent registration or consent of instructor.

800612 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: 800410/610.

800690 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.

800696 Special Studies 1–3 credits
A study of special topics in physics for students of senior or graduate standing. Prereq: Consent of the instructor.
800700 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.

800797-I Institute 1–3 credits

800798 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)

805550 Astrophotography for Amateurs 3 credits
This course is designed for those interested in combining astronomy and photography through the medium of telescope and camera. The course is activity-oriented and will provide an opportunity to learn photography and the techniques necessary to develop color slides and black and white and color prints of astronomical objects. 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.

805630 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.

805690 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 as summer programs, night programs or Saturday programs.

805700 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)

820510 Origins of Western Political Thought 3 credits
An examination of early Western political thought with an emphasis upon the ideas of Plato and Aristotle, but also including the Romans, the Church fathers, and others up to the time of Machiavelli. Prereq: A political science general studies course.

820516 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.

820517 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.
820518 The American Presidency 3 credits
A study of the American Presidency which stresses the nature and extent of Presidential power in the American political system in light of the theory and practice of separation of powers. Prereq: A political science general studies course.

820520 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.

820530 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: 820141.

820544 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.

820546 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.

820557 Public Opinion and Political Behavior 3 credits
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.

820560 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 a heavy emphasis on library assignments utilizing the various resources. Prereq: A political science general studies course.

820580 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.

820611 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.

820612 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 non-violence and the existentialist dilemma. Prereq: A political science general studies course.

820613 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.

820614 The Constitution and Civil Liberties 3 credits
A course focusing on the constitutional development of the rights of individuals and limitations upon the powers of government, both state and national. Prereq: A political science general studies course.

820615 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.

820619 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.

820620 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: 820141 or consent of instructor.

820621 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.

820640 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: 820141.

820646 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.

820651 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.

820653 Government and Politics of the Communist World 3 credits
A comparative study of the Communist political systems with emphasis on the advent of Communist rule, the role of the party, the nature of leadership, the function of ideology and the process of policy making. Prereq: A political science general studies course.

820655 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.
<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>820657</td>
<td>American Foreign Policy</td>
<td>3</td>
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<tr>
<td></td>
<td>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.</td>
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<tr>
<td>820660</td>
<td>Government and Politics of Asia</td>
<td>3</td>
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<tr>
<td></td>
<td>A comparative study of the political structures, institutions and processes of the nations of Asia. Prereq: A political science general studies course.</td>
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<tr>
<td>820662</td>
<td>Social Welfare Policy</td>
<td>3</td>
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<td>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.</td>
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<tr>
<td>820690</td>
<td>Workshop</td>
<td>1–6</td>
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<td>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.</td>
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<tr>
<td>820692</td>
<td>Internship in Political Science</td>
<td>1–12</td>
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<td>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.</td>
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<tr>
<td>820694</td>
<td>Seminar in Political Science</td>
<td>3</td>
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<td></td>
<td>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.</td>
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<tr>
<td>820694B</td>
<td>Seminar in Public Administration</td>
<td>3</td>
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<td></td>
<td>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.</td>
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<tr>
<td>820696</td>
<td>Special Studies</td>
<td>1–3</td>
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<td></td>
<td>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.</td>
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<tr>
<td>820700</td>
<td>Individual Studies</td>
<td>1–3</td>
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<td>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.</td>
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<tr>
<td>820711</td>
<td>Scope and Methods of Political Science</td>
<td>3</td>
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<td></td>
<td>Analysis and evaluation of research methods, techniques and material in political science. Prereq: A political science general studies course.</td>
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<tr>
<td>820715</td>
<td>Major Concepts in Political Theory</td>
<td>3</td>
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<td></td>
<td>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 applica-</td>
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tions and limitations of the models based on them. Prereq: A political science general studies course.

820720 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.

820751 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.

820756 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. A political science general studies course.

820757 Seminar in Foreign Policy 3 credits
An intensive study of the machinery and conduct of foreign policies. Prereq: A political science general studies course.

820760 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.

820767 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.

820798 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

840523 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.

840545 Behavior Disorders 3 credits
A study of behavior pathology with particular consideration of the inception, development, and maintenance of inappropriate modes of behavior, especially those classified as psychoneurotic, psychotic and characterological disorders.

840624 Human Learning 3 credits
Emphasis on the variables affecting the acquisition of verbal processes and concepts.
The role of organizational factors is stressed. Classical S-R and mediational paradigms are evaluated in relation to transfer effects. Methods in assessing long term and short term extension as well as theory concerning these processes are described. Prereq: 840315 or 840303 or equivalent with consent of instructor.

840635  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.

840646  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: 840304 or 840345, or consent of instructor.

840651  Interpersonal Relations and Social Interactions  3 credits
Theory, research and exercises in interpersonal perception, communication, motivation, leadership and problem-solving within groups.

840686  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: 840304 or 840345 or consent of instructor.

840690  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.

840694  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: 840355 or 880355.

840696  Special Studies  1–3 credits
A seminar in which students and staff members study and discuss contemporary problems in areas of psychology determined by mutual interest. May be repeated with permission of department. Prereq: 12 psychology credits or consent of the instructor.

840700  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.

840776  Theories of Personality  3 credits
A critical analysis of the major personality theories. Psychoanalytic, socially oriented and self-actualization theories will be covered. Prereq: 840304 or equivalent with consent of instructor.

840777  Theories of Psychotherapy  3 credits
An intensive study of the major principles and approaches to psychotherapeutic theory. Designed as a foundation course in preparation for practicum training in psychological therapy. Prereq: 840746 or 840776 or consent of instructor.
840798 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

840594 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: 840315 and/or permission of instructor.

840615 Research Design  3 credits
Includes a careful study of some of the more frequently used methods for evaluating research. The content will include a review of chi-squares, t-tests and correlation. Trends, analysis, analysis of variance and covariance and other methods will be studied. Prereq: 840215 or equivalent with consent of instructor.

840637 Psychological Aspects of Death and Dying 3 credits
A study of psychological phenomena associated with death and dying; including age changes in concepts about death, attitudes, dying factors, death system, and psychological intervention on death and dying. Prereq: 3 credits in psychology or consent of instructor.

840640 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.

840644 Principles of Behavior Modification 3 credits
A survey of the concepts used in psychological programs using behavior modification approaches. Emphasis will be on observable academic and other problem behavior rather than hypothetical constructs. Prereq: 840303, 840323, or equivalent with consent of instructor.

840652 Organizational Psychology Research Seminar 3 credits
A study of research in applied social psychology and applied analysis of behavior 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: 840355 or 880355.

840745 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: 840615 and 840640; admission to graduate study in the Psychology Department or consent of instructor.

840746 Psychopathology of Childhood and Adolescence 3 credits
Review and analysis of research literature and theory in the area of child and adolescent behavior deviation. Prereq: 840345/545 or equivalent with consent of instructor.

840766 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: 840746 or concurrent enrollment; admission to graduate study in the Psychology Department or consent of instructor.

840767 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: 840746 or concurrent enrollment; admission to graduate study in the Psychology Department or consent of instructor.

840768 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: 840444/644 and admission to graduate study in the Psychology Department or consent of instructor.

840770 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, constructive, 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: 840745 or concurrent enrollment; admission to graduate study in the Psychology Department or consent of instructor.

840780 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: 840745; 840770; admission to graduate study in the Psychology Department or consent of instructor.

840781 Supervised Clinical Practicum II 6 credits
The weekly seminar considers 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 a practicing school psychologist. Prereq: 840797; admission to graduate study in the Psychology Department or consent of instructor.

840782 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 comparative school psychology in an overseas placement. Prereq: Consent of instructor.

840790 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. Students may have
the option to work in another setting, e.g., a mental health clinic, for 50% of the internship. All work is supervised on campus and in work setting. On-campus supervision is one day a week. 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.

840791 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. Students may have the option to work in another setting, e.g., a mental health clinic, for 50% of the internship. All work is supervised on campus and in work setting. On-campus supervision is one day a week. 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.

840796 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.

840799 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)

860502 Grief Management in the Helping Professions 1 credit
This course focuses on how to adjust to the death of someone close, how to help someone who is terminally ill, how to better handle one's own eventual death, and how to handle other losses, such as cherished relationships. The grief counselling content is intended for students who are planning a career in the helping professions. Prereq: None.

860503 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.

860510 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 (e.g., child neglect/abuse, emotional disturbance, delinquency, alcoholism, divorce) and relate these to social work practice.

860537 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 provide 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.
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>860541</td>
<td>Sexuality for Professional Growth</td>
<td>3</td>
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<td>This comprehensive course is designed to add to students' knowledge and comfort in the area of human sexual behavior. Topics covered include family, religious, social and legal influences on sexual attitudes and behavior. Multimedia, lecture, and small group discussion techniques are used to explore issues. Students will learn basic skills useful in treating sex-related problems encountered in professional practice in areas such as developmental sexuality, sex education programming for children and youth, problem pregnancies, common sexual dysfunctions, and the psychology of sexual responses at all ages. Prereq: Social Welfare major, graduate standing, or consent of chairperson.</td>
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<tr>
<td>860546</td>
<td>Administration of Volunteer Programs</td>
<td>3</td>
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<td>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 accountability, budgeting, administration and volunteer recognition. Prereq: Consent of instructor.</td>
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<tr>
<td>860573</td>
<td>Social Work Practice III</td>
<td>3</td>
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<td>Specific advanced techniques used in the assessment and treatment of individuals and families will be studied. These techniques will be applied to simulated practice situations in class and/or with clients in field placement. The relationship of the community both as target and client will be analyzed and applications of various social work roles within communities will be examined. Prereq: 860372 and 860492 or consent of instructor.</td>
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<tr>
<td>860662</td>
<td>Social Welfare Policy</td>
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<td>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: 860310 and 860372 or consent of instructor.</td>
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<tr>
<td>860682</td>
<td>Methods of Social Welfare Research</td>
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<td>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 formulating a social work research proposal. Prereq: 860492, a course in descriptive/inferential statistics, or consent of instructor.</td>
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<tr>
<td>860690</td>
<td>Workshop</td>
<td>1-6</td>
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<td>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.</td>
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<tr>
<td>860694</td>
<td>Seminar in Social Work Methods</td>
<td>3</td>
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<td></td>
<td>Examination of change strategies applicable to social work covering interviewing, diagnosis, various therapy approaches, social action, research and planning. Prereq: 860371 or consent of instructor.</td>
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<tr>
<td>860696</td>
<td>Special Studies</td>
<td>1-3</td>
</tr>
<tr>
<td></td>
<td>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.</td>
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<tr>
<td>860700</td>
<td>Individual Studies</td>
<td>1-3</td>
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<tr>
<td></td>
<td>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.</td>
<td></td>
</tr>
</tbody>
</table>
860798 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

880711 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.

880520 The Sociology of Retirement, Aging, and Death 3 credits
This course examines the emergency 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.

880525 White-collar Crime: Illegality in Business, Politics and the Professions 3 credits
The course is an introduction to the study of non-traditional crime. The emphasis is on an understanding of the social origins and role of such diverse phenomena as the Mafia and organized crime, price-fixing conspiracies, political bribery, corruption, and malpractice in the professions. Additional requirements for 880525: 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.

880554 The Construction of Social Consciousness and Society 3 credits
Acquaints the student with the development of the main currents of social thought, with the reciprocal influences of social thought and overt societal behavior systems.

880555 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.

880557 Public Opinion and Political Behavior 3 credits
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.

880562 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.
880570 Juvenile Delinquency* 3 credits
A study of the incidence of delinquency, theories and findings regarding causation and the policies designed for treatment and prevention.

880580 Organizations and Society 3 credits
An examination of the growth and role of organizations in society with specific attention to American society.

880586 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.

880610 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.

880651 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.

880655 Sociology of the Family* 3 credits
A sociological analysis of the family, its historical development in structure and in function. Attention given to aid the student to understand contemporary social aspects of the family in a changing social milieu.

880659 Sociology of Minorities 3 credits
A course to acquaint the student with the historical and contemporary sociology of minority groups. Attention given to social and individual aspects of minorities, including changing societal concepts regarding societal reaction to minorities.

880675 Contemporary Sociological Theory 3 credits
An advanced area approach to the study of contemporary sociological theory, giving emphasis to the major assumptions, concepts, propositions and methodology.

880676 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.

880677 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.

880690 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. Announce-
ment 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.

880694 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.

880696 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.

880700 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.

880798 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

890501 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.

890503 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 biography and autobiography.

890550 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.

SPECIALIZED COURSES

890680 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.

890690 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.

890696 Special Study  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.
Individual Studies
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

<table>
<thead>
<tr>
<th>Department</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ANTH</td>
<td>613534</td>
<td>Women in Cross-Cultural Perspective</td>
<td>3 credits</td>
</tr>
<tr>
<td>ART</td>
<td>115505</td>
<td>History of Women in Art</td>
<td>3 credits</td>
</tr>
<tr>
<td>COMM</td>
<td>666643</td>
<td>Women Speakers in America</td>
<td>3 credits</td>
</tr>
<tr>
<td>EDFD</td>
<td>421677</td>
<td>Counseling Women and Girls</td>
<td>3 credits</td>
</tr>
<tr>
<td>ENGL</td>
<td>680588</td>
<td>American Minority Women Writers</td>
<td>3 credits</td>
</tr>
<tr>
<td>ENGL</td>
<td>680662</td>
<td>Twentieth Century Women Writers</td>
<td>3 credits</td>
</tr>
<tr>
<td>ENGL</td>
<td>680683</td>
<td>Nineteenth Century Women Writers</td>
<td>3 credits</td>
</tr>
<tr>
<td>HIST</td>
<td>740525</td>
<td>Women in the Western World</td>
<td>3 credits</td>
</tr>
<tr>
<td>HIST</td>
<td>740526</td>
<td>History of Contemporary Women from 1800</td>
<td>3 credits</td>
</tr>
<tr>
<td>PHIL</td>
<td>782590</td>
<td>Feminist Philosophy</td>
<td>3 credits</td>
</tr>
<tr>
<td>PSCI</td>
<td>820580</td>
<td>Women and Politics</td>
<td>3 credits</td>
</tr>
<tr>
<td>SCWF</td>
<td>860541</td>
<td>Sexuality for Professional Growth</td>
<td>3 credits</td>
</tr>
<tr>
<td>SOC</td>
<td>860610</td>
<td>Sociology of Health and Illness</td>
<td>3 credits</td>
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</table>
Organization
Section IV Organization

ADMINISTRATION

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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
Robert P. Knowles ............................................. New Richmond
Ben R. Lawton .................................................. Marshfield
Frank L. Nikolay ............................................... Abbotsford
Paul R. Schilling, Vice President ......................... Milwaukee
Laurence A. Weinstein, President ......................... Madison

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Executive Vice President ..................................... Katharine C. Lyall
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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

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

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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 Domitz
Dean of College of Education ................................ Lewis Stoneking
Dean of College of Letters and Sciences ................. Mary Quinilvan
Dean of School of Graduate Studies .................... Larry W. Davis
Dean of Continuing Education and Outreach .......... Thomas McLeRoy
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

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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

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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 Gorby

Office of the Assistant Chancellor for University Relations
Assistant Chancellor for University Relations ............................... Kathleen E. Woit
Director of Alumni and Community Relations .............................. Mark Dorn
Director of News and Publications ............................................. Dale Reich
GEORGE R. ADAMS (1966), Professor of English: B.A., Ph.D., University of Oklahoma
STEVEN J. ALBRECHTSEN (1963), 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), Associate 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
GEORGE R. ARIMOND (1980), Assistant Professor of Health, Physical Education and Recreation: B.S., Belmedji State University; M.S., Ph.D., University of Minnesota
MALVINA F. BAICA (1984), Assistant 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
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), Associate 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
JOSEPH R. BIGGS (1985), Professor of Management: B.S., B.A., Ohio State University; M.B.A., University of Missouri-Kansas City; Ph.D., Ohio State University
LLOYD A. BINAGI (1982), Assistant Professor of Black Studies: M.S., M.A., Ph.D., Temple University
WINSON C. BLANKENSHIP (1964), Professor of Educational Foundations and Counselor Education: B.S., Missouri Valley College; M.S., Emporia Kansas State College; Ed.D., Oklahoma State 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
KARL F. BORGESON (1970), Professor of Art: B.A., St. Cloud College; M.F.A., University of Minnesota
HOWARD A. BOTTS (1983), Assistant Professor of Geography: B.A., M.A., California State University; Ph.D., UW-Madison
CHARLES W. BRADY (1961), Professor of Biology: B.S., Purdue University; M.S., Ph.D., UW-Madison
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
KAREN BOUBEL (1974), Associate Professor of Music: B.M., UW-Superior; M.M., 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

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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 Faculty 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.
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